

Religion, Values, and Secularization in Europe

A multilevel, cross-national, comparative
analysis of the European Values Study Data

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A thesis in fulfilment of the requirements for the degree of
Doctor of Philosophy, Department of Media &
Communication Studies at Mary Immaculate College,
University of Limerick

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Submitted to Mary Immaculate College, January 2017

Abstract

This thesis examines the relationship between religion and values through an analysis of the four waves of the European Values Study 1981 -2008. The thesis engages with key conceptualisations and theorisations of the relationship between religion and values from the fields of social psychology, classical and comparative sociology. These are then framed within major theories of social and cultural change, principally theories of modernization and secularization. The insights drawn from the theoretical literature are then formulated into a series of hypotheses that are tested in relation to a large subset of national samples from the four waves of the European Values Study. Firstly, the analysis comprises a cross-national comparison of the relationship between different dimensions of religiosity and values in different domains. The findings of these analyses suggest that there is considerable accord across Europe and over time, in the relationship between each dimension of religiosity and values in different domains. Secondly, the analysis assesses the strength and stability of the relationship between religiosity and values relative to key sociodemographic variables. The findings here show the relationship between each dimension and values is one that is relatively strong in comparison to, and net of the effects of, important sociodemographic variables. Thirdly, the analysis moves from the micro level to the macro level, and through multilevel analyses, assesses the degree to which individual religiosity, individual values, and their micro-level relationship, are contingent on macro-characteristics of societies. The findings here suggest that macro-level differences between societies are important in explaining both religiosity and values. Furthermore, the findings show that the relationship between religiosity and values is one that is contingent on these differences. In relation to macro-level characteristics used to explain these differences, operationalizations of core concepts in modernization and secularization theories, the findings are broadly supportive of secularization theory, with some noteworthy exceptions. Finally, the research asserts the importance of operationalizing the strong macro-level theory that makes up secularization paradigm in future empirical research.

Author's Declaration

I hereby declare that this thesis represents my own work and has not been submitted, in whole or in part, by me or any other person, for the purpose of obtaining any other qualification.

Signed: _____

Date: _____

Acknowledgements

First and foremost, I would like to thank my supervisor, Professor Michael Breen, for his perpetual encouragement, kindness, and patience. It is a privilege to have him as a supervisor and a friend.

I would like to thank Mary Immaculate College for bestowing me the doctoral award, for which I am both tremendously proud and grateful to receive.

I would like to thank the sociology department at the University of Limerick, whose MA programme provided me with the academic foundation on which I have built my doctoral studies.

And thanks to my family, for their love and support. And a special thanks to Dorothy Cassidy for all the help in finishing up this thesis and her support and encouragement throughout.

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1 Introduction

This thesis comprises a theoretical and empirical analysis of the relationship between religion and values, using data from the European Value Study, 1981-2008. Principally, the research engages with theories of modernization and secularization with a view to understanding how this relationship is contingent upon both individual and societal characteristics. That is, the relationship between religion and values is one that is examinable at both the individual level and at the societal level. At the individual level, the questions addressed by this research are whether belonging to a religious denomination, holding religious beliefs, engaging in religious practice, also entail holding certain values. Moreover, the research enquires as to whether these relationships are contingent on individual level differences such as age, gender, or education. But the relationship is also one that is examinable at the level of societies. At the most basic level, the research enquires as to whether the relationship between certain values and certain dimensions of religiosity varies across countries and over time. The research situates these societal differences within theories of social and cultural change, particularly modernization and secularization. Principally, the research enquires as to whether these differences between societies are the result of the declining societal significance of religion brought about by modernization, that is, secularization. Moreover, the research attempts to theoretically and empirically link these “two realities”, of the declining societal significance of religion, and the declining significance of religion at the individual level.

1.1 Purpose of the Study

The main purpose of the study lies in its contribution to theoretical and empirical literature in a number of related fields. Firstly, the research represents a comprehensive contribution to the field of cross-national research on values and religiosity. The breadth of the analysis, in establishing theoretically grounded empirical linkages between each dimension of religiosity and different values, in several European societies over three decades, endows the conclusions of the research with both legitimacy and generalisability. The thesis seeks to address several gaps in understanding of the relationship between religiosity and values, the exact nature of which is understudied (Storm 2016, p.111). Whereas in previous studies religiosity is treated as a uni-dimensional whole in its relation to values, this thesis draws on seminal and contemporary theory to formulate hypotheses about the specific relationship between each dimension of religiosity and particular values. Moreover, the thesis assesses the relative significance in terms of values of each of these dimensions. In this regard, the thesis fills an empirical gap in our understanding of the relative significance of belonging, believing, practicing and one's relationship to the church, which is often theorised and speculated upon, but rarely investigated empirically.

Secondly, the research represents a substantial contribution to theoretical and empirical knowledge within the paradigm of secularization, and modernization theory more generally. Building on existing theories of secularization, and using advanced methods to establish theoretically grounded empirical linkages between the societal significance of religion and individual religiosity and values, the research represents a significant contribution to the field. While it is quite well-established that modernisation entails the decline in the societal significance of religion, evidence of this macro-level change is situated primarily at the individual level. This micro-level evidence however, is often poorly related to the macro-theory, and vice versa. For example, secularization is often purported to be evidenced by the declining levels of religiosity in modern societies. While declining religiosity may in fact be one aspect of secularization, it is a one-dimensional and theoretically weak analysis. This thesis engages with the macro-level theory to formulate hypotheses regarding the specific consequences of modernisation for religiosity and the

changing significance of religiosity at the individual level. By investigating the specific relationship between religiosity and values, and investigating whether this relationship varies according to the degree to which a society is modernised/secularized, the thesis offers a comprehensive analysis that is lacking in the literature.

Thirdly, the research represents a significant and meaningful contribution to practical knowledge. In a society(s) where the declining significance of religion is often purported through one-dimensional analyses of religious surveys and census data, the research represents a sophisticated analysis of secularization that is often lacking in debates about the nature of our society. For example, one of the more subtle conclusions of the research was that although there is strong evidence that characteristics of modern society are indeed secularizing at the individual level, the evidence suggests this effect is not uniform across all groups in society. This and other conclusions of the research, represent important realities to consider in terms of public policy (in areas such as educational patronage for example), and also suggest fertile ground for further research into the place of religion in modern society.

1.2 Thesis Outline

The thesis begins with a review of the literature pertaining to values, religion, modernization, and secularization. The aim of the review is to define the multidimensional concepts of religion and values, consider the theoretical and empirical linkages between them, relate these to theorisations of the structural and cultural apparatus of society, and further relate these understandings to theories of social and cultural change, with the objective of generating hypotheses that will furnish the field with findings of empirical and theoretical importance.

The review begins with a discussion of the concept of values, with particular attention paid to the work of Talcott Parsons, and the relationship between values and the social system. This is followed by a review of values definitions, and the place of the concept within influential theorisations and empirical studies of culture and national culture. Perspectives on the nature of cultural change are then briefly discussed, particularly the relationship between macro and micro level changes in society.

Definitions of religion, particularly the distinction between functional and substantive definitions, are then reviewed. This is followed by a discussion of the dimensions of religiosity. The relationship between religiosity and values is then discussed at length, in the field of social psychology and in the works of classical social theorists, along with more contemporary applications of their theories.

The review then moves to a discussion of modernization and value change, outlining the fundamental concepts of modernization theory and its relation to values and value change. Particular attention is given to the works of Ronald Inglehart and his vast theoretical and empirical work on the subject.

The concept of secularization is then discussed, firstly in relation to the range of meanings and definitional debate that surround the concept. Particular emphasis is then given to the debate surrounding secularization as a macro-level process, to which there is robust theoretical literature, and secularization as a micro-level process, which is theoretically contentious but the focus of most empirical studies on the subject.

The review then discusses the secularization paradigm even further, outlining the key concepts and their place within the paradigm at the macro, meso and micro levels. Particular attention is given to the theoretical linkages between concepts at a higher level of analysis and the micro-level of individual religiosity and values.

The next chapter, the methodology, takes these theoretical insights and formulates them into a series of hypotheses to be tested. Firstly, the data used to test these hypotheses are described. The scales on which values in different domains are operationalized are then described. The items which make up these scales, informed by previous studies, are subjected to principal component analyses to test whether they do indeed tap the single dimension theorised. This is followed by a description of the various sociodemographic variables used in the analysis.

The next section of the methodology devotes considerable attention to the societal level concepts used in the analysis, and the operationalizations that are employed to measure these concepts.

Finally, the twelve hypotheses to be tested in the analysis are detailed, specifying conceptual definitions, theoretical linkages, operational definitions, and operational linkages. The statistical methods used to carry out these tests are also specified.

The analysis chapter is structured firstly according to each hypothesis and secondly in relation to each dependent variable (e.g. H1-DV1, H1-DV2 etc.). Hypotheses one through four are concerned with the relationship between each dimension of religiosity and each of the values in different domains. Each hypothesis is tested firstly using the pooled dataset, and then in each country and wave separately.

Hypotheses five through seven concern the relationship between religion, values and key sociodemographic variables. In hypothesis five, the relationship between age, cohort and religiosity are subjected to a detailed analysis using the Irish data. This is followed by regression analyses assessing the relative effect of each of the sociodemographic variables on the belief and organizational dimensions of religiosity. Hypothesis six is tested via similar regression analyses in relation to personal and civic morality. Hypothesis seven assesses the relative strength of the

relationship between each dimension of religiosity and values, controlling for the effects of these key sociodemographic variables, via a regression analysis.

Hypotheses eight through twelve are the societal level hypotheses. The analysis of these hypotheses is via multilevel models of personal morality and civic morality (H8-H10), the belief dimension (H11) and the organizational dimension (H12). The initial stages of each of the analyses test whether a multilevel model is appropriate, followed by more detailed analysis such as significance testing of level-two variables, and interactions between these variables and individual level variables.

The findings and discussion chapter is structured according to the hypotheses, with a summary and discussion given after each section. The findings regarding the dimensions of religiosity and their relationship to values are presented first (H1-H4), followed by the sociodemographic correlates of religiosity and values (H5-H7), and finally the societal effects on religiosity and values (H8-H12). The chapter closes with a summative discussion and conclusion.

The thesis concludes with a theoretical synthesis of the theory discussed in the literature review and methodology, followed by a discussion of the significance of the research relative to this theory. The chapter concludes with some limitations of the research and potential directions for future research.

2 Literature Review

2.1 Introduction

The aim of this chapter is to discuss the multidimensional relationship between religion and values. As noted in the introductory chapter, studies of modernisation and secularisation are often one-dimensional accounts of declining religiosity at the micro level. While this may be one aspect of secularisation, the phenomenon is considerably more complex. The aim of this chapter is to unpack this complexity by engaging with the relevant theoretical and empirical literature, delineating the exact relationship between religion and values at different levels of analysis, and situating these relationships within paradigmatic theories of social change – that of modernisation and secularisation.

The chapter begins with a discussion of the ‘values’ concept, how it has been conceptualised in social theory. Particular emphasis is given to the work of Talcott Parsons and the works he drew upon in his theory of social action. There is also a brief discussion of the relationship between religion and values in Parsons’ theory of action. Key definitions of the values concept are then discussed. The place of values within different perspectives on culture, and broad perspectives on the nature of cultural change, are outlined. The review then moves to an examination of the concept of religion, with a particular focus on unpacking its multi-dimensional character into meaningful objects of analysis. The relationship between values and religion, in key empirical studies, and in the classical sociological theories is then discussed. Theories of modernization, the dominant approach in the study of social and cultural change, are then laid out, with a particular emphasis on the place of values and religion within these theories. The concepts of differentiation, rationalization, and individualisation, each of which have distinct consequences for values, and religion, are given particular attention. Key studies of value change, with their differing perspectives on values, culture, and the nature of social and cultural change are then critically examined. The review then moves to a discussion of religious change, particularly secularization.

2.2 Values

One of the most debilitating issues of value research is that values “have no consensual definitions” (Hechter 1993, p.3), “there is little coherence between the different approaches used across conceptualization and measurement of values” (Hitlin and Piliavin 2004, p.360), and there is “no common understanding of the values concept on the social sciences; no dominant or accepted conceptualisation we can take up” (van Deth and Scarbrough 1995, p.23). Furthermore, empirical studies rarely make use of relevant social theory and vice versa (Hitlin and Piliavin 2004). A useful starting point therefore is to review some of the key conceptualisations and definitions of values, and provide a brief history of the concept’s use in social theory.

2.2.1 Values and Social Theory

The roots of the concept ‘values’, as it is used in contemporary studies, can be found in the work of Talcott Parsons. One of the key advances in Parsons’ (1968b) work on values was in distinguishing the concept of values from its previous usage in the social sciences, that of value in terms of worth, particularly in relation to labour (Spates 1983, pp.28-29). More significantly, Parsons (1968b) stressed the fundamental importance of values, positioning them as the most essential elements of the norms and agreements that create and maintain the social order. Drawing on the works of Pareto, Durkheim and Weber, Parsons (1968b) identified values as cultural ideas that are the “*determining and distinguishing* element of social existence” (Spates 1983, p.30).

His definition of values was in terms of cultural ideas that influence human choice: moral beliefs that served to structure and constrain action. Values have a powerful influence on social life because: (a) their normative power in guiding which actions are good and which are not; (b) the sanctions that can be imposed on those who contravene them; and (c) their reproduction in the next generation via socialization. Furthermore, Parsons would argue that values occupy such a central position in the maintenance of the social order that it was feasible that they might not change for decades or centuries (Spates 1983, p.28).

At the most general level, both Durkheim and Parsons emphasized the crucial role of the social in shaping human behaviour. The *conscience collective* of Durkheim (1893) resonated with Parsons' (1982 [1960]) conceptualisation of shared values maintaining the social order. The mechanical solidarity of pre-industrial society, theorised by Durkheim (1893) to be based on a shared set of values or *conscience collective*, enforced by moral/social custodians such as the church, mirrored Parsons' conceptualisation of values (Spates 1983). More specifically, Parsons (1982 [1960], p.194) saw Durkheim's *conscience collective* as being rooted in "a system of common societal values". Durkheim (2004, p.24) defined *conscience collective* as "the totality of beliefs and sentiments common to average members of the same society . . . something completely different from individual consciousnesses, even though it is materialized only through individuals". Durkheim used the term *conscience collective* to describe beliefs and sentiments that were constant and unchanging for every member of society; and his use of the term pertained more to societies characterised by a mechanical rather than an organic solidarity. In this regard, societies based on a mechanical solidarity are bound together by common values, while those in organic are bound by interdependence and contractual relations.

Spates (1983) maintains that the suggestion that cultural ideas, particularly values, were central in distinguishing and defining societies, Parsons drew on Weber's notion that societies could be characterised by their dominant rationales of action, the Protestant ethic of asceticism in industrial capitalism for example. Both Parsons (1968b) and Weber (1978) stressed the significance of values in explaining individuals' social action, that is, action within a meaningful relationship to the behaviour of others.

For Weber (1978), the chief aim of sociology was to gain an interpretive understanding (*Verstehen*) of social action, or the meaning individuals attach to action (Boudon 2001). Weber (1978) argued that the causes of all action lie in the meaning they attach to that action, and distinguished four main orientations in action (Boudon 2001). The first, and critical in much of Weber's work, is social action that is guided by instrumental rationality or purely goal-oriented (*Zweckrationalität*), or by the efficiency of reaching a certain goal. Weber argued that such social action typified modern society. Action is also often guided by values or ultimate values, or

an axiological rationality (*Wertrationalität*). Such action was characteristic of pre-modern societies. The two other types of action Weber outlined were traditional oriented action (*Traditionell*), acting because it has been regularly done that way before, and affective (*Affektiv*) oriented action, acting on the basis of emotions (Boudon 2001). In concrete situations, actors would tend to combine these types, and such categories represented 'ideal-types' (Kalberg 1980, Weber *et al.* 1978). Additionally, Weber's concept of *Weltanschauungen*, "an untranslatable term" that signifies "general views of life and the universe" (Brubaker 1984, p.62), is equivalent to Parsons' (1935) conceptualization of "ultimate values". Additionally, in very simple terms, one can see the parallels between Weber's idea of traditional societies being characterized by value rationality and modern societies by instrumental rationality, and Durkheim's ideas on the mechanical solidarity of traditional societies and the organic solidarity of modern ones.

2.2.1.1 Values and Parsons' Theory of Action

Parsons (1968b) believed that Weber, along with the other major social theorists he examined, were all theorising, or moving towards a theory, of a similar voluntaristic theory of social action. Basically, this amounted to a theory that attempted to understand how human beings make choices between different goals and the means to achieve them. Parsons (1968b) begins with the unit act, an abstract description of all action. The unit act is made up of the individual actor, his goals, the means to achieve these goals from which the actor must choose, and the physical and social factors that limit these choices. Chief among the many factors in the environment that influence these choices are values and norms (the latter being more concrete rules of conduct in social interaction) (Craib 1992). Parsons (1991a, p.7) defined values as "an element of a shared symbolic system which serves as a criterion or standard for the selection among alternatives of orientation which are intrinsically open in a situation".

Other definitions, which will be discussed later, stress something more about the content or object of values, as "conceptions of the desirable" (Kluckhohn 1951). Reminiscent of Durkheim's (2004) ideas about the *conscience collective*, Parsons paid less attention to what the object or content of these "conceptions of the

desirable” were, than where they had their source (the cultural system), and how commitment to them fostered integration within the social system (Gerhardt 2002).

Our master conception under that of value-pattern here is that of *commitment*. Regardless of what other value-commitments an acting unit may have, our concern is with his or its commitments to implement value-patterns in his capacity as a member of one or more social systems.

(Parsons 1968a, p.137)

When Parsons does focus on the object of values, the type of values with which he was chiefly concerned were conceptions of the desirable type of society, that is, societal values. Other conceptions of the desirable related to “personalities, organisms, physical objects, and other cultural objects” are excluded from his analytic scheme, except in the sense that they “inherently interpenetrate with the particular social systems of reference” (Parsons 1968a, pp.136-137).

The values which come to be constitutive of the structure of a societal system are, then, the conceptions of the desirable type of society held by the members of the society of reference and applied to the particular society of which they are members.

(Parsons 1968a, p.136)

2.2.1.1.1 Values and Social Integration: Institutionalization

Similar to Weber, Parsons treats the normative element of action as the most significant, rather than action that is based purely on the rational calculation of individual interests. Such an emphasis represented Parsons’ rejection of utilitarian theories where individuals are primarily motivated by self-interest, thereby neglecting somewhat the problem of social order (Mayhew 1982). Parsons was of the opinion that without a consensual basis in ideal interests, social order was not possible based on either material interests or through the use of force (Fenn 1970). It is significant for Parsons because it is in social action that norms must be responsive not just to individual interests, but also to the co-ordination and maintenance of the relationships between individuals, that is, the social order (Mayhew 1982). In Parsons’ conceptualisation of social action “the function of social integration replaces the interests of individuals as the foundation of the normative element in action” (Mayhew 1982, p.9). In this sense Parsons’ ideas about the normative

element of action are very similar to Durkheim's (2004) ideas on the collective consciousness and the cohesiveness of a society united by common values, that is, a society characterized by mechanical solidarity.

The relationships between actors interacting regularly and fulfilling certain expected responses towards each other in accordance with norms and values, gradually become *institutionalized* into status roles. Status roles represent a solidifying of the relationships between actors, with rewards for meeting expectations of the role, or norms governing the role, and transgressions of norms met with sanctions (Craib 1992). Institutionalization is essentially "a linking of norms and ends—actors coming to seek conformity as an end" (Mayhew 1982, p.12). These expected behaviours generally remain constant over time, regardless of a different actor occupying the status role. Society as a whole can be seen as a network of these status roles, each directed by its own norms and values (Craib 1992). Parsons argues that the social system, as a whole, "is a system of the actions of individuals, the principal units of which are roles and constellations of roles" (Parsons 1982 [1951], p.118). These different clusters of roles and institutions in a society are clustered around specific societal needs, which are discussed below.

Individual social action is therefore primarily shaped by the norms and values associated with different social roles. More specifically, shared values are translated into more concrete norms which are internalized as motivations through socialization. Social action is the fulfilment of these values in combination with physical drives and desires (Fuchs 2001). In an integrated society:

A system or a subsystem of concerted action which (1) is governed by a *common* value-orientation and in which (2) the common values are motivationally integrated in action is, as we have said, a collectivity. It is this integration by common values, manifested in the action of solidary groups or collectivities, which characterizes the partial or total integration of social systems.

(Parsons 1982 [1951], p.126).

Essentially, institutionalization is where culture and social structure meet. Thus, the central idea in all of Parsons' work is the theorem that "the structure of social systems consists in institutionalized normative culture" (Mayhew 1982, p.12). One of the primary tasks of sociological theory is therefore to construct, "grounded

in the action frame of reference, a structurally relevant scheme” to analyse institutionalised normative culture - Parsons’ ‘pattern variables’ (Mayhew 1982, p.11). A useful way to think about this conceptualization of a social systems is in terms of the normative/moral dimension occupying the vertical dimension of a society, and the order of the social system occupying the horizontal or relational dimension. When each of these dimensions are integrated in action, along with the two other dimensions, space and time, the result is Parsons’ concept of an integrated social system (Fenn 1970).

2.2.1.1.2 The Pattern Variables

In *The Social System* (1951) Parsons develops five dichotomies that describe the values to which individuals, or the roles individuals occupy, orient themselves in social action, which he terms ‘pattern variables’. These pattern variables are as follows: affectivity versus affective neutrality, particularity versus universalism, ascription versus achievement, and diffuseness versus specificity, and orientation towards collective interests versus orientation towards private interests. They are derived from the intrinsic dilemmas of choice facing social actors, could, in principle, characterize all social roles, institutional arrangements, and societies more generally (Mayhew 1982).

To state this in very broad and simple terms, by analysing different institutional arrangements in different types of societies, one can identify different patterns of behaviour in the roles individual occupy, according to these pattern alternatives. One could also apply these polar alternatives to a comparison or cultures or subsystems and groups within a society, but the more frequent application is in terms of contrasting ideal-type modern and traditional societies (Larrain 2003). Although they do not explicitly draw upon Parsons’ work, Schwartz and Hofstede would later develop similar schema to conceptualize and measure cross-cultural value differences (see section 2.2.3). How these pattern variables are translated into more concrete value orientations, related to specific roles in particular situations, to which collective commitment fosters integration is described quite lengthily by Parsons:

The primary integration of the social system is based on an integrated system of generalized patterns of value-orientation. These patterns of value-orientation are to be described in the categories of the pattern variables. The pattern variables and the derivative patterns of value-orientation can, however, never by themselves adequately define the specific role-expectations which govern behaviour in particular situations. Orientation to specific features of the situation in particular ways must be developed in any social system. These will be elaborations and concrete specifications of the values derived from the pattern variables.

(Parsons 1982 [1951], pp.125-126)

2.2.1.1.3 Internalization and Socialization

Attributing normative culture with such an important position in social action, Parsons' theory also had to come to grips with how specifically normative culture controls conduct. Several possibilities are laid out: through force (or the threat of force), through incentives, through habit, or actors can come to see norms as being morally correct (Mayhew 1982). The key task for the sociologist, and for Parsons, is not to simply list the reasons why one individual conforms, but to try to gain an understanding of how conformity becomes patterned and routinized in society (Mayhew 1982). It is in this task that Parsons' concept of institutionalization, the process by which normative culture becomes embedded and established in social organization, becomes most important.

For any system of sociological thought, its concept of institutionalization provides a key to its stance on the complicated and vexed question of how ideal or normative elements—conceptions of right, of required appropriate conduct, of ideal expectations—are related to established patterns of power, realistic interests, and networks of bonds between people.

(Mayhew 1982, p.12)

While Parsons may have given little attention to how values and norms change, he did pay close attention to how they become institutionalized and engrained in the social organization. The crucial mechanism through which values and norms become institutionalized is *socialization*, and also the related processes of motivation, internalization and integration. For Parsons (1991a), social systems rely on cultural systems to provide values and norms, and personality systems to provide motivation to adhere to these values and norms. Socialization is basically the process through which individuals learn to conform to norms habitually without the

need for incentives or force. Adherence to these norms is motivated by attachment to deeper cultural ideals or shared values that become internalized by individuals, becoming constitutive of their personalities. As a result of this socialization, norms become established, routinized and institutionalized. In this process “motivated attachment to cultural demands provides integration and stability for social systems” (Mayhew 1982, p.13). Elsewhere Parsons (1991b, p.40) refers to institutionalization and internalization as cognate processes, the former at the level of the social system and the latter at the level of the individual.

Social integration occurs when motivational and cultural elements are brought together in an ordered system. The principal mode of bringing these elements together is internalization, "so that to act in conformity with [a value standard] becomes a need-disposition in the actor's own personality structure, relatively independently of any instrumentally significant consequences of that conformity

(Mayhew 1982, p.13)

Mayhew (1982) offers a simple example of how this process would operate between two individuals in an idealized fully integrated system. A married couple expect each other to share washing the dishes every evening. The process by which they both learn to want to conform to the norms of mutual aid is socialization. The motivations for conformity with these norms are informed by cultural ideals and shared values of domestic co-operation or gender equality. The process by which such values become ingrained in their personalities is internalization. Institutionalization is the process whereby the norm of mutual aid in dishwashing becomes established and routinized. Integration is the order brought about by this process. Such a normative system stands in contrast to one in which action is founded on the rational and utilitarian calculation of interests (akin to Hobbes' state of nature), where mutual aid is founded on individuals expecting rewards or fearing sanctions from a higher authority (Mayhew 1982). While Parsons does not deny that such motivations may play a role, he argues that integrated social systems cannot be entirely founded on such motivations (Fenn 1970). More generally then, socialization serves two major functions. Firstly, it guides individuals in the roles they play, educating them into the cultural and societal norms of the system. Secondly, by communicating the contents of culture from one generation to the other, it provides for its persistence and continuity (Chinoy 1961).

The discussion thus far has focussed on the creation of a stably ordered social system through institutionalisation (i.e. in embryonic form as the unit act, the action of individuals being regulated by norms, derived from values, that the actor has an internalized motivation to adhere to). But the description of the process of institutionalisation presupposes other systems, which have already been touched upon, but not fully explained within Parsons' grand analytic scheme. It presupposes an individual who aims for maximum gratification, or personality systems which provide motivation. It presupposes the existence of a cultural system, providing wider values that give coherence to different norms attached to different status roles. And it presupposes a physical environment to which a society must adapt, or a biological system/organism (Craib 1992).

2.2.1.1.4 Systems, Subsystems and the Hierarchy of Control

In Parsons' analytic scheme the unit act represents one level of abstraction (the level of systems of action), and the cultural, social, personality, and biological systems represent subsystems of this level of systems of action. There are higher and lower levels in Parsons' scheme but the focus here will primarily be on these two levels. Of note is that each level has four subsystems, in this case the level of systems of action has the four subsystems of cultural, social, personality and biological. Each of these subsystems has four subsystems. The social system for example contains four subsystems: the economic system, the political system, the socialization system, and the "societal community". Each of these subsystems have four subsystems, *et cetera ad infinitum* (Craib 1992). The relevance of having four subsystems at each level stems from Parsons' argument that any system must satisfy four functional prerequisites, or societal needs, if it is to survive. These four functional prerequisites are Adaptation, the capacity of the system to adapt to its environment; Goal-Attainment, mobilising the means to achieve goals and thus obtain gratification; Integration, the maintenance of internal co-ordination, or simply holding itself together; and Latency (or latent pattern maintenance), the maintenance of a state of equilibrium. In a differentiated society, these functional prerequisites are met by different institutions, integrated through mutual dependency and generalized media of exchange (Parsons 1982 [1961]).

For Parsons, the cultural system (and the socialization system within the social system) is at the helm of this 'hierarchy of control'. The hierarchy of control concerns the ordering of the relationships between the different elements of the action system. Those features of the system of action that are high in information, but low in energy, can control those that are high in energy and low in information. Among Parsons many analogies for this hierarchy are the information contained in genes controlling the genetic process, jockeys controlling horses, or thermostats controlling heaters. The cultural system, being high on information is at the pinnacle of the hierarchy, with the social, personality, and biological systems respectively below. In a simplistic arrangement, the cultural system controls the social system, the social system controls the personality system, the personality system controls the organism, and the behavioural organism is the point of articulation "of the system of action with the anatomical-physiological features of the physical organism and is its point of contact with the physical environment" (Parsons 1982 [1961], pp.157-158).

The cultural system carries out the functional prerequisite of pattern maintenance for the general system of action, and the socialization process carries out the pattern maintenance of the cultural system. As already noted the cultural system comprises the most general ideas, ideals and values of the system, which are made more concrete in the norms of the social system and internalised in the personality system. The socialization system is the means by which individuals are educated in these values and norms. The function of pattern maintenance "refers to the imperative of maintaining the stability of the patterns of institutionalized culture defining the structure of the system" (Parsons 1982 [1961], p.159).

The functional imperative of pattern maintenance is comprised of two distinct elements of control. The first is "maintenance, at the cultural level, of the stability of institutionalised values through processes which articulate values with the belief system, namely, religious beliefs, ideology, and the like" (Parsons 1982 [1961], p.159). Secondly, it concerns "the motivational commitment of the individual", where internalized values need reaffirmation and insulation from strain. Here Parsons posits that various types of ritual, the arts, and recreation may reaffirm such commitment within the individual. He seems to suggest that collective religious ritual in particular functions to sustain such commitment. Accordingly he points the works of Durkheim as the point of departure for this aspect of pattern maintenance.

2.2.1.2 Values and Religion: Parsons and Bellah

What is immediately striking about Parsons' (1982 [1961]) conceptualisation of the two distinct elements of control is its reflection of two classical sociological approaches to religion, that of Durkheim and that of Weber. On one side there is the Weberian notion that religious beliefs are of paramount importance in shaping the values of a society (and individuals within the society). And on the other side there is the Durkheimian account of ritual and communal practice being of central importance in fostering attachment to collective values. Accordingly, Parsons places religion in a central position in his general theory. Along with family life, the socialization process, and education, religious activity has "a special involvement in the pattern maintenance function" (Lidz 1982, p.291). In broader terms, Parsons conceptualized society as "a religiously based moral order" (Fenn 1969, p.112).

A student and collaborator of Parsons, Robert Bellah (1970), would elaborate on this idea, and position the system of religious action in the cybernetic hierarchy as the "pattern maintenance sector of the primary pattern maintenance subsystem of society" (Lidz 1982, p.291). In clearer terms, both Parsons and Bellah position religious action standing in cybernetic control over other systems concerned with pattern maintenance, such as the family and the socialization process. And in accordance with the above description of the cultural system standing in relations of cybernetic control over the other subsystems, religious action more generally stands in relations of cybernetic control over other institutions of society, such as legal, political, and economic, establishing "the overall normative pattern that orients the institutional regulation of various controlled social processes (Lidz 1982, p.291). Or in Lidz's (1982) terms, religious action is the helmsman's course prescribing the angle to which the rudder of the ship is set. (The helmsman being high on information about which way to go, but relatively weak in terms of energy to move the rudder).

The functional importance of religion for society therefore "was claimed to be that it stands at the pinnacle of the cybernetic hierarchy" (Lidz 1982, p.291). The reasons why religious action in particular stands at the peak of the hierarchy is that:

since religious ideals are formed through intense engagement with such 'ultimate' issues about the grounding of human responsibilities (Bellah 1970, Chapter 1), they tend to

monopolise moral authority concerned with the general normative premises of social life. Consequently, operative institutions of society are constrained to secure legitimation by deriving their normative patterns from religiously articulated ideals.

(Lidz 1982, pp.291-2).

Of course in a differentiated society each specialized institution (or subsystem of the societal subsystem) must have its own normative patterns (derived from values) according to the conditions in which it operates, with different normative arrangements legitimate the educational sphere, the legal sphere etc. The key point is that all these institutionalized normative orders depend on religiously articulated values from which they draw their legitimacy (Lidz 1982). Lidz (1982) argues that this hypothesis is the cornerstone on which Parsons attempted to build other relationships between the major institutional complexes of society, and that all of his further writings on religion were basically elaborations, refinements, and applications of this hypothesis.

In a theoretical framework that ascribes religion with such significance, it is important to note how exactly Parsons and Bellah conceptualise religion. The two main definitions Parsons drew upon were those of Durkheim (1915) and latterly of Bellah (1964), each functional definitions of religion. Durkheim (1915, p.47) defined religion as “a unified system of beliefs and practices relative to sacred things, that is to say, things set apart and forbidden—beliefs and practices which unite into one single moral community called a Church, all those who adhere to them”. Bellah’s (1964, p.358) short definition was equally functional, defining religion as “a set of symbolic forms and acts that relate man to the ultimate conditions of his existence”. Religion was therefore centred around the sacred rather than the spiritual, with an emphasis on a moral community over and above any belief in the supernatural. Rooted in a functionalist conception of religion, Parsons (1974) would argue that a variety of what many would term secular belief systems, such as Marxism and secular humanist groups in the West, could be classified as religions because of the ways they were institutionalized. In such a functionalist definition there would appear to be limitless entities that could be described as religion, and the problems of functionalist definitions of religion are outlined in more detail below.

As already noted, “the processes which articulate values, namely religious beliefs” (Parsons 1982 [1961], p.159) echo Weber’s ideas regarding religious beliefs

forming the basis of cultural values. Whereas Weber was concerned with how such beliefs play a generative, or at least collaborative, role in social change, Parsons seems to be chiefly concerned with how such beliefs contribute to stability. Indeed, one of the primary criticisms levelled at Parsons' work is that it is too conservative, and that his emphasis is primarily on the maintenance of the status quo. Accordingly, Parsons treats religion, functionally defined, as essential to such maintenance. But the question of how religion continues to stand at the pinnacle of the cybernetic hierarchy and how society continues to be integrated on the basis of a religious moral order in a functionally differentiated society, where the different institutions become divorced from the religious sphere (i.e. secularization), is a question that is not easily resolved. In a sense, it appears to be a contradiction to speak of a secular society using Parsons' conceptualization of an integrated society (Fenn 1970). Parsons' approach to this was to position religion as that which continues to have a monopoly over the 'ultimate issues', but this has been met with much criticism, particularly from Fenn (1970). As this has more to do with a discussion of differentiation and secularization, it will be discussed at more length in the relevant sections below (Section 1.5.1 and Section 1.6.4).

Much of Parsons' work has received considerable criticism, and his functionalist analysis of social systems is rarely fully employed in contemporary analyses of social change. Additionally, Parsons has been criticized for generating vast and complicated theoretical models that are not readily applicable to empirical analysis (Turner 2010a, pp.5-8). Turner (2010a, p.8) for example, describes Parsons as generating "conceptual schemes on top of conceptual schemes", and relying on "an overly complex conceptual edifice". These criticisms of Parsons are extremely pertinent for this review, as his grand analytic scheme offers few clear propositions on the nature of value change. As well as his influential formulation of differentiation, which will be addressed in more detail later, Parsons' model does however offer a very useful theoretical synthesis of the relationship between values and action, between religion and values, and the significance of values, and religion more generally, in the maintenance of the social order.

Furthermore, Parsons' attempt to organise the disparate writings on values in classical sociological literature, in addition to his placement of values in such a central position in his theory of social action, encouraged other sociologists and

anthropologists to focus their attention on values. Collaboration between Parsons and several other anthropologists, sociologists, and psychologists in *Towards a General Theory of Action* (1951) produced several key contributions to value theory (Spates 1983). One of these key contributions, which Parsons himself drew upon, was Kluckhohn's (1951) seminal definition of values, which Spates (1983) identifies as the primary orienting definition in the sociology of values ever since.

2.2.2 Values Definitions

As noted above, there is a large degree of incoherence in the study and definition of values. To begin this section, the most intelligible approach is to delineate the definition of the concept adopted for this study, and latterly to outline the definitions in the literature of which it is comprised.

Values are latent constructs – they are not directly observable but can be detected as a patterning or constraint among attitudes or inferred through observation of patterned behaviour (Kluckhohn 1951, van Deth and Scarbrough 1998).¹ They determine² or influence³ behaviour, as guiding images of social action⁴, designating some actions as good or bad, desirable or undesirable, acceptable or unacceptable, as moral judgements about the rightness or wrongness of certain actions (Kluckhohn 1951, van Deth and Scarbrough 1998, Schwartz and Bilsky 1987, Haller 2002). They exist as guiding images at the level of individual cognition – as a part of cognitive system (the focus of social-psychological conceptualizations of values such as Rokeach (1969a, 1969b, 1973) and Schwartz (1992, 2007, Schwartz and Bilsky 1987, Schwartz and Huisman 1995), but more importantly at the level of collectives – the groups, communities and societies to which the individual belongs – it is from

¹ While still latent, values may be expressed in art, architecture etc. and not just attitudes (although these expressions might fall under the rubric of behaviour). Martin (1985) attempts to map the values of Protestants and Catholic societies in this way.

² Situational factors, such as material limitations, will always shape individual behaviour, and it is seldom possible for individuals/ groups/ societies to entirely fulfil their values (Gundelach 1992).

³ “Values are not about action as such but, rather, abstract principles with which action is to conform; concepts of purposes or ends to be realized in determining course of action, rather than determinate principles of action” (van Deth and Scarbrough 1995, p.30)

⁴ “Sometimes such [moral] judgements are made by isolated individuals standing in opposition to their own society. Most of the time, however, these judgements are collective, that is, held in common by most member of a particular group or society” Berger, P. L. and Berger, B. (1972) *Sociology: A Biographical Approach*, New York: Basic Books.

participation in collectives that individuals come to have specific values (Kluckhohn 1951, Van Deth and Scarbrough 1995). The shared values of a group/society are one of the primary constituents of its culture (along with other phenomena such as language and beliefs) (Wuthnow 2008). The social context of values is of particular importance, and while some values may have a degree of trans-situationality (Rokeach, 1973, Schwartz and Huisman 1995), individuals will possess a collection of values with each according to a particular social setting, such as work or the family (Halman and Vloet 1994, Van Deth and Scarbrough 1995). Values also differ in their level of generality, from universal values at the most general, to societal values, to situational values, to attitudes at a lower conceptual level (Haller 2002).

As noted earlier, Kluckhohn's definition of values has been cited as the primary orienting definition of values in the literature. According to Kluckhohn values are:

A conception, explicit or implicit, distinctive of an individual or characteristic of a group, of the desirable which influences the selection from available modes, means and ends of action.

(Kluckhohn 1951, p.395)

An important aspect of the definition is that it refers to the 'desirable' rather than the broader category of 'desired', indicating a normative component. Essentially this replaces a reference to the broader category of what one might 'want' with what 'ought' to be (Van Deth and Scarbrough 1995). Van Deth and Scarbrough (1995, p.27) adopt this as part of their definition of values, "that values are wishes or demands engaging moral considerations", as prescriptive rather than descriptive statements. Kluckhohn directs much of his attention to delimiting what is normative and what is existential, and differentiating values from other similar concepts like expressive symbols (Parsons 1968a). Like Parsons, who extensively used this definition (Gerhardt 2002), Kluckhohn (1951, p.396) stressed the significance of internalization, with values being "instigators of behaviour 'within' the individual". Accordingly, Kluckhohn (1951, p.396) also pinpointed the fact that values are only inferable through observation of "certain types of patterned behaviour". Furthermore, Kluckhohn's (1951) definition places an explicit emphasis on the point that values can be individually held and also characteristic of a group. The shared values of different nations, societies and cultures are an important focal point around

which much of the value research covered in this review will focus. Van Deth and Scarbrough (1995, p.35) further this aspect of Kluckhohn's definition, arguing that "it is from participation in a group, or membership of a community, that individuals come to their distinctive values".

A different strand in the conceptualization of values is that of social psychologist Milton Rokeach who defines values as:

Enduring beliefs that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence.

(Rokeach 1973, p.5)

For Rokeach (1973), values are a collection of options that give meaning to action (Hitlin and Piliavin 2004). Additionally Rokeach specifies that values, or modes of conduct and end-states, are situated along a continuum of relative importance. The main difference between Rokeach's and Kluckhohn's definition is in their emphasis on action. Following Parsons, values are for Kluckhohn cultural imperatives in creating social cohesion which influence or determine action. The problem with such a functional emphasis is that values are, by definition, determinate of behaviour (Lesthaeghe and Moors 2002). This approach has been accused of being empirically problematic, where observations are forced to accord with a pre-conceived model (see Spates 1983). There does however exist "a broad consensus that values have a significant bearing on action" (van Deth and Scarbrough 1995, p.29). The question of how exactly values feature in the process of selecting modes of action is one that Van Deth and Scarbrough (1995) find little explication of in the literature, but devote a good deal of attention to themselves. They conclude that:

Values are not about action as such but, rather, abstract principles with which action is to conform; concepts of purposes or ends to be realized in determining course of action, rather than determinate principles of action.

(van Deth and Scarbrough 1995, p.30)

Following Rokeach, Schwartz more recently defined values as trans-situational "desirable goals, varying in importance, that serve as guiding principles in people's lives" (Schwartz and Huismans 1995, p.89). Schwartz & Bilsky (1987, p.551) identified five features that are common to most definitions of values. They maintain that generally, values refer to:

(a) concepts or beliefs, (b) about desirable end states or behaviours, (c) that transcend specific situations, (d) guide selection or evaluation of behaviour and events, and (e) are ordered by relative importance.

(Schwartz and Bilsky 1987, p.551)

There are however some problems with Schwartz's, and Rokeach's definition, particularly their emphasis on the trans-situational, and the hierarchically organized nature of values. Rokeach differentiates values from attitudes in the sense that values are more generalised conceptions of the desirable and trans-situational, whereas an attitude is "an organization of several beliefs around a specific object or situation" (Rokeach 1973, p.18). Following this line of thought, for example, one would expect that the same set of values that define what is desirable in the workplace would be the same as those in family life. Van Deth and Scarbrough (1995) offer the example of altruistic values in family life very much contrasting with competitive values of the business world. Of course there may be certain values that transcend situations, but it is more accurate and truer to actual life to relate certain values to certain domains. The proposition that "different contexts call upon different values" that structure an individual's particular attitudes in that context, and that individuals live in a multitude of social contexts or life-worlds, is a simple but very important one (van Deth and Scarbrough 1995, p.35). As will be discussed later in the review, the differentiation of life-worlds characteristic of modern societies is particularly relevant to the salience of religion as a binding and over-arching source of values in different contexts.

Hofstede (1980a, p.19) defines values as "broad tendencies to prefer certain states of affairs over others" that are "the core elements of culture". For Halman and Vloet (1994, p.7) values are simply conceived of "as deeply rooted motivations or orientations guiding human action". As the above definitions also suggest, values differ from attitudes in the sense that they act as standards, while attitudes reflect multiple and changeable opinions (Spates 1983). Additionally, the term 'attitudes' suggests that they are the property of individuals, and not of groups per se. Values are also similar to norms in that they are a group-level phenomenon requiring some sense of shared agreement, but differ in the sense that norms are generally much more situation specific. In the same way that "values are obviously deeper than

attitudes” (Rokeach 1969a, p.4), value systems is a concept that is broader than values. Value systems represent:

A learned organization of rules for making choices, resolving conflicts, developing and maintaining attitudes towards significant objects or significant others, for judging one’s own behaviour and the behaviour of others.

(Tate and Miller 1971, p.359)

There remains considerable divergence and disagreement in the conceptualisations of values, which creates particular problems when trying to compare different theoretical models and empirical findings. A very useful definition and conceptual clarification is offered Haller (2002), who defines values as:

Guiding images of social action which denote some of these as socially desirable and ‘good’, others as ‘bad’. Thus values include an element of desirability and an ethical-moral component, differentiating different forms of human conduct and of objects to which humans strive, as ‘better’ or ‘worse’, as acceptable or unacceptable.

(Haller 2002, pp.142-3)

There are also different levels of generality at which one can conceptualise such values. Haller (2002, p.143) distinguishes three kinds of values: (1) Universal values, which are the basic human values present in every literate society, such as justice, equality and liberty. They have their roots in major world religions and great social thinkers. (2) Societal values or value orientations are more ‘concrete’ conceptualisations of values, “valid in a specific societal context and actually held by certain groups or populations” (Haller 2002, p.143). Haller offers the example of equality, which would be a value known since ancient times, but that has become more concrete and generalized in content (e.g. of opportunity) and in coverage (e.g. between men and women, between religious denominations). (3) Situational value orientations and norms; guidelines, and prescriptions are all “related to the concrete application of values to social behaviour in specific circumstances”. The example Haller (2002, p.143) offers is the concrete prescriptions such as quotas in employment and norms governing sexual harassment needed to implement gender equality. Haller (2002, p.143) also maintains that there is a “sliding transition” from these situational value orientations to attitudes, with attitudes containing

“idiosyncratic individual preferences and wishes” as well as “evaluative and normative elements”.

Halman & Vloet (1994) offer a useful example of how one can demonstrate the relationship between values, attitudes and behaviour. They suggest that one can argue that the use of contraception, signing a petition against abortion, or having a large number of children can be part explained by a positive or negative attitude towards family planning. These attitudes can be seen as expressing an underlying modern or traditional orientation, or value, in the domain of the family and sexuality. While Halman and Vloet (1994) concede that the line distinguishing attitudes and values may not always be clear, two distinct steps are involved in shaping behaviour. The first is several different attitudes explaining several behavioural acts, the second that all these different attitudes are shaped by an underlying guiding principle, that of values. Conceiving of values in this way, values can be identified by looking at the latent underlying principles guiding multiple behavioural and attitudinal items. This idea is better articulated by van Deth and Scarbrough in their discussion of value orientations:

Values are non-empirical – that is, not directly observable – conceptions of the desirable, used in moral discourse, with a particular relevance for behaviour. We argue that such conceptions are to be treated, analytically, as hypothetical constructs, used for heuristic without any presumption about their empirical status. Researchers can establish the empirical relevance of these constructs by uncovering some pattern, or constraint, among attitudes. A set of patterned, or constrained, attitudes we will call a *value orientation*.

(van Deth and Scarbrough 1995, p.22)

The idea of constraint, or a patterning, among attitudes reflecting an underlying value orientation is a very important and useful one. Constraint is a concept that has its roots in public opinion research, particularly in relation to political attitudes, the seminal source being Converse’s (2006 [1964]) ‘The nature of belief systems in mass publics’. It is used in conjunction with a concept that is almost analogous to values and value systems, as well as other concepts such as ideologies: that of a ‘belief system’. A belief systems is defined by Converse (2006 [1964], p.3) as a “configuration of ideas and attitudes in which the elements are bound together by some form of constraint or functional interdependence”. Converse maintains that however logically coherent a belief system appears to be,

the sources of constraint are much more likely to be psychological than logical, and even more likely to be social than psychological. Moreover, Converse argues that the “creative synthesis” of these belief systems is one in which an appeal to a superordinate value (such as Haller’s (2002) conception of universal values, or Bellah’s (1970) description of ultimate issues in relation to the religious sphere) bestows them their legitimacy. These ideas will be returned to in the discussion of Weber and Inglis on the relationship between religion and values.

Haller (2002) concludes his analysis of the use of the concept of values in comparative research by stating that:

The central task of a sociological analysis of values include, first, the definition and the operationalization of the relevant dimensions of values as clearly as possible, both in terms of the level of analysis and in substantive terms; and second; the development of concrete hypotheses about the relation between those values and the changing social circumstances in which they are imbedded.

(Haller 2002, p.143)

2.2.3 Values and National Culture

A number of more contemporary researchers have sought to identify the different value profiles of different nations, placing values at the centre of their analyses. Using a variety of different instruments and theoretical orientations, Inglehart (1971, 1977, 1990, 1995, 1997, 2003, Abramson and Inglehart 1992, 1995, Inglehart and Abramson 1994, 1999, Norris and Inglehart 2004), Schwartz (1982, 2007, Schwartz and Bilsky 1987, Schwartz and Huisman 1995), Hofstede (1980a, 1984, 2001), and to a lesser extent, Huntington (1991, 1993, Huntington and Harrison 2000), are among the most prominent researchers that have attempted to map and compare national cultures utilizing the values concept. Each of these scholars approach the concepts of values and culture from different perspectives. Hofstede's work on values is rooted in an organizational context, focussing on work-related values, and extending this to national cultures more generally. Schwartz and his colleagues approach values from a social psychological perspective, attempting to map a universal framework of cultural value orientations as a coherent system of related dimensions. Schwartz's model is concerned with which values cluster together and which values conflict with each other. Inglehart approaches values and value change from a political and sociological perspective. His focus on cross-national variation in values is an attempt to explain social, political and cultural changes in terms of modernization theory. Inglehart's theory of value change will be discussed at length below, but in this section his work will be merely alluded to in terms of conceptualising national cultures and cross-national differences in values. Despite their differing approaches, Hofstede, Inglehart, and Schwartz all apply one basic principal to their analysis. They infer the values that characterize a society by averaging the values of individuals in matched samples from each nation. They therefore "assume that the average value priorities of societal members point to the underlying cultural emphases to which they are exposed" (Schwartz 2007, pp.38-9). This is an important point, particularly in relation to the abovementioned theorization of values in the work of Parsons. Parsons (1968a) however warned that the values of a certain society were not necessarily equivalent to those values that were held by the majority of the population.

2.2.3.1 Hofstede

Hofstede's primary work, *Culture's Consequences* (2001, 1984, 1980a) (1980a, 1984, 2001), was based on a pre-existing survey of over 100,000 IBM employees in over 40 countries between 1967 and 1973. Hofstede was primarily concerned with work related values and values within an organisational context, but the dimensions he developed came to be considered to encompass more universal dimensions of cultural variability that could be used to compare and contrast various nations. The five independent dimensions on which he argued national cultures could be positioned were: 1) power distance; 2) uncertainty avoidance; 3) individualism/collectivism; 4) femininity/masculinity; and 5) long/short-term orientation. The individualism/collectivism dimension is the most frequently employed in other studies of cross-cultural differences. Badahdah (2007, p.598), for instance, describes how the concepts of individualism/collectivism dimension are used extensively by contemporary social scientists *because of* Hofstede's work. Of course the concept also has its roots in the work of Tönnies' (1964) *Gemeinschaft/Gesellschaft* distinction, and Durkheim's (2002) contrasts between modern individualistic and traditional collectivist society.

According to Hofstede (1980b, p.54), these dimensions were derived from a "massive statistical analysis" of the pre-existing survey data. The five dimensions have been widely applied in the fields of business and management, but Hofstede (1980b, p.44) rather ambitiously claims to "uncover the secrets of entire national cultures". Hofstede (1980b, p.43) defines culture as "the collective mental programming of people in an environment". Furthermore, he conceptualises culture as "not a characteristic of individuals; it encompasses a number of people who were conditioned by the same education and life experience" (Hofstede 1980b, p.43). And although Hofstede points to the fact that individuals are "conditioned" by several layers of cultural influences such as the family, social groups, and geographical regions, he is primarily interested in national cultures. National cultures represent "the cultural mental programming that the nationals tend to have in common" (Hofstede 1980b, p.43). Hofstede (2001) describes culture as having several levels, the exterior layers comprising of symbols such as words, gestures, and objects; other layers consisting of iconic representations; then rituals, collective activities and teachings; and finally values as the core of the culture. Hofstede's reasoning that

national cultures can be revealed through the use of these employee surveys is as follows: the respondents are highly similar in age, sex and occupation - it is only their nationalities that differ. Hence, the general factor that distinguishes different responses is national culture. The five dimensions mentioned above are “the main criteria by which ... national cultures differ” (Hofstede 1980b, p.43). As his focus is on characterizing national cultures with these four or five dimensions, he is not concerned with the orientations of individuals, but rather the “national norm”. The national norm is essentially the average score on each dimension for each nation. Mapping each countries position according to their scores on these dimensions, Hofstede (1980b) extends his theory further by delineating how scientific theories, amongst other things, can be explained by the national culture of a nation. One example of a rather ambitious application of his theory is to explain why Freudian approaches have never become popular in U.S. management theory, concluding it is due to Austrian national culture differing from American national culture.

Hofstede (2002, p.1355) has described his own research as a “paradigm shift in cross-cultural studies”, and that criticisms of his work are symptomatic of “paradigm shifts in any science meet[ing] with strong criticism”. There are however a vast array of criticisms that can be levelled at his work, unrelated to any resistance to paradigm shifts, which are too extensive to go into detail here. A particularly useful and incisive criticism can be found in McSweeney (2002), to which Hofstede (2002) responds. For the purposes of this review only his treatment of values and value change are of note. Echoing Parsons’ conceptualisation of values, Hofstede treats values and culture as static entities that enduring over decades and perhaps centuries. Even Parsons however, left considerably more room for cultural change than Hofstede (McSweeney 2002). Culture, Hofstede (1980b, p.43) argues, “in this sense of collective mental programming, is often difficult to change; if it changes at all; it changes slowly”. Taking Hofstede’s (1980b, p.53) analysis of Freudian theory being unpopular in contemporary management theory in the USA as an example, he argues that Austrian national culture today (or in 1980) is equivalent to Austrian national culture in “Freud’s time”. “Freud’s time”, presumably from his birth in 1856 to his death in 1939, witnessed mass industrialisation, the Austro-Prussian War, World War I, and the beginnings of World War II. While it may be useful for those

who wish to compare cultures as static entities in an historical vacuum, Hofstede's analysis offers little in terms of charting social and cultural change.

2.2.3.2 *Schwartz*

The work of Shalom Schwartz (1992, 2007, Schwartz and Bilsky 1987, Schwartz and Huisman 1995) and his colleagues represent another important body of research on cross-national and cross-cultural value research. Schwartz views culture as:

The rich complex of meanings, beliefs, practices, symbols, norms, and values prevalent among people in a society. The prevailing values emphasizes in a society may be the most central feature of culture.

(Schwartz 2007, pp.34-35)

A significant difference between the theories of Schwartz and those of Hofstede (and those of Inglehart) is that his theory of cultural value orientations is based on *a priori* theorizing rather than post hoc analyses of data. Schwartz's starting point is the notion that values represent, in the form of conscious goals, basic problems, basic needs, or universal requirements that all humans must be responsive to in order to survive physically, to co-ordinate social interaction, and for the survival and welfare of groups (Schwartz 2007).

Building on Rokeach, Schwartz distinguishes between ten distinct "types of values" derived from these universal requirements, with each distinguished according to its central goal: achievement, self-direction, universalism, benevolence, stimulation, hedonism, power, security, tradition, and conformity. Specific values are representative of a certain value type if the central goal of that value type is promoted when people act in ways that express that value or lead to its attainment. The value type of 'conformity' for example, which he defines as "restraint of actions, inclinations, and impulses likely to offend or upset or harm others and violate social expectations or norms", is represented by specific values of obedience, politeness, self-discipline, and honouring parents or elders. Essentially values represent operationalizations of these universal needs as goals that fit together in meaningful clusters (Schwartz and Huisman 1995, pp.89-90).

Furthermore, Schwartz's theory specifies "a set of dynamic relations among motivational types of values", some of the types being psychologically, practically and socially compatible with each other and others conflicting and competing. Schwartz's analysis of these conflicts and compatibilities when individuals pursue different value types simultaneously yielded "hypotheses about the universal relations among value priorities". (Schwartz and Huisman 1995, p.89). Hypothesized conflicts between values types of conformity and value types of hedonism, or the compatibility of tradition and conformity for example, were supported substantially in separate analyses of 88 samples in over 40 countries. It should be noted that the samples were drawn mainly from college students and teachers. With the exception of China, Schwartz (1992) found that values do cluster and compete in the ways he hypothesized. The value of his work lies in showing that there is a degree of cross-cultural universality in the organization of values, and in showing that societies differ in terms of which values, or value clusters, are dominant. Whereas Hofstede conceptualised the value dimensions on which nations could be distinguished as being highly independent of each other, in Schwartz' model the dimensions form "an integrated, non-orthogonal system", providing an integrated structure of the dynamic relations among values, which distinguishes his work from others (Schwartz 2007, p.38).

Schwartz does not however make much reference to social, cultural or value change. He argues "change is slow. An important feature of cultural value orientation is that they are relatively stable". He points to the fact that some researchers argue that "elements of culture persist over hundreds of years". While he does not develop the point much further he does admit that "cultural value orientations do change gradually. Societal adaptation to epidemics, technological advances, increasing wealth, contact with other cultures, and other exogenous factors leads to changes in cultural value emphases" (Schwartz 2007, p.37).

2.2.3.3 *Huntington*

Following the Weberian notion that cultural ideas, particularly values and religious traditions, have an powerful enduring influence on the institutions of societies Huntington (1993, p.24) more recently argued that the world can be divided

into eight major civilisations based on differences in culture. These civilisations represent the “highest cultural grouping of people and the broadest level of cultural identity people have”(Huntington 1993, p.24). According to Huntington (1993) the zones of Western Christian, Orthodox, Islamic, Confucian, Japanese, Hindu, African, and Latin American civilisations exhibit cultural differences that have persisted for centuries, largely shaped by religious traditions. Furthermore, Huntington (1993) claims that as economic modernization separates individuals from deeply-rooted local as well as national identities, religion and religious fundamentalism take root in their place. Huntington (1993, p.27) claims this religious revival or “unsecularization of the world” provides a “basis for identity and commitment that transcends national boundaries and unites civilizations”. Also of note in Huntington’s thesis is the argument that religious and cultural characteristics are much less mutable than ideological or class differences, and that cultural identity is essentially fixed. Whereas in ideological and class conflict individuals could choose and switch sides, in conflicts between civilizations positions are fixed and resistant to negotiation. Furthermore, Huntington (1993, p.49) argues that as non-Western societies become more economically and technologically modern they must “reconcile this modernity with their traditional culture and values”. Huntington posits that with the coming of modernity, the values of non-Western civilisations will not become similar to those of modern Western civilisation, but rather Western civilisation will have to co-exist with equally modern societies with values and interests that are significantly different to theirs. In essence, Huntington views culture and values as relatively static and enduring, even in the face of economic development and modernization. One of the most remarkable aspects of Huntington’s analysis is his underlining of the fact that, despite claims to the contrary in rhetoric about globalization and Western cultural hegemony, cultural and civilizational differences are an enduring feature of the contemporary world.

2.2.4 Values and Culture

In the discussion of Parsons' cybernetic hierarchy it was noted that the cultural system was at the highest level in the general system of action, and that values have their source in, and more concrete norms are derived from, the cultural system. Furthermore, studies of value change often frame their analysis in terms of a 'culture shift' (e.g. Inglehart 1990), or a 'clash of cultures' (e.g. Huntington 1993, Inglis 2006). And although the definitions listed above state that values are characteristic of both individuals and groups, "social scientists are primarily interested in values that are shared by many, that is, collective values" (Zetterberg 2008, p.417). Most obviously, a shared set of values is seen as a central and defining element of culture. It is therefore necessary to provide a brief review of some of the key conceptualisations of culture in anthropological and sociological literature, and how these conceptions are specifically related to values.

Culture is a term that is loaded with many different meanings, being described as "one of the two or three most complicated words in the English language" (Williams 1976 in Jenks 2007, p.928). Kroeber and Kluckhohn (1952) for example, identified 164 definitions of culture. Classic definitions of culture from 19th-century anthropology were extremely inclusive, associating culture with all things that distinguish man and his accomplishments from his biological and evolutionary origins. With such inclusivity anything from language to nation-states, or from religion to kinship structures could be subsumed under the rubric of culture (Gilmore 2000). Seminal anthropological definitions such as Tylor's (1871, p.1) identify culture as the "complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society".

Anthropologists that began comparing different cultures using more etic (from within) rather than emic (from outside) approaches refined these more inclusive definitions, giving particular emphasis to ideas and values. Kroeber & Kluckhohn's (1952) definition is similarly inclusive to the previous definitions, but more precise, and gives explicit importance to ideas and values. Of particular importance was their refinement that culture is both the product of human action and the important in influencing and instigating action.

Culture consists of patterns, explicit and implicit, of and for behaviour acquired and transmitted by symbols, constituting the distinctive achievement of human groups, including their embodiments in artifacts; the essential core of culture consists of traditional (i.e., historically derived and selected) ideas and especially their attached values; culture systems may, on the one hand, be considered as products of action, on the other as conditioning elements of further action.

(Kroeber and Kluckhohn 1952, p.181)

Another seminal definition is offered by Clifford Geertz, who defines culture as:

a historically transmitted pattern of meanings embodied in symbols, a system of inherited conceptions, expressed in symbolic forms by means of which men communicate, perpetuate and develop their knowledge about and attitudes towards life.

(Geertz 1973, p.89)

The common thread to all these definitions is their emphasis on shared ideas, meanings, and values, which are historically transmitted, and find expression in various forms such as symbols and attitudes. A more succinct definition is offered by Redfield (1941, p.1) who defines culture as “shared understandings made manifest in act and artefact”.

Swidler (1986) critiques the use of the values concept as the central element of cultural explanations of action. With a lack of any viable alternative to the values paradigm, Swidler (1986, p.273) concedes that for those interested in cultural explanation, as opposed to interpretive social science or the ‘thick description’ approach of Geertz and others, “values remain the major link between culture and action”. Swidler’s definition of culture would reflect similar elements to the previous definitions, but her alternative to the value paradigm stressed the role of the individual using culture as a “toolkit” to construct strategies of action in different situations. For Swidler:

culture consists of such symbolic vehicles of meaning, including beliefs, ritual practices, art forms, and ceremonies, as well as informal cultural practices such as language, gossip, stories, and the rituals of everyday life.

(Swidler 1986, p.273)

Furthermore, many of these definitions of culture are almost identical to definitions of religion. Geertz (in the paper entitled 'Religion as a cultural system') defines religion as:

(1) a system of symbols which acts to (2) establish powerful, pervasive, and long-lasting moods and motivations in men by (3) formulating conceptions of a general order of existence and (4) clothing these conceptions with such an aura of factuality that (5) the moods and motivations seem uniquely realistic.

(Geertz 1966, p.4, 1973, p.90)

Both entail meaning and knowledge about the world, transmitted and expressed through symbolic forms. The chief difference appears to be that religion draws its legitimacy from its "conceptions of a general order of existence", (a conception which Geertz's seems to implicitly view as being false, having only an "aura of factuality").⁵ The parallel between the two definitions has its source in the functional definitions used by Geertz for both religion and culture, but it does call attention to the fact that religion represents a key source from which culture draws its shared understandings, values and meanings. One could argue that it is only a relatively recent occurrence, with secularization, that religion has become distinct, or simply one aspect of, the cultural sphere. It also reflects what has already been discussed regarding Parsons and Bellah's positioning of religion as the chief source of legitimacy to the values prescribed by the cultural system.

The logic of Geertz's definitions would seem to suggest that if the "aura of factuality" that surrounds religion's "conceptions of a general order" were to be undermined, so too would its ability to shape the "moods and motivations of men". Taking the functionalist approach to culture and religion further, Parsons and Bellah positioned religion at the pinnacle of their hierarchy because "religious ideals are formed through intense engagement with such 'ultimate' issues about the grounding of human responsibilities (Bellah 1970: Chapter 1), they tend to monopolise moral authority concerned with the general normative premises of social life" (Lidz 1982, p.291). This begs the question what happens to this relationship when "the aura of factuality" surrounding these "conceptions of a general order" falls into decline, or

⁵ For a useful critique of this and other aspects of Geertz's definition see Frankenberry, N. K. and Penner, H. H. (1999) 'Clifford Geertz's long-lasting moods, motivations, and metaphysical conceptions', *The Journal of Religion*, 79(4), 617-640.

what happens when religious ideals are no longer relevant (or as relevant) as a source of the normative premises of social life? This is essentially the key question of this review, in terms of whether or not religion is no longer a key source in the normative order, and what relevance this change might have for values. The simplest answer to this question is that religion is no longer as relevant a source because of the differentiation of the institutional spheres to an extent that they no longer require guidance nor legitimation from the religious one. This is fundamentally a question at the macro level that one can find evidence of at the individual level (e.g. educational institutions becoming independent of religious institutions, and the populace becoming more liberal). But there is also a very simple micro level question from which the first question draws its logic: when individuals stop believing in “the general order of existence” provided by religion, do the moods and motivations lose their power and pervasiveness?

2.2.5 Values and Cultural Change

With values being defined as a central element of culture, an understanding of value change must first be situated within a broader discussion on the place of culture within theories of social change. Etzioni-Halevy and Etzioni (1973) argue that:

Within the range of the theories which stress that the determinants of social change arise from within society itself, the longest, deepest, and most important controversy lies between those who see the prime moving forces of human history in the ‘spiritual’ spheres and those who see it in the ‘material’ ones; between those who stress the role of ideas and those who stress the role of economic factors; between those who stress the role of culture and those who stress the role of technology.

(Etzioni-Halevy and Etzioni 1973, p.6)

Social theories that are based in a materialist interpretation of reality, such as the various forms of Marxism, see culture as an ideological set of understandings. These understandings are often distorted, used as an apparatus of domination by ruling classes, and arise from power relationships at the heart of society. Theorists in this vein of social theory such as Marx, Gramsci, Lukács, Adorno and others, while differing in their exact theorisation of culture, all view it as an epiphenomenon to the

primacy of material relations (Jenks 2007). The logic of this approach is that economic production is the most basic sphere of human activity, and changes in this sphere instigate changes in all other domains of social life. In contrast to these materialist understandings of culture, theorists such as Weber, Simmel, Geertz, and to some extent Parsons, see culture as an autonomous realm of social experience. Although they do not deny that culture is linked to material conditions, culture is seen as generative (Jenks 2007). Weber is a prime example of conceptualising culture that has a generative role in social change. He suggests that “social structure ‘catches up’ with cultural development” through the emergence of charismatic leadership outside of the social structure. A prime example is Calvin and other reformers introducing a Protestant ethic that gave rise to rational capitalism (Etzioni-Halevy and Etzioni 1973, p.5).

Weber’s (2001) *Protestant Ethic* therefore demonstrated the crucial importance of culture in determining the economic structure itself. But he was also mindful that this represented only one side of the causal equation. In other circumstances the economic structure might determine the cultural, and overall the sources of change are both economic and cultural. Furthermore, it is argued that “all efforts to explain societal change as originating from one single factor have so utterly failed” and “contemporary sociology has almost unanimously adopted a multi-factor approach” (Etzioni-Halevy and Etzioni 1973, p.7)

Social change, it is now held, may originate in any institutional area, bringing about changes in other areas, which in turn make for further adaptations in the initial sphere of change. Technological, economic, political, religious, ideological, demographic, and stratificational factors are all viewed as potentially independent variables which influence each other as well as the course of society.

(Etzioni-Halevy and Etzioni 1973, p.7)

Although Etzioni-Halevy and Etzioni rightly point out that any institutional area may bring about change in other areas, changes in the economic sphere are of prime importance in theories of social change. As Turner (1997, p. 9) rightly states: “if we know how economic activity is organized, we can make fairly accurate predictions about the structure and operation of other institutions”.

These different perspectives on the nature of culture, and social and cultural change, map directly onto contemporary perspectives on the nature of value change. Locating values as a central element of culture, many authors conceive of mass changes in attitudes, public opinion, and values as a ‘culture shift’ (e.g. Inglehart 1990, Pettersson 1994). The two dominant paradigms in explaining such shifts in values are modernization theory and culturalism (Arts *et al.* 2003a, p.190). The emphasis of modernization theory is on the consequences of economic and technological developments. The main thrust of modernization theory in relation to values is that economic development brings with it predictable shifts in values. More precisely, modernization entails the convergence of values. Different societies, and groups and individuals within these societies, experiencing similar patterns of experiences brought about by modernization, will develop similar values. In simple terms, the culturalist approach stresses the opposite. Culturalist approaches place their emphasis not on economic and technological transformations having a direct effect of values, but that values and cultural orientations are persistent, and have an enduring influence on the institutions of society. Cultural orientations, or shared values, are most fundamentally a product of shared socialization, and are therefore quite resistant to change (Arts *et al.* 2003a, p.190). Inglehart’s theory of value change (see section 2.5.3) represents an attempt to integrate the elements of each approach.

2.2.6 Value Change: Macro & Micro Change

When investigating the interrelationships between values and religion, and their place within social and cultural change it is essential that one distinguishes between different levels of analysis, between macro level changes and effects and individual level changes and effects (Coleman 1986, 1994, Haller 2002). In general sociologists identify two level of analysis: the macro and micro levels (although others such as Turner (2010a, 2010b, 2012) identify the meso level as having particular importance). The macroscopic or macrosociological entails the study of large-scale social phenomena such as groups and collectivities of various sizes, the major organizations and institutions of a society or several societies, and cross-sectional, historic and comparative studies of a society or multiple societies.

Microscopic studies, or microsociology, encompass the social activities of individuals or small groups, focussing on individual thought, action and interaction, often using social-psychological theories. The micro-macro divide represents one of the principle dualisms that characterizes divergent sociological perspectives (Tickmayer and Li 2000). There is currently no dominant perspective on how exactly these two levels of analysis may be unified, with Giddens' (1984) structuration theory representing the most prominent attempt in contemporary social theory. The duality is of central importance as it guides and determines "researchers' choice of instruments, units of observation, and explanatory procedures" (Cherkaoui 2001, p.9117).

In relation to value change, Haller (2002, p.152) distinguishes four effects on the basis of actor/events versus structure/values and micro versus macro levels. The first is macro-macro effects or "direct shaping", which often entails macro-level actors, such as political leaders (as collective actors), religious figures, or intellectuals, initiating changes that directly affects macro-structures and institutions. Secondly, there are macro-micro effects, or "indirect shaping", where macro-actors influence the actions of many individuals. Thirdly, there are macro-micro effects or "structural determination or limitation" whereby "either macro or micro structures set limits on or broaden the range of action that are possible for individuals at the micro level". Lastly, there are micro-macro changes, where numerous individuals change their actions or attitudes so that it brings about change at the macro level, a revolution being the most deliberate example.

Such a scheme is particularly important for understanding the relationship between religion and values, and value change more generally, as relationships that apply at the micro level do not necessarily apply at the macro level. If one were to apply this logic to the process of secularization, it would imply that a decline in the importance of religion at the macro level, in terms of providing an over-arching value consensus between the institutions of society, does not *necessarily* imply that such a change will lead to declining importance of religion at the individual level, and vice versa.

As already discussed in relation to Inglehart, Schwartz, and Hofstede, the average of aggregated individual responses to a series of survey questions are

theorised to be the reflective of the dominant values of national cultures. This notion is however somewhat problematic because it presupposes that each nation is characterised by value homogeneity and that each nation has a high degree of cultural integration (Haller 2002, p.150). One of the central questions in many comparative studies of values in modern and postmodern societies is whether or not values have become more fragmented and heterogeneous (e.g. Halman and Pettersson 1995). It is also of great importance to note that such dominant values cannot be fully understood from individual attitudes and behaviours. To gain a fuller understanding one could also look at the constitutional texts, laws, statements from official representatives (Haller 2002, p.150), not to mention other cultural expressions such as art, architecture and literature. Similar arguments can be made about operationalizations of the degree of secularization or the degree of religiosity in a society as an average of the levels of belief, practice and other indicators. The duality is particularly important in the conceptualisation of religion and values, how these affect each other, and how each of these affect and are affected by other aspects of social and cultural change.

A classic example of how one could theorise the duality between the macrosociological and the microsociological is Weber's Protestant ethic and spirit of capitalism. Coleman (1994) discusses this in his *Foundations of Social Theory* as an example of a somewhat deficient micro-macro linkage. According to Coleman (1994, pp.8-9), the problematic aspect of Weber's thesis is proposition three, the micro to macro linkage. He argues that Weber provides very little evidence of how an aggregation of individual economic behaviours amounts to the growth of a social organization (capitalism), with its structure of positions that constitute the organization, and how each of the individuals within such a structure come to occupy, and be motivated to occupy, such positions.

This micro to macro linkage can be considered one of the preeminent problems in social theory. Parsons for example, essentially abandoned his attempt to link the two, focussing instead on the macro-social of systems and functions, discarding the micro-foundations, and Marx's conception of how individual consciousnesses (micro) transformed into class conscious social action (macro) is the most problematic element in his overall thesis (Coleman 1986). While one could go into much more detail on Coleman's ideas on how individual behaviour and social

systems can be linked in theory and in empirical research, it will suffice to say that we need to clearly distinguish between macro and micro effects, outcomes and explanations.

2.3 Religion

Religion is obviously a multi-dimensional concept that is very much loaded with different meanings and understandings, the review thus far only touching on its multi-dimensionality. As will be discussed later, many of the debates and discussions about secularization become mired in confusion because of different uses of the term religion, and hence different uses of the term secularization. That is not to say that secularization and religion/religiosity are simply opposite ends on a well-balanced scale, but rather that how one defines the scope of the concept of religion ultimately directs what one understands as the scope, or even the existence of, secularization. An obvious starting point therefore would be to address some of the seminal social scientific definitions of religion. Robert Bellah (1964, p.358), already noted for his functional conceptualization, defines religion as “a set of symbolic forms and acts which relates man to the ultimate condition of his existence”.

According to Geertz (1966, p.4) religion is:

(1) a system of symbols (2) which acts to establish powerful, pervasive and long-lasting moods and motivations in men (3) by formulating conceptions of a general order of existence and (4) clothing these conceptions with such an aura of factuality that (5) the moods and motivations seem uniquely realistic.

(Geertz 1966, p.4)

In *The Sacred Canopy* Berger (1967, p.59) defines religion as

the establishment, through human activity of an all-embracing sacred order, that is, of a sacred cosmos that will be capable of maintaining itself in the ever-present face of chaos

(Berger 1967, p.59)

A more substantive definition would be one from Bruce, who defines religion as:

beliefs, actions and institutions predicated on the existence of entities with powers of agency (that is, gods) or impersonal powers or processes possessed of moral purpose (the Hindu notion of karma, for example), which can set the conditions of, or intervene in, human affairs.

(Bruce 2002, p.2)

The most important aspect of religion for Yamane (1997) and Chaves' (1994) definition was not religion per se, but religious authority structures. A religious authority structure is defined by Chaves as:

a social structure that attempts to enforce its order and reach its ends by controlling the access of individuals to some desired good, where the legitimation of that control includes some supernatural component, however weak.

(Chaves 1994, pp.755-756)

Beckford (2003, p.16) however has argued that “from a social scientific point of view, it would be better to abandon the search for, and the assumption that there are, generic qualities of religion”. Furthermore, Budd (1973, p.82 cited in Beckford 2003, p.16) maintains that “religion is not a single phenomenon and consequently that research to establish what religion ‘is’ or ‘does’ is in vain”. He points to the socially constructed nature of the term, and Maduro (2002) highlights the political connotations of legitimising one thing as religious and another thing not. Rather than abandoning the term however, Beckford (2003, p.18) and Maduro (2002) have called for a more mindful, precise and qualified use of the term, be it “beliefs, feelings, actions, relationships organisations and so on”.

2.3.1 Substantive versus Functional Definitions

A particularly important distinction in defining the concept of religion is the distinction between substantive and functional definitions. There is also the distinction between descriptive and evaluative definitions, those that try to capture the essence of what religion is or should be, and a more hermeneutic approach that attempts to describe it in day to day practice (Hamilton 2001). While these distinctions are important, the analysis here will focus on substantive and functional definitions. Following Weber (1978, p.399), “the essence of religion is not even our concern, as we make it our task to study the conditions and effects of a particular type of social action”. A simple distinction between substantive and functional is that substantive definitions define what religion ‘is’, and functional definitions define what religion ‘does’. A substantive approach investigates religion as a previously defined phenomenon, irrespective of whether it fulfils certain functions or not. A

functional approach looks at a phenomenon in terms of previously defined functions, the provision of meaning or integration for example, irrespective of whether individuals involved, or others, refer to it as religion. Substantive definitions typically involve the contents of religion, such as belief and practices (Hamilton 2001). A typical example of an early substantial definition of religion is Tylor's (1871, p.8) simple "belief in spiritual beings". Examples of more expansive substantive definitions would be those of Bruce (above) and Berger's (above). Yamane and Chaves' definitions (above) represent a mixture of the two types, part functional in terms of an authority structure controlling access to a desired good, but including a reference to the substantive supernatural element.

Functional definitions typically define religion in terms of its role in society. Durkheim's (1915) emphasis on religion uniting followers into a single moral community of the church by differentiating the sacred from the profane would be a typical example of a functional definition. Bellah's (above) and Geertz's definitions (above) are also functionalist definitions, particularly in relation to religion's establishment of "moods and motivations in men". Functional definitions have however been criticized as being too inclusive (but valuable for heuristic purposes) (e.g. Weigert 1974), encompassing a wide range of phenomena that would seem to have little correspondence with what one would conventionally term religion, and even encompassing phenomena that are blatantly anti-religious, such as Communist ideology or secular humanism (e.g. Parsons 1974). This poses particular problems for empirical enquiry. One important problem of functional definitions is that "they prejudice the important empirical question of the role or effects that religion does have in society by stating the very definition of what it ought to be demonstrated empirically" (Hamilton 2001, p.19). A simple example would be a functional theory of religion arguing that religion is central to society because it provides integration and promotes social stability. But if a society were to have no 'religion' in conventional terms, this does not refute the theory. Any set of beliefs that function to provide integration and promote stability qualifies as religion. Hamilton (2001, p.20) therefore argues that functional definitions should be avoided because "they prejudice empirical questions which must be resolved by actual enquiry and investigation".

That is not to say functional interpretations of religion are of no importance in this study. Indeed, this study is expressly concerned with the ‘functions’ of religion. Functional approaches to religion offer particularly useful insights into the role of religion in society. The insights provided by Parsons and later Bellah have already been useful in interpreting the relationship between religion and values. The central question of this thesis does however need to be based on a substantive definition of religion. Although the final analysis may be able to make claims about the function of religion, a substantive definition of what religion is, and its dimensions, must be laid out at the outset. Only then can one question what role religion plays in society, how this may change, and how this specifically relates to values.

2.3.2 Dimensions of Religiosity

Denominational membership, religious practice, religious beliefs, confidence in religious institutions, and importance of religion are all dimensions of religiosity at the individual level. These can also be related to higher levels in relation to the social and institutional aspects of religion. In empirical analyses an individual level indicator such as frequency of church attendance might be used as a measure of the degree of integration into the religious system (e.g. Bréchon 2003) or a measure of the degree of individual religious adherence or commitment (e.g. Procter and Hornsby-Smith 2003). Frequency of church attendance represents an important measure in this respect, as it is a direct behavioural measure of religious involvement, integration, direct participation in the rites of the church, or “the symbolic expression of the experience of the church” (Giorgi 1992, p.640). It is a particularly important because it is a behaviour rather than a self-reported attitude or belief, hence much more concrete and less prone to bias than self-reported attitudes and beliefs. Very often, frequency of church attendance is the measure that forms the basis for the comparative studies of secularization and value change by using it as the guiding indicator of how secularized a society is (e.g. Halman *et al.* 1999).

Religious practice is however just one dimension of religiosity (and as will become clearer later, changes in individual religiosity are only one, contested, dimension of secularization). In the sociology of religion and other related disciplines, religiosity is generally used as a generic term for individual religious

commitment, religiousness, and many other related synonyms. It is important to stress that religiosity is a multi-dimensional concept that requires significant elaboration. One of the seminal illustrations of the dimensions of religiosity was Stark and Glock's (1968) *American Piety: The Nature of Religious Commitment*. They contend that beneath the pluralities of religious expression lie five fundamental dimensions: belief, practice, experience, knowledge, and the consequential dimension. The belief/ideological dimension consists of an individual holding "a certain theological outlook", adhering to the primary beliefs or "truth tenets" of the religion (Stark and Glock 1968, p.14). The practice dimension encompasses "the things people do to carry out their religious commitment", and consists of the two sub-dimensions of devotion and ritual. Ritual refers to "the set of rites, formal religious acts, and sacred practices which all religions expect their adherents to perform". Devotion is similar to ritual but less formalized and public. Devotion entails "personal acts of worship and contemplation which are relatively spontaneous, informal, and typically private". The experience dimension consists of subjective religious experience, "those feelings, perceptions, and sensations which are experienced by an actor or defined by a religious group (or society) as involving some communication, however slight, with a divine essence, that is, with God, with ultimate reality, with transcendental authority" (Stark and Glock 1968, p.15). The knowledge dimension encompasses the information individuals are expected to have regarding a religion's traditions, religious texts, rites, and the basic tenets of the religion. The consequential dimension differs from the other four dimensions. The consequential dimension identifies the effects of these four dimensions in individuals' everyday lives (Stark and Glock 1968, p.16). Stark and Glock note that although religions tend to prescribe how adherents should think and act in day-to-day life, the extent to which religious consequences are a part of religious commitment or simply follow from it are not entirely clear. Volume III of their study was to be devoted to the study of the social and psychological consequences of religious commitment, but unfortunately Volume III never materialized.

Glock and Stark (1968) also point out that while these dimensions are likely to be very much related to one another, it is clear that being religious on one dimension does not necessarily imply being religious on another. Religious knowledge does not necessarily entail religious belief, religious experience does not

necessarily flow from religious belief or practice, religious practice does not necessarily entail knowledge and belief, and so on through other permutations. In other words, each dimension is considered *analytically* discrete (Faulkner and Gordon 1966). They do however place the belief aspect as the most central component of religiosity, considering it “a particularly necessary, but not sufficient, aspect of religious commitment” (Stark and Glock 1968, p.17). While one could argue that their interpretation of religiosity is quite individualistic, making very little reference to communal (which they later address), institutional or societal dimensions of religion, it is a very useful exposition of the multi-dimensionality of individual religiosity. The relationship between individual religiosity and these wider dimensions of religion will be discussed in more detail in the discussion of the relationship between religion and values, and in the discussion of secularization.

Other dimensions of religious commitment have also been suggested, a few important examples being Allport & Ross’s (1967) differentiation between intrinsic and extrinsic religiosity, and between indiscriminately pro-religious and anti-religious. Lenski’s (1961) demarcation between associational and communal religious group involvement, and in relation to religious orientations between doctrinal orthodoxy and devotionism, bear much resemblance to the measures used in contemporary studies of religious change.

From numerous analyses of European Values Survey (EVS) data Halman, Ester, Riis, Vloet and others (e.g. Halman and Vloet 1994, Ester and Halman 1994, Halman 1995, Halman and Pettersson 1996, Halman and Riis 2003, Arts *et al.* 2003b) have constructed a number of indices of basic religious orientations that capture different dimensions of individual religiosity or individual religious values. The first is religious orthodoxy, encompassing acceptance of traditional Christian beliefs such as God, Heaven, Hell et cetera. The second, church adequacy, consists of confidence in the church, as well as whether individuals feel the church is giving answers to moral, social and spiritual problems. The final orientation is related to personal religiosity, and is expressed in belief in a personal God, the importance of God in everyday life, getting comfort and strength from religion, and frequently praying (Halman *et al.* 1999). While all these indicators are somewhat limited to the individual level, they can be related both theoretically and empirically to meso (organizations) and macro (societal) levels of analysis.

2.4 The Relationship between Religion and Values

As already discussed, values can be defined as guiding images of social action, which denote some actions as desirable/undesirable and acceptable/unacceptable. Values therefore contain both a normative moral/ethical component in terms how behaviour should be, and a component that guides the goals to which humans strive. The role of religion in shaping this moral and ideal behaviour was of central concern to the founding fathers of sociology, and continues to be the subject to theoretical and empirical debate in contemporary sociological and social psychological research.

2.4.1 Values and Religion: Social Psychology

In a seminal study of the relationship between values and religion Rokeach (1969a, p.3) laid out two fundamental assumptions that those “partisan to religion” must be committed:

First, that religion teaches a man a distinctive system of moral values that he might otherwise not have and, second, that such moral values guide man’s everyday relations to his fellowman towards higher, nobler, or more humane levels than might otherwise be the case.

(Rokeach 1969a, p.3)

He states that these two assumptions are empirically testable, but he knows “no studies that systematically attempt to identify the specific values or value systems of the religious”. Such a relationship can be uncovered in many different ways, using different approaches to religious commitment and different approaches to values. Rokeach (1969a) approached this question in relation to value systems, asking respondents to rank 18 instrumental and 18 terminal values. Terminal values refer to preferred end states, instrumental values to preferred modes of behaviour. Rokeach asked respondents to rank each of the 18 terminal and 18 instrumental according to how important they were in their daily lives. Rokeach’s analysis compares these values according to denomination, according to frequency of religious practice, and according to the importance of religion in the lives of individuals. Summarising the voluminous findings greatly, Rokeach found that more religious individuals ranked values such as ‘salvation’, ‘forgiveness’, and

'obedience' higher, and other values such as 'independence', 'pleasure', 'intellect', and 'logic' lower than non-religious respondents. According to Fontaine *et al.* (2005) "most of the research on the religion-values relationship has been inspired by this approach". The approach has some serious limitations however, some of which were already alluded to in terms of Rokeach's (and Schwartz's) definitions, in that they each focus on quite abstract values, devoid of any context or domain in which values might apply, such as the family or the workplace. It also makes very few concrete hypotheses about the relationship between the religiosity and values, merely cataloguing which values religious people rank highest and lowest. Indeed the results of Rokeach's research into the religion-values relationship have been accused of being poorly organized and one-dimensional (Fontaine *et al.* 2005).

More recently, Schwartz & Huisman (1995) carried out a similar analysis of the relationship between values and religion, drawing on past research to develop hypotheses about the relationship between religion and values, as well utilizing Schwartz's theory of the structure of value systems described earlier. They drew their hypotheses from both value compatibilities and conflicts, as well as theological, sociological, and psychological analyses of religion. From their theological analysis, they argue that religion emphasizes awe, respect, and humility, promotes "the transcendence of material conditions", and opposes "self-indulgent materialism" (Schwartz and Huisman 1995, p.91). They therefore argue that individual religious commitment should correlate most positively with their 'tradition' value type (which is made up of values that include "submission to transcendental authority through acceptance of the customs and beliefs of traditional culture and religion" (Schwartz and Huisman 1995, p.91)). They argue that religion will be correlated negatively with the value type 'hedonism', (which is constituted of values whose "central goal is "sensuous gratification of oneself") (Schwartz and Huisman 1995, p.92). From their sociological analysis they highlight the role of religion in "symbolizing, preserving, and justifying the prevailing social structure and normative system", therefore discouraging questioning and innovation (Schwartz and Huisman 1995, p.93). They argue that religious commitment will be positively correlated with the value types of tradition, conformity, security, and correlate negatively with values that encourage independent action and judgements, the value types of stimulation and self-direction.

From their psychological analysis, they argue that religiosity is a means to reduce uncertainty and anxiety, providing answers to life's "most fundamental existential miseries" (Schwartz and Huisman 1995, p.92). They therefore argue that religious commitment will be positively correlated with "values that emphasize attaining and maintaining certainty in life", those of security, tradition and conformity. They propose that negative correlations would be found in values directed towards openness to change, those of self-direction and stimulation. The value types proposed by Schwartz were also collated into larger two-dimensional indexes, 'conservatism vs openness to change' and 'self-transcendence vs. self-enhancement'. Taken together their series of hypotheses amount to religion being correlated negatively with openness to change (stimulation, self-direction and hedonism), negatively with self-enhancement (achievement, power, hedonism) positively with conservatism (security, tradition and conformity), and positively with self-transcendence (universalism and benevolence). Overall, their findings were consistent with their hypothesized associations. It is also quite striking how similar these two value dimensions are to those proposed by Inglehart (see below), between materialism/postmaterialism, and secular-rational values.

There are however some problems with this analysis. The first and most obvious one is the tautology of their first hypothesis, that religious commitment will be highly correlated with the 'tradition' value type, which they define as "respect, commitment, and acceptance of the customs and ideas that traditional culture or religion provide". The second is that the level of analysis is purely at the micro level of individual values and individual religious commitment, making little reference to the significance of religion at the societal level. Third, although their rationale for adopting a one-dimensional approach to individual religiosity is persuasive⁶, focussing on the subjective importance of religiosity fails to furnish their analysis with any theoretically useful conclusions about the possible changing relationship between religion and values. Finally, there is the point made earlier in the review

⁶ They argue that a uni-dimensional approach is more appropriate when: a) The interest is in relating religiosity to broad cultural attitudes rather than interest in the relatedness of the different dimensions of religiosity. b) The same set of hypotheses is tested in different denominations, requiring a common denominator that has relevance to each. c) The sample is from a religiously heterogeneous population (Schwartz and Huisman 1995, p.96).

regarding their conceptualisation of values as being trans-situational, where the social context of these values is ignored.

2.4.2 Values and Religion: Classical Sociology

The relationship between values and religion was of central concern to founding fathers of sociology, each addressing the values-religion relationship in different ways. Their ideas regarding the religion-values relationship are discussed here in turn. In addition, a selection of exemplary contemporary applications and criticisms of their approaches are discussed.

2.4.2.1 Marx

Marx famously argued that religion served the interests of the ruling classes by diverting individuals from their miseries in this life with the promise of fulfilment in the next (Marx and Engels 1970). More generally, Marx & Engels (1970, p.64) stated that “the ideas of the ruling class in every epoch are the ruling ideas”. Religion and the institution of the church are one means through which such ideas can be transmitted. Religion legitimates these ideas by imbuing them with a sacred quality, securing the hegemonic power of the ruling classes over ideas (Schoenfeld 1998).

By internalizing a set of beliefs that are contrary to their own interests, but serving those of the ruling classes, religion teaches individuals that obedience to authority and acceptance of the social order will lead to future salvation. For instance, Thompson *et al.* suggests that the emergence of Methodism in England was key in defusing political agitation that, in their opinion, would have led to a revolution. It is difficult to say whether Marx maintained that such beliefs instilled certain values in individuals, or whether they merely de-fused other values that would be at odds with the maintenance of class inequality (Thompson *et al.* (1966) cited in Schoenfeld 1998, p.287). Schoenfeld (1998) describes the process using Nietzsche’s (1976) concept of ‘transvaluation’, where the working class attribute a positive value to their conditions because they are powerless to change them.

Meekness, turning the other cheek, and the desirability of poverty are offered as examples of Christian teachings that exemplify this practice of transvaluation.

Concisely, Marx's treatment of the relationship between religion and values is that religious belief/doctrine, as an element of the cultural superstructure, shaped by the material base of relations of production, instils values of deference to authority and conservatism, and de-fuses those that might emphasize worldly gain and equality, to name but a few. This ensures the status quo of class inequality (Marx and Engels 1970). Marx's chief emphasis is therefore on the belief aspect of religion, specifically the belief that salvation will come to those who are meek, suffer poverty etc. In terms of the macro-micro distinctions discussed above, Marx's treatment of religion and values can be defined as the macro structure of material relations affecting 'macro-cultural' religious doctrine (or possibly the specific doctrines that religious institutions convey to the members), which at the micro level can be seen in commitment to a belief in salvation, which in turn instils certain values in individual adherents, which ultimately ensures the maintenance of class inequality at the macro level. It is noteworthy that Marx treats specific religious beliefs, those of salvation, as the key mechanism through which values are instilled in individuals. Interpreting this analysis of religion in relation to the theorisation of belief systems discussed earlier, one could argue that Marx maintained that the belief systems that served the interest of the ruling classes were ones that knitted ideas such as obedience and meekness with religious or cosmological ideas about salvation. Indeed, Schwartz and Huisman (1995) found that values of hedonism, stimulation, and self-direction were all negatively correlated with subjective religiosity, and positively correlated with values of tradition and conformity.

2.4.2.2 The use of Marx's Theory in the Sociology of Religion

It is noteworthy that, although they seldom directly cite Marx, many sociologists of religion use his logic in explaining the causes of secularization, or the decline of supernatural beliefs. Wilson argues that:

with the course of scientific and technological advance, life in this world became less arduous, and its depiction as a vale of tears became less plausible. Alternative agencies of

salvation, relevant to the here-and-now, or amenable to empirical validation, came to displace the speculative supernaturalism of religious systems.

(Wilson 2001, p.40)

This statement suggests, perhaps indiscriminately, that science and technology have put an end to, or at least lessened, the suffering of all those who once turned to religion for solace. Indeed this is almost the exact thesis to which Inglehart (Inglehart and Baker 2000, Norris and Inglehart 2004), in their analysis of religion and values, subscribe. Although it will be stated in more detail later, Inglehart suggests that religiosity diminishes when individuals are materially secure, and that this is the primary cause of declining religiosity.

The idea of religiosity falling into decline as a result of material security is an important if somewhat simplistic one. It suggests that individuals have not simply become aware that religious beliefs only serve the interests of the ruling classes, but rather the relations of inequality have reached a stage of equilibrium (or at least a stage where everyone is at an adequate level of material wealth), where these beliefs are no longer required to justify individuals' positions. Notwithstanding claims that might suggest inequality and material insecurity is still rife in modern societies, the argument suggests that the only function of religion is to provide salvation from material insecurity. The logic of this thesis suggests that as material inequality subsides, so too will religion, the end result seemingly a godless socialist society. It will be argued in more detail later that religion might still function to provide insulation from other insecurities, and ones that are as relevant in modern society as they ever were. But the overall idea of religion being eliminated by the technological and material benefits of is one that is very much tied up with the idea of modernization itself:

The emergence in high modernity of the affluent society and the welfare state, notwithstanding current cutbacks, has reduced economic vulnerability as dramatically as it has reduced the physical vulnerability associated with birth, sickness, and death. *If* religion is rooted in social, economic and physical vulnerability, it is to be expected, surely that modernity ... is inherently secularizing. Modernity solves at the root the vulnerability to which religion was the prime compensator.

(Walter and Davie 1998, p.653)

2.4.2.3 Weber

Like Marx, Weber emphasized the salvation aspect of religion as one of the key mechanisms through which holding certain religious beliefs shapes values. Whereas Marx conceptualised beliefs and values as by-products of material interests, Weber would show how this arrow of causation could be reversed, particularly in his Protestant ethic thesis (Parkin 1982). As already noted, Weber was not a complete idealist: he always emphasized the structural context in which ideas and beliefs operated. In his political writings in particular, he stresses that values and ideology can only have a very limited impact on the structures of society, especially when it has reached a certain stage of development, that of the bureaucratic stage (Parkin 1982).

Much of Weber's (1978, 1993, 2001) work on religion is related to the key question of this review: "the relations between religious ideas and commitments and other aspects of human conduct" (Parsons 1993, p.xxx). Weber's starting point is that belief in the supernatural is a universal in all societies. Such forces give meaning to events and experiences that are incomprehensible and unexplainable. Such forces or spirits are also "endowed with volition" and are invoked, through entreaty or coercion, to fulfil certain goals (Weber 1993, p.3). In less developed religions, their invocation is concerned with this-worldly goals such as prosperity, health and security. In the most primitive, magical stage of 'religion' there are no ethics or metaphysics, simply worldly ends, with magic used to achieve them on an ad hoc basis. It is interesting to note that Weber positions the material and security providing functions of religion as the central element of religion in its simplest form (this worldly and ad-hoc however).

Other than theodicy - how to explain the injustices of this world - Weber's chief concern was with the effects of soteriology: "our concern is essentially with salvation, whatever its form, insofar as it has produced certain consequences for practical behaviour in the world" (Weber *et al.* 1978, p.528). Weber argued that all world religions, in one way or another, were concerned with salvation. What path a religion followed towards salvation, would have distinct consequences for practical behaviour: "in other words, the quest for salvation in any religious group has the

strongest chance of exerting practical influences” (Weber *et al.* 1978, p.528). Weber (1978, pp. 518-576) delineates five major means of forms of achieving salvation: ritual, good works and self-perfection, ecstasy, mysticism, and asceticism. The latter two, asceticism and mysticism can be both this-worldly and other-worldly. The latter two are also of the most importance for Weber in relation to their consequences for practical, particularly economic, behaviour.

For Weber, religious action is directed towards either worldly ends or “advantages in this world”, such as relief from sickness and suffering, and also to more “other-worldly non-economic goals”, the very goals that are distinctive of religious behaviour itself (Weber *et al.* 1978, p.424). The changes in the locus of religious action follow an evolutionary process of increasing rationalization and systematization of man’s relationship to God and the divine. The most ‘primitive’, achieving “advantages of this world” are in the realm of magic, “magical coercion” or “magical instrumentality”, and do not constitute religions per se (Weber *et al.* 1978, pp.422-423). With increasing rationalization, “primitive rationalism” or “magical instrumentality” recede, and religion becomes concerned with the “other worldly non-economic goals” (Weber *et al.* 1978, p.424). Instead of magical coercion of spirits and demons, religion entreats God through prayer and worship. Furthermore, instead of ad hoc coercion by sorcerers, the “rise of the priesthood” endows religion with permanent functionaries that are equipped with “special knowledge, fixed doctrine, and vocational qualifications” (Weber *et al.* 1978, p.425). More precisely, “the priesthood had to delimit what must and must not be regarded as sacred and infuse its views into the religion of the laity” (Weber *et al.* 1978, p.458). Doctrine refers to:

the development of a rational system of religious concepts and (what is of the utmost importance for us here) the development of a systematic and distinctively religious ethic based upon a consistent and stable doctrine which purports to be a ‘revelation’.

(Weber *et al.* 1978, p.426).

This revelation usually has its roots in a prophet, whose divinely inspired and unified ethical vision is translated by the priest to the laity. More specifically, priests and theologians “rationalized the values implicit in doctrines into internally consistent constellations of values, or worldviews (*Weltbilder*)” (Kalberg 1980,

p.1153). Adherence to the rules and regulations prescribed by the priest and the institution of the church, and not any distinctive interpretation of doctrinal principles⁷, would deliver individuals from sin and achieve salvation (Weber 1958b). Significantly, this stage of religious evolution involves behaviour being codified in relation to religious ritual, but also 'non-religious' everyday life, relative to salvation. Furthermore, religious organisations become more bureaucratic and large-scale, with an elite priestly class whose explication of belief systems and rituals comes to dominate religious life, and who come to wield considerable secular power in society (Turner 1997).

In contrast to this ethic based on orthodoxy, for Weber the most evolved and rationalized form of religion was that of the inner-worldly ascetic, exemplified in Calvinism. Calvinism represented:

that great historic process in the development of religions, the elimination of magic from the world which had begun with the old Hebrew prophets and, in conjunction with Hellenistic scientific thought, had repudiated all magical means to salvation as superstition and sin, came here to its logical conclusion.

(Weber 2001, p.101).

The pinnacle of religious evolution and rationalization meant that no longer could individuals only adhere to given laws, rules, and rituals as a means to salvation, and no longer was the path to salvation mediated by the clergy. Rather the locus of religious salvation moved to the individual living an ethically principled life in every sphere of activity (Weber 2001, p.100), or in "the methodical and rationalized routine activities of everyday life in the service of the Lord" (Weber 1958b, p.291). As already discussed, Weber (2001) maintained that such worldly

⁷ "Now, every hierocratic and official authority of a 'church'- that is, a community organized by officials into an institution which bestows gifts of grace- fights principally against all virtuoso religion, and against its autonomous development. For the church, being the holder of institutionalized grace, seeks to organize the religiosity of the masses and to put its own monopolized and mediated sacred values in the place of the autonomous and religious status qualifications of the religious virtuoso" Weber, M. (1958b) 'The social psychology of world religions' in Gerth, H. and Mills, C. W., eds., *From Max Weber: Essays in Sociology*, New York: Oxford University Press, 267-301.(p.288).

ascetic behaviour was particularly important in the development of rational capitalism.

Although these stages of rationalization seem to represent a fairly linear evolutionary progression, it is likely that any religion will contain elements of each. Weber (1968) maintained that Catholicism in particular retained a great deal of emphasis on magic. Weber's characterisation of Catholicism as a cult with a particular emphasis on magic and polytheism, and which maintained primitive modes of thought and action has however been criticized as being poorly thought out and unrealistic (Stark 1968, p.202).

A useful means of considering Weber's theorisation of religion is in terms of Converse's belief systems discussed earlier in the review. With increasing rationalization, systems of values and beliefs become less controlled and constrained by external sources such as the clergy, but rather are more reliant on the individual to bind them together into meaningful systems themselves. Furthermore, Weber's notion of secularization predicts that the religious component of this system would gradually become less central to the belief system as a whole, and values that once stemmed from ways of achieving salvation, such as ascetic behaviour, would eventually lose their association with religious beliefs altogether, becoming wholly secular ideals.

2.4.2.4 Inglis' Application of Weber's Theory

Drawing on Weber's scheme, Inglis (1998, p.20-38) developed a typology of Irish Catholic religiosity based on "the three main types of ethical behaviour in Christianity" (Inglis 1998, p.21):

1. Magical Devotional: "fulfilling traditional prescriptions and formulas in order to achieve material transformation in this world", which entails "traditional spiritual practices of prayer, penance and pilgrimage" (Inglis 1998, p.21, p.12).
2. Legalistic-Orthodox: "strict adherence to Church rules and regulations" (Inglis 1998, p.12).

3. Individually principled ethics: “methodically following and individually reasoned set of ethical guidelines”, which entails “choosing for themselves the beliefs, practices and ethics to which they adhere” (Inglis 1998, p.21, p.12).

Inglis (1998, p.23) argues that since the 1960s there had been a “definite shift away from the dominance of legalistic-orthodox behaviour towards individually principled ethics”. His general conclusion is that magical-devotional and individually principled ethics are still very much secondary to legalistic-orthodox religious behaviour, but that individually principled ethics are becoming more widespread. In this regard, his proposition is that Irish Catholics are beginning to dispense with the need for grace, once achieved through the miracle of the sacraments and adherence to the regulations of priests. Instead Irish Catholics are “making up their own minds about what is good and bad moral behaviour”, “choosing for themselves the beliefs, practices and ethics to which they adhere” (Inglis 1998, p.23, p.12). While he discusses at length the various ways in which Irish Catholics are firmly tied to the legalistic-orthodox type, as well as the persistence of magical-devotional dimensions, he offers very little evidence to support his conclusion that Irish Catholics are in fact moving toward individually principled ethics. Inglis (1998, p.36) speaks of individually principled ethics as the internalisation of the general principles of the Catholic faith, that can only be interpreted as individually principled ethics if they are “adopted for their own sake rather than simply because of church demands”. The problem seems to be how one can pinpoint when individuals are adhering to the rules of the church, or when they are acting on internalised moral principles. In one way it seems a contradiction to speak of being a Roman Catholic and not adhering to any of the principles of the Catholic Church. Hence, Inglis’ argument that Irish Catholics are becoming more Protestant, which at times he distinguishes from secularization, and at other times treats the two as fairly synonymous. The distinction he makes is that:

the increasing number of people who reject the Roman Church as the one true path to salvation may not be a sign of secularization, it is a sign of Protestantisation and a decline in the institutional Catholic Church and its monopoly over morality. On the other hand, if when making a moral decision, Irish Catholics do not refer to God, sin, or life after death, then that indeed is a sign of secularisation.

(Inglis 1998, p.207)

Later, Inglis (1998, p.244) argues that Irish Catholics are “moving towards an inner-worldly ascetic type of religion, in which people work hard and focus on what is happening in this world”. What seems to be unclear in Inglis’ scheme is whether this inner-worldly asceticism is linked with any conception of salvation or religion at all. Whether it represents “the methodical and rationalized routine activities of everyday life in the service of the Lord” seems contentious (Weber 1958b, p.291). And given what has already been discussed in relation to rationalization of religion, it would seem to make more sense to call this secularization, where an ethical code has become divorced from its supernatural base.

Inglis provides little direct evidence of worldly-ascetic and individually principled behaviour, instead providing a great deal of evidence that there is a decline in institutional adherence. He argues that “whereas the links between institutional church teaching and the moral habitus used to be obvious and direct it has now become indirect”, and that the ways in which people behave morally “although derived from church teaching, have become increasingly separated from it at a conscious level” (Inglis 1998, p.211). In this sense Inglis seems to be arguing that the values of Irish Catholics, once drawn from church teachings, have become generalized rather than any fundamental change in values themselves. The archetypal account of generalization is of course Weber’s (2001, p.124) Protestant Ethic thesis, where the values of hard work and diligence lose their once religious ethos. In its simplest form, the argument is that the values that were once tightly bound together in a belief system with religious beliefs such as salvation being a central elements, now have these elements pushed to the fringes. But this can also be subsumed under the general category of secularization. Thus, one might expect that the association between having certain religious beliefs and holding certain values would have deteriorated, the values themselves remaining much the same, but the religious beliefs either becoming more vague and inconsequential and perhaps fading away completely.

Religious beliefs, however vague and inconsequential they may or may not be, have shown considerable signs of persistence. Focussing on the moral teachings of the Catholic Church, the belief aspect of religion, which showed little sign of decline at the time of Inglis’ work, is bracketed off, and given much less attention in his general argument of institutional decline. He argues that there are two main

dimensions to being religious, moral and spiritual, and that it is primarily over the moral sphere that Church control has fallen into decline. He argues “whatever may be true about the decline in traditional Christian beliefs, particularly concerning the nature of God and salvation, the greatest decline would appear to be in institutional beliefs about the Church (1998, p.208). Inglis’ argument is that since the 1970s, when the two dimensions were united, ways of being moral and ways of being spiritual have become increasingly separated. Such a conclusion seems to fit the data that he is confronted with, that individuals are still believing in God and life after death, but are adhering less to the moral teachings of the church. But it is unclear to what extent believing in God, salvation, and life after death *do* still influence moral decisions, and to what extent the spiritual and moral spheres *have* become separated, and what relevance falling church attendance and diminishing confidence in the institutional church have for these relationships. It is a particularly relevant question in this review, and it is a question that warrants empirical investigation. It resonates with questions that already put forward, in terms of the level of constraint in belief systems and also the plurality of life-worlds that arise as a consequence of functional differentiation, a topic that will be dealt with in more detail in relation to secularization.

Despite the claim that the spiritual and moral spheres are becoming increasingly separated, Inglis also suggests that the Church never had a monopoly over the spiritual sphere either. He argues that “in this respect the Church can be seen as an institutional force which adapts to the changing conditions of Irish people’s beliefs and values” (Inglis 1998, p.206), and the church has “always adapted its message to suit the needs and interests of the people” (Inglis 1998, p.207). Accordingly, he points to the problems of defining religion as only those beliefs and practices related to a specific type of supernatural belief. But while he is mindful of the ways the Church might have adapted and assimilated many of the more magical-devotional types of religious beliefs and practice, he is less open to the notion that the church is adaptive in relation to morals. He criticises Hornsby-Smith’s (1992) arguments that “there has never been a simple top-down imposition of orthodoxy” and that instead of coercing individuals into conformity, the institutional church has become more of a “conscience of the nation” (Inglis 1998, p.204). He argues that such conclusions are, at best, optimistic. The characterisation of the Church as an

institution that is simply concerned with a “top-down orthodoxy” is however somewhat limited. While it is useful in describing how the substantive content of beliefs, and the institution of the Church, come to influence the moral values of individuals, it seems to ignore the somewhat collective roots of the Church and collective beliefs themselves. A perspective that is thoroughly oriented to this perspective, on the collective moral roots of religion (or rather the religious roots of collective morals), is offered by another classical sociologist of religion, Emile Durkheim.

2.4.2.5 Durkheim

Durkheim’s work emphasized the link between values and religion in a very different way to Weber and Marx. To explain this properly it is necessary to discuss Durkheim’s more general sociological approach. Firstly, Durkheim’s primary unit of analysis was not the individual, but the social. More specifically, Durkheim’s (1982) focus was on social facts, the study of which differentiated sociology from other sciences of human behaviour (e.g. biology, psychology). Social facts are characterised by “externality, constraint and generality” (Thompson 2002, p.43). A social fact is external in the sense that it has an existence outside the individual. Two specific types of constraint can be distinguished: constraint from a lack of choice, and constraint from having to choose in accordance with established normative patterns. Institutions and collective representations such as beliefs, values and currents of opinion exercise the latter form of constraint. The availability and distribution of material resources exercise the former. (Thompson 2002, p.43).

One such social fact of particular importance in Durkheim’s work was that of the collective conscience. Collective conscience was defined by Durkheim (2004) “the totality of beliefs and sentiments common to average members of the same society [which] forms a particular system with a life of its own”. In his later work, the concept of collective conscience would give way to the more discriminating concept of ‘collective representations’ (Thompson 2002, p. 45). Collective representations were the “the ways in which the group thinks of itself in its relationships with objects which affect it” (Durkheim 1982, p.40). Essentially Durkheim argued that collective representations (beliefs, ideas, values, currents of

opinion) had a social rather than individual source, were derived from collective rather than individual concerns (Thompson 2002). He would use the concept of social currents, one level of crystallization of collective representations, in his discussion of suicide. In *Suicide* (Durkheim 2002) he argued that the chief explanatory variable in rates of suicide were changes in these social currents, whereby each group had a collective inclination.

Another more crystallized collective is that of a social institution, a set of beliefs and practices that are oriented towards a specific social concern, and that become normative or obligatory (Thompson 2002). The normative aspect contains two elements, the first being positive or negative sanctions. The second is the aura of legitimacy provided by the prestige associated with collective representations (Thompson 2002). The second type are those of a moral nature, those that were of most interest to Durkheim, and those that are of most interest to this review.

Religious institutions are extremely important, or at least a prototypical institution, in this regard, in the sense that they imbue norms with an unparalleled appearance of legitimacy: that of the sacred. Durkheim differentiates religion from other normatively constraining institutions such as law and other customs in that it is the only institution that “asserts itself not only over conduct, but over the *conscience*. It not only dictates actions but ideas and sentiments” (Durkheim.[1886] 1995, p.21 cited in Stark (2001, p.619). Religion is also essentially social, uniting its members into a “single moral community” (Durkheim 1916, p.47). This is achieved through collective religious practice, or ritual, in which individuals feel part of a collective whole, and the representations and practices associated with this take on a sacred character, differentiating them from the profane world of everyday activities.

Not only does this apply to the religious sphere, but high prestige collective representations legitimate norms in other institutional spheres (Thompson 2002). For example, even the most ‘profane’ of institutional spheres, the economic sphere, has been shown by Weber’s *Protestant Ethic* to have been normatively sanctioned by religious beliefs. The chief difference is that Weber emphasized the substantive content of beliefs in shaping individual values and behaviour, but Durkheim stressed the legitimating effect of collective practice and collective representations. The effect of religion on norms/values was not at the level of individual reasoning about

the best way to salvation, but at the social level of the normative order being established by the collective through shared practice and representations. One of his seminal applications of this treatment of religion was in *Suicide* (Durkheim 2002). Comparing predominantly Protestant and predominantly Catholic countries, and comparing Protestants and Catholics within the same country, Durkheim would find that suicide rates were higher for Protestants than for Catholics. He postulated that such difference were not linked to substantive beliefs, as both churches condemned suicide. Rather it was the degree of integration provided by the two religions.

Interpreting Durkheim's work into a macro-micro scheme, it could be described as macro-level social concerns finding expression in collective beliefs and practices, legitimating values and norms, which are then internalized by the individual. It should also be noted that this internalization, what Durkheim refers to as the assimilation of institutions by the individual, is not necessarily uniformly constraining. There is scope for each individual to interpret and individualize collective institutions, constructing "his own religious faith, his own cult, his own morality, his own technology" (Thompson 2002, p.49). Individual religiosity was however of secondary interest to Durkheim, and derivative of the social.

2.4.2.6 Stark's Criticism of Durkheim's Theory

Stark (2001) has recently argued that the idea of religion sustaining the moral order by uniting members into "a single moral community" is simply wrong. Stark (2001, p.621) argues that the "social science orthodoxy: it is only through participation in collective rituals that people are bound into a moral community", is misconceived. Rather, it is a belief in a God that is concerned with morality that is the true source of the relationship between religion and morality. More precisely, "the moral behaviour of individuals would be influenced by their religious commitments only in societies where the dominant religious organizations give clear and consistent expression to divine moral imperatives" (Stark 2001, p.620). His critique of Durkheim and other early functionalists is that they dismissed belief in the supernatural as mere "window-dressing" to the primacy of "rites and rituals [as] the fundamental stuff of religion" (Stark 2001, p.620). For divine moral imperatives to exist, the supernatural must be conceived as "conscious, powerful, morally-

concerned beings”. He proposes that in ‘religions’ where such a conception of the supernatural does not exist, likely to be in less complex cultures, morality will have no association with ‘religion’. His next hypothesis is that “the effects of religiousness on individual morality are contingent on images of gods as conscious, morally-concerned beings” (Stark 2001, p.261). His final hypothesis is that participation in rites and rituals will have little or no effect on morality, independent of importance of God in one’s life. He confirmed each of these hypotheses using data from the World Values Survey, using gamma correlations between religious attendance, and the importance individuals attribute to God in their lives.

While Stark’s analysis is a useful explication of the linkage between morality and substantive beliefs, it is a rather simplistic reading and critique of Durkheim. Although Durkheim was of the opinion that the substantive content of beliefs were not of particular relevance to an analysis of religion, from an Durkheimian point of view it could be argued that the “images of gods” as powerful, morally concerned beings are just one type of collective representation that emerges to sustain the moral order itself. One could argue that as society becomes more complex, Gods that are capable of uniting individuals into a moral community must become more complex themselves, more rationalized and far-reaching than those closer to magic or animism. Stark’s formulation of this seems the opposite: that as gods become more complex, so too do their moral power. Again this goes back to the question of whether to define religion substantively or functionally. But it also reflects a more complicated question: whether religion is conceived of as institution that imposes substantive beliefs on individuals, with these substantive beliefs influencing how individuals are moral; or whether substantive beliefs emerge from the collective representations of the society, or more precisely, the morals which are functional to a society, and what sacred beliefs emerge to legitimate and sustain these moral values.

The second problem with Stark’s analysis is that he treats the effects of collective ritual in sustaining the moral order purely at the individual level. It is unclear whether Durkheim felt that the role of ritual was purely to foster a sense of attachment to common values at the individual level (a micro effect), or whether he believed that collective ritual fostered a sense of attachment to common values at the level of society (a macro/contextual effect). This is a question of whether the

contextual level of religiosity has an effect on the individual relationship between religious beliefs and values.

2.4.2.7 Individual and Contextual Effects

This contextual effect of religion has received little attention in empirical research, notable exceptions being Finke and Adamczyk's (2008) analysis of the individual and contextual level relationship between religiosity and morality, and Storm's (2016) analysis of moral values, national religiosity and confidence in state authority. These analyses are given particular attention here because they represent useful examples of how the theoretical linkages described above can be formulated into a series of testable hypotheses. Their analyses test the relationship between different dimensions of religiosity at the micro level, and also the relationship between religiosity and values relative to the macro level.

Finke and Adamczyk (2006) hypothesise that in nations that have high levels of belief and practice, people will tend to be more conservative (a macro-micro relationship). They also hypothesise that the more religious individuals are in terms of belief and practice, the more conservative they will be in terms of morality (a micro-micro relationship). Furthermore, they hypothesise that this micro-relationship will be stronger in nations with a supportive religious context (a macro effect on a micro relationship) (Finke and Adamczyk 2008, pp.619-620). Their findings in relation to these hypotheses establish a strong empirical linkage between individual religiosity and morality, and offer tentative support for the hypothesis that national religious context has an effect on this relationship. Storm (2016) too hypothesised that individual religiosity will have stronger associations with moral values in countries where average levels of religiosity are high. Her supportive findings, that the negative relationship between religiosity and autonomy values and self-interest values was stronger in countries with high average levels of religiosity, are a strong indication of the importance of religious context to the relationship between religiosity and values.

Each of these studies also highlight an important theoretical point in relation to the relationship between religiosity and particular values relative to the macro

context. As mentioned above, Durkheim was of the opinion that religion and a belief in the supernatural were not intrinsically related. Nor did Durkheim believe that religion was the only institution that had an influence over morality, or the only institution that could bind individuals into a collective order. A particularly important institution in this respect is that of the legal system. It is noteworthy because that “up until a relatively advanced moment of evolution, moral and legal rules have been indistinguishable from ritual prescriptions” (Durkheim 1915, p.418). As Finke and Adamczyk (2008, p.619) note: “religion is not always distinctive in the behaviours promoted or the morality taught. In fact, religious organizations go to great lengths to have their morality adopted into legal code and enforced by the state”. They go on to argue that once moral prescriptions are adopted into the legal system of a society, they no longer need legitimation from religious beliefs or require support from a supportive religious context. Finke and Adamczyk therefore supplement their analysis with a fourth hypothesis, to which their findings were supportive: that when sanctioned by legal code, the effect of religiosity on moral issues is diminished. Equally, when the moral issue is not sanctioned in law, and is openly contested, the effect of religiosity on morality is stronger. The analysis by Storm (2016) also offers some support for this hypothesis, where she found the strongest associations between religion and moral values were in relation to those behaviours not sanctioned in all European jurisdictions (versus behaviours illegal everywhere), and therefore subject to public debate, in which religious organizations are heavily involved.

2.4.2.8 Conclusion

Marx, Durkheim and Weber all agree that religion has an impact on values, the causal chain operating at different levels, and the emphasis placed on different dimensions of religion. Whereas Durkheim focussed on collective rituals and representations, Marx and Weber focussed on substantive beliefs. This duality of belief and practice, ideology and ritual, individual and social, is eloquently described by Geertz:

Religion is never merely metaphysics. For all peoples the forms, vehicles, and objects of worship are suffused with an aura of deep moral seriousness. The holy bears within it

everywhere a sense of intrinsic obligation: it not only encourages devotion, it demands it; it not only induces intellectual assent, it enforces emotional commitment. Whether it be formulated as mana, as Brahma, or as the Holy Trinity, that which is set apart as more than mundane is inevitably considered to have far-reaching implications for the direction of human conduct. Never merely metaphysics, religion is never merely ethics either. The source of its moral vitality is conceived to lie in the fidelity with which it expresses the fundamental nature of reality. The powerfully coercive "ought" is felt to grow out of a comprehensive factual "is," and in such a way religion grounds the most specific requirements of human action in the most general contexts of human existence

(Geertz 1973, p.127)

Marx, Durkheim and Weber were of the opinion that religion was shaped by the material, morphological and structural changes that accompany modernization. To some extent at least, Weber, Durkheim and Marx all argue that religion, in substantive terms would deteriorate in the modern world. Indeed Casanova (1994, p.18) argues that although Durkheim and Weber laid the foundations for later theories of secularization, they offered "scant empirical analyses" and shared "the major intellectual assumptions of the age about the future of religion...that the old historical religions cannot survive the onslaught of the modern world". Durkheim would argue that traditional religion would become obsolete in modern society, stressing the need for new 'religions' to foster a sense of collective attachment to common values. Weber would argue that the increasing rationalization of religion would eventually lead to the elimination of any reference to the supernatural. And Marx predicted that the emergence of class consciousness amongst the proletariat would eventually uncover the fact that religion was contrary to their interests. Despite these claims, it has been argued that religion, even in the traditional church-oriented sense, has not retreated to the extent these classical authors predicted:

Contrary to expectations, the main Christian denominations were in fact not entirely defeated by modernity, they evolved and adapted to the developments in society, and they still socialize people and continue to instil values and world views. Not only do they transmit religious beliefs, they also pass on a meaning of life, and moral and political values. Religion was and perhaps still is an important source of the formation of a person's identity.

(Bréchon 2003, p.114)

2.5 Modernization & Value Change

Most comparative studies of values, both cross-national and cross-time, are framed within a paradigm of modernization (Arts and Halman 2004, p.26).

Modernization is a multi-faceted concept that entails extensive social changes that permeate all domains of life, the concept rooted in the work of the classical sociological authors such as Marx, Durkheim, Weber, Spencer and Tönnies. The theory's primary focus is on the ways in which pre-modern or traditional societies become modern, developed, or Westernized, through economic growth and the accompanying changes in social, political, and cultural structures. It is generally assumed that modernization and development are evolutionary processes, whose main characteristics are general to all societies. One of the major proponents of modernization theory, Schmucl Eisenstadt, offers an historical definition of modernization:

Historically, modernization is the process of change towards those types of social, economic and political systems that have developed in Western Europe and North America from the seventeenth century to the nineteenth and have then spread to other European countries and in the nineteenth and twentieth centuries to the South American, Asian and African continents.

(Eisenstadt 1966, p.1)

Modernization theory can be divided into two main schools, Weberian and Marxist (Inglehart 1995). Despite divergences between these schools on the specifics of modernization, both schools agree:

that socioeconomic change follows coherent and relatively predictable patterns. Thus, they imply that social, political and economic characteristics are not randomly related; they tend to be closely linked, so that from a knowledge of one such trait, one can predict the presence of other key traits with far better than random success.

(Inglehart 1995, p.379)

Turner (1997, p. 9) argues that development in the economic sphere is of paramount importance in this regard. With an understanding of the properties of this sphere, one can make fairly accurate predictions regarding the development of other spheres of society.

2.5.1 Differentiation and Rationalization

Smelser (1973, p.261) distinguishes several interrelated “technical, economic, and ecological processes frequently accompanying development”, including the movement from traditional techniques toward the application of scientific knowledge, industrialization, the emergence of the market, and the movement to urban centres. These processes give rise to a number of social structural changes, most notably structural differentiation, “the establishment of more specialized or more autonomous social units” and “the evolution from a multi-dimensional role structure to several more specialized structures” (Smelser 1973, pp.269-271). A more formal definition specifies functional differentiation as:

a process whereby one social role or organization ... differentiates into two or more roles or organizations which function more effectively in the new historical circumstances. The new social units are structurally distinct from one another but taken together are functionally equivalent to the original unit.

(Smelser 1973, p.271)

A more descriptive definition is given by Eisenstadt:

Differentiation is, like complexity or specialization, first of all a classificatory concept. It describes the ways through which the main social functions or the major institutional spheres of society become disassociated from one another, attached to specialized collectivities and roles, and organized in relatively specific and autonomous symbolic and organizational frameworks within the confines of the same institutionalized system.

(Eisenstadt 1964, p.376)

Typical examples include: economic activities previously in the domain of the family home moving to the domain of the firm/factory through increased division of labour; education that was once provided by the family and the religious sphere becoming located in a specialized unit of its own. The movement from a less-differentiated society to a more-differentiated society should not be over emphasized however, “empirically the process evolves gradually and influences the social structure selectively”. There are various ‘half-way houses’, the hiring of families in factories could be seen as maintaining a version of family production for example (Smelser 1973, p.273). The continuing influence of the religious sphere over the education system in many countries might be another instance where differentiation

is somewhat incomplete (e.g. Mitchell (2004) maintains this is the case in Northern Ireland, Scotland and much of Britain).

The differentiation of modern society is of seminal importance because it entails extensive and significant changes, for both society and its individual members. It has been a central element of many theories of social change, particularly those of Marx (Marx and Engels 1967), Durkheim (2004) and Spencer (Spencer and Andreski 1971), as well as being central to more contemporary theorists such as Parsons (1966) and Luhmann (1977). Modernization theory's emphasis on differentiation grew out of classical theories of social evolution in the work of Spencer and Durkheim. The underlying assumption of these theories is similar to that of biological evolution, whereby societies evolve from simple and undifferentiated to more complex differentiated societies, with increasing specialization leading to more effective ways of performing social functions (Haferkamp and Smelser 1992, Alexander 1992).

Other classical theorists such as Tönnies (1964) emphasized similar linear progressions from undifferentiated societies to ones that are more and more complex. Tönnies theorised this trend in terms of a movement from *Gemeinschaft* to *Gesellschaft*, from small, traditional, close-knit communities to large, urban, impersonal and instrumentally oriented industrial societies (Etzioni-Halevy and Etzioni 1973).

The modern theory of social change in terms of differentiation began with Durkheim (Lane 2007), who viewed changes in religion, morality, law, and cultural values such as individualism as being rooted in the increasing complexity of society (Haferkamp and Smelser 1992). In the *Division of Labour* (2004) Durkheim argued that a major historical shift was taking place where mechanical solidarity was being replaced by an organic solidarity. This change entailed a shift from a social structure with little interdependence to a more organized structure with high levels of interdependence, and high degrees of differentiation and co-ordination of functions (Emirbayer 2003). At the level of culture, such changes entailed a shift from a collective consciousness based on conformity, collective authority and shared values, to a normative order based on the moral autonomy of the individual and interdependence (Emirbayer 2003). For Durkheim, contemporary society was in a

transitional state where the old collective consciousness was now obsolete, but the new forms of integration were incomplete. Hence, the moral crisis of the times (Emirbayer 2003). With such complexity Durkheim stressed the need for a positive integration in a differentiated society to stave off the potential for anomie (Haferkamp and Smelser 1992).

Parsons' work represents one of the most comprehensive theories of differentiation. Parsons (1982) argues that as societies become more complex as a result of differentiation, new and more general value systems must emerge to ensure social stability. Returning to the pattern variables discussed earlier, Parsons (1951) opposed tradition and modernity as distinct and opposed sets of pattern variables. Traditional society is characterized by ascribed status, collective orientation, particularist action and relationships which are diffuse, and affective (Larrain 2003). Modern societies are characterised by values that emphasize achieved status, individual-orientation, universal norms, relationships which cater to only specific needs, and affective-neutral or impersonal relationships.

Similarly, theories of modernization have therefore often cited the internal characteristics of a given country, such as traditional cultural traits, as barriers to development and explanations for underdevelopment. Equally, certain values and psychological traits, such as an emphasis on personal achievement and values favouring economic progress, must be prevalent for societies to develop and achieve self-sustained economic growth (Smelser 1973). Such a perspective is summed up by Inkeles (1976, p.232) who states that "it is impossible for a state to move into the twentieth century if its people continue to live, in effect, in an earlier era". As such, the path to development for such countries entails the replacement of traditional values with more modern ones (Smelser 1973). The logic of this version of modernization theory is that all industrial societies follow similar developmental paths. This is of decisive importance in the comparative study of values. Although societies may have different starting points, all are subject to the same forces that accompany industrialization. Inkeles (1960, p.2) asserts that "the underlying theory is quite simple":

within broad limits, the same situational pressures, the same framework for living, will be experienced as similar and will generate the same or similar response by people from different countries... [I]ndustrialization, urbanization, and the development of large-scale

bureaucratic structures and their usual accompaniments create a standard environment with standard institutional pressures for particular groups, to that degree should they produce relatively standard patterns of experience, attitude, and value.

(Inkeles 1960, p.2)

It is this idea, allied with more contemporary theories related to globalization, that gives rise to the theory that values in industrial societies should converge over time, that industrialized societies will become more and more similar in terms of values. They become more similar because the standard institutional forms and standard environments of industrialization imposes a technical and economic rationality, not only in the workplace, but to some extent in every other sphere of society. In sum, a convergence is brought about through an increasing emphasis on this economic and technical rationality that pervades all industrialized societies. Because this force is generally the same for everyone, and similar in strength, a consensus emerges from it (Beugelsdijk *et al.* 2006).⁸

Weber's main concern in much of his work was with how such instrumental rationality (*Zweckrationalitat*) infiltrates all domains of human organization and relations, subordinating value rationality (*Wertrationalitat*). Institutional spheres such as science and politics develop autonomous rationalities, decoupled from religious values (Smelser 1973, pp.274-275). A central feature of modernization is therefore that each institutional sphere develop their own autonomous rationalities. Through differentiation each institutional sphere becomes more specialized, developing their own rationalities based on their specific function. In Weber's terms, the other life-orders (*Lebensordnungen*): the economic, the political, the aesthetic, the erotic, and the intellectual, separate themselves from the "binding religious narrative", attaining their own value autonomy or *eigengesetzlichkeit* (Gane 2002, p.29). This process, in turn, leads to a differentiation of culture. The life-orders now develops according to their own internal logics, giving rise to a proliferation of different worldly beliefs and values (Gane 2002). Modern society is therefore characterised by a plurality of life-worlds, social contexts become diversified, and each context requires different values and different forms of behaviour (Halman and

⁸ It is however quite probable that the influence of this technical and economic rationality is more potent for certain sections of society, particularly those in employment, and particularly those with high levels of education (Jagodzinski and Dobbelaere 1995b).

Pettersson 1995). At the individual level there is therefore “a differentiation of personal life-worlds” (Dobbelaere 1993, p.26) and the likelihood of an integrated value system declines (Halman and Pettersson 1995). This is an extremely important idea, differentiation being the foundational concept of the secularization paradigm, which will be discussed in more detail in the relevant section below.

With this proliferation of different world-views, beliefs, and values that come about as a result of differentiation and specialization, one of the most important questions guiding Parsons’ analysis of modernity was how social order was possible in a world that was increasingly complex, differentiated and pluralistic. To embrace this complexity, Parsons (1982, p.275) argued that values must become more general and universalistic. As noted earlier, Parsons maintained that Western society remained “a religiously based moral order”, even though it was a functionally differentiated one.

Other theorists, such as Luhmann (1990, pp.422-423), came to similar conclusions where “increasing differentiation leads to an increasing generalization” of values and “their directive value decreases when the complexity of society increases”. But instead of the need for integration, Luhmann argued that the only functional necessity in a highly differentiated society is a system of communication between differentiated subsystems. Luhmann’s “paradox of differentiated unity” describes how each differentiated subsystem, or specialized unit, “does not look outside of itself for value-guidance” (Waters 1994, p.309). Rather, each unit becomes “self-referential in terms of values” developing its own area-specific rationality (*Eigenlogik*) (Waters 1994, p.309). As long as different units can communicate with one another, there is no need for an over-arching or shared set of values: “the paradox is that the world can cohere though its values are incoherent” (Waters 1994, p.309). Luhmann (1990, p.427) suggests that the consequences for religion are that: “the cosmologically/religiously founded continuum of meaning breaks down ... [R]eligion is reduced to one social function among others and condemned to a kind of faithless belief”.

2.5.2 Individualization

According to Becker (1995) within modernization three processes can be distinguished: rationalization; secularization; and individualization, and, he argues, values and value orientations are primarily changed by individualization. Bauman (2002, p.xv) states that individualization and modernity essentially express the same social condition. He summarizes the concept of individualization as the transformation of human identity from a given to a task. For Bauman (2002, p.xv) “modernity replaces determination of social standing with obligatory self-determination”. Beck (2002) maintains individualization involves individuals being bound less by traditional values, norms and sources of collective identity. In the modern world “the social order of the national state, class, ethnicity, and the traditional family is in decline. The ethic of individual self-fulfilment and achievement is the most powerful current in modern society” (Beck and Beck-Gernsheim 2002, p.22).

Beck and other prominent theorists such as Giddens and Lash stress ‘detraditionalization’ and the emergence of ‘post-traditional society’ or ‘high-modernity’ through ‘reflexive modernization’ (Beck *et al.* 1994). These theorists do not simply argue that traditional ways of life are in decline, but that they are continually subject to interrogation and public debate, paving the way for greater freedom and personal autonomy (Beck *et al.* 1994). For some postmodern theorists, Beck (1992, 2002) in particular, when discussing individualization it is in reference to an amplification, or “hyper-extension”, of many of the core processes of modernization: differentiation, rationalization and individualization (Pakulski 2009, p.276). A significant weakness of many of these theories is that few are empirically grounded (Majima and Savage 2007). When subjected to scrutiny, many of the historical and contemporary generalizations in Beck’s *Risk Society* (1992) have been deemed questionable, with Dingwall (1999) arguing that many of the claims made by Beck are more applicable to Beck’s native Germany than to Western civilization as a whole. In relation to values, many of these postmodern theories have been empirically engaged with in the work of Ronald Inglehart, whose unparalleled empirical work on cross-cultural value change is given more attention below.

In other empirical studies that have sought to investigate the extent of individualization, it is considered “an intrinsic part of the modernization process” and it is defined as “the social and historical process by which values, beliefs, attitudes and behaviour are increasingly based on personal choice and less dependent on tradition and social institutions” (Ester *et al.* 1993, p.7). Evidence of individualization is manifold and numerous, and seems difficult to separate from other aspects of modernization theory, its various manifestations including:

the decreasing adherence to religious values, the decreasing civic morality, the increasing permissiveness, the decreasing willingness to legitimate moral convictions by a Christian worldview, the increasing emphasis on personal development and achievement in working life, the change from a materialistic value orientation to a post-materialistic preference in the socio-political domain.

(Halman and Pettersson 1995, p.299)

Ester *et al.* (1993, pp.18-19) sought to test the extent of individualization in Europe and North America, advancing four key hypotheses which guided their analysis.

1. As countries advance economically, the values of their populations increasingly shift in the direction of individualization.
2. In the long run, modern societies will converge in the direction of individualized value systems in religion, morality, politics, primary relationships and work.
3. The value systems of individuals in modern societies tend to be fragmented
4. In the long run, modern societies will show a coherent pattern of individualized value systems in all domains of behaviour.

(Ester *et al.* 1993, pp.18-19)

Except for the third hypothesis, that value systems in modern societies tend to be fragmented, none of their hypotheses regarding individualization were supported. The authors conclude that theories rooted in the broad changes that accompany modernization are far too general to explain particular changes in values in different domains and the changes that are taking place within each country. They conclude that “empirically founded partial theories are needed” (Ester *et al.* 1993, p.232).

2.5.3 Inglehart's Theory of Value Change

The work of Ronald Inglehart represents “the most empirically wide ranging and impressive attempt to ground claims about cultural transformations using survey data” (Majima and Savage 2007, p.294). Inglehart's theory of value change represents a version of modernization theory, initially arguing that values are fundamentally shaped by economic conditions, and later revising this theory to include an element of path-dependency reflecting the cultural heritage of a nation. Although Inglehart observes that the conclusions of Marx, “the chief witness of modernization theory”, regarding the fate of modern society did not materialize, he argues that the central idea of modernization theory “was correct: socio-economic development brings major changes in society, culture, and politics” (Inglehart and Welzel 2005b, p.5). The central idea in all of Inglehart's work is that value change is fundamentally a product of technological and economic change:

The basic values of the public of advanced industrial societies have been undergoing a gradual intergenerational shift during the past several decades. Though given countries have shifted at varying rates, processes of economic and technological change seem to have had a generally similar impact across industrial societies.

(Inglehart *et al.* 1996, p.48)

This change was first investigated by Inglehart (1971), who proposed that the values of Western societies were moving from materialist to postmaterialist orientations, emphasizing quality of life and self-expression over material goals such as economic and physical security. He later clarified the concept of materialist/postmaterialist orientations as dimensions of a self-expression vs. survival index of values, but there is little difference between the two sets of concepts. The ‘survival/self-expression’ index:

reflect[s] an intergenerational shift from an emphasis on economic and physical security, towards an increasing emphasis on self-expression, subjective well-being, and quality of life concerns. Societies characterized by survival values emphasize materialist orientations, show relatively low levels of subjective wellbeing, report relatively poor health, tend to be intolerant of out-groups, such as foreigners, women and homosexuals, rank relatively low on interpersonal trust, and emphasize hard work, rather than imagination or tolerance, as important things to teach a child. By contrast, societies that emphasize Self-Expression values, display the opposite preferences on all of these topics.

(Inglehart and Welzel 2005a, p.174)

2.5.3.1 Socialization and Scarcity Hypotheses

Inglehart's analysis of this value change rests on two key hypotheses: a "scarcity hypothesis" and a "socialization hypothesis". The scarcity hypothesis rests on the idea that "an individual's priorities", or values, reflect socioeconomic conditions. Basically, individuals attach the most importance to that which is in short supply. In advanced industrial nations, characterized by high levels of economic prosperity, the majority of individuals live in conditions of physical and economic safety. Thus, Inglehart proposes, individuals place less emphasis on material goals and place more emphasis on self-esteem, belonging, and values that centre on quality of life.

The relationship between material security and post-materialist values is not that straightforward however, and Inglehart supplements the "scarcity hypothesis" with the "socialization hypothesis". The socialization hypothesis proposes that "the relationship between socio-economic environment and value priorities is not one of immediate adjustment". Rather there is "a substantial time lag" and "to a large extent, one's basic values reflect the conditions that prevails during one's pre-adult years" (Inglehart *et al.* 1996, p.49). This draws attention to the fact that values are generally hypothesized to be formed in individuals' formative years, and remain relatively stable and enduring thereafter. The formative period in the life course is generally defined as being between the ages of ten and twenty five (Becker 1995, p.269). This pre-adult formation and endurance thereafter is described by Inglehart *et al.* (1996, p.49) as "one of the most pervasive concepts in social science". Accordingly, value change at the level of societies/nation states (in terms of an aggregate of individual values) is primarily the product intergenerational population replacement.

2.5.3.2 Existential Security and the Decline of Tradition

Although much of Inglehart's work is concerned with materialist/post-materialist value change, he locates these changes within a much broader process of cultural change that is shaping advanced industrial society. He draws parallels

between his own work on post-materialism with theories of Beck, Giddens, Lyotard and Foucault on the rise of reflexive modernization, postmodernization and de-traditionalization (Majima and Savage 2007, p.294). He theorizes that changing political outlooks, religious orientations, gender roles, and sexual mores are all related to one common denominator that is undermined by economic security: “the need for a sense of security that religion and absolute cultural norms have traditionally provided” (Inglehart *et al.* 1996, p.60). He theorizes that rises in prosperity, coupled with the material safety net provided by the welfare state, have led to a decline in the existential insecurity that characterized agrarian and early industrial society. This existential security diminishes the need for traditional religious and cultural norms, particularly when such norms conflict with individual self-expression. Inglehart’s more recent work has therefore been concerned with the persistence or decline of ‘traditional’ values in certain societies. In Inglehart’s & Baker’s (2000) terms, they are concerned with the variations in traditional vs. secular-rational values:

The ‘Traditional/Secular-Rational’ dimension reflects the contrasting values found in religious and secular societies. Traditional societies emphasize the importance of parent/child ties in traditional families, and deference to authority, along with absolute moral standards, and they reject divorce, abortion, euthanasia, and suicide. Traditional societies are highly patriotic and nationalistic. In contrast, societies with secular-rational values display the opposite preferences on all of these topics.

(Inglehart and Welzel 2005a, p.174).

According to Inglehart the traditional/secular-rational and survival/self-expression indices each “taps a major axis of cross-cultural variation involving scores of basic values”, and account for half the cross-national variance in several variables tapping basic values in the domains of politics, economic life, and sexual behaviour (Inglehart and Welzel 2005a, p.174). The decline in these traditional values, or more precisely what explains cross-national variation in traditional and religious values, is essentially the changing conditions existential security discussed above:

As lives gradually become more comfortable and secure, people in more affluent societies usually grow increasingly indifferent to religious values, more sceptical of supernatural beliefs, and less willing to become actively engaged in religious institutions, beyond a

nominal level of formal religious identities, participation in symbolic ceremonies of birth, marriage, and death to mark life's passages, and enjoyment of traditional holidays.

(Norris and Inglehart 2004, p.79)

2.5.3.3 Path Dependency and the Persistence of Tradition

Noting the cultural emphasis in the USA of individual self-achievement draws attention to the second part of Inglehart's explanation of value change, or more precisely, his explanation of value persistence and the continuing contrasts between different societies with similar levels of economic development. Inglehart proposes, in the intellectual tradition of Weber, and mirroring contemporaries such as Huntington (1991, 1993, 1996, 2000), that cultural values shaped by religious traditions have an enduring impact on societies' contemporary value profiles. In more secular societies these enduring values may no longer be transmitted by the church, but continue to be transmitted by the educational system and the mass media. One consequence of this is that countries that are historically Protestant have consistently different values than countries that are historically Catholic (Norris and Inglehart 2004). Religious heritage is not the only factor that continues to shape values in Inglehart's model. The cultural legacies of a country's political history continue to exert an influence on values. A colonial past continues to be a powerful explanatory factor in the contemporary value profiles of different countries. English-speaking countries for example, particularly the USA, continue to have more traditional value systems than one would expect of societies with such high levels of economic development (Inglehart and Welzel 2005a). Additionally, former communist states tend to emphasize more secular and survival oriented values than one could predict using economic explanatory variables alone. The persistence of a society's historical cultural heritage however "does not predict the amount or direction of change that will occur, but it does help predict a given society's position relative to other countries on the cross-cultural map" (Inglehart and Welzel 2005a, p.177).

Inglehart's focus on the persistence of a society's cultural heritage represents an attempt to avoid the reductionism and economic determinism of modernization theories (Majima and Savage 2007). His main argument is that "economic

development is a powerful predictor of a society's value system but it needs to be supplemented by taking the society's historical heritage into account" (Inglehart and Welzel 2005a, p.177). Taken together, the economic and the cultural factors in his model explain around 76% of the total variance on the traditional-secular rational dimension, and 79% of the variance on the survival-self-expression dimension (Inglehart and Welzel 2005a, p.178). Economic development and cultural zones do however shared a large amount of overlapping variance, and whether one attributes value differences primarily to economics or culture largely depends on one's ideological preference. Inglehart's revised version of modernization theory attempts to take both into account but does not attempt to make any definitive conclusions about their relative weight. Inglehart & Welzel (2005a) however argue that the stronger causal arrow run from socioeconomic development to cultural change.

2.5.3.4 Criticisms of Inglehart's Thesis

Inglehart's theorization of value change has been met with much criticism. Most notable for this review is his conclusions regarding declining materialist orientations, and their linkage to the declining relevance of religion. Firstly, in relation to the decline of materialist and rise in post-materialist orientations in post-industrial societies, Haller (2000) argues that the opposite is true: modern consumer society has in fact brought about increasing relevance of material goods and possessions. A different but related point of departure for criticizing Inglehart's is his theorization of scarcity and security itself. Firstly, there is the notion that those who live in traditional societies do not necessarily live in conditions of material insecurity simply because they belong to societies that are relatively underdeveloped in comparison to their Western counterparts. Sahlins (1972, p.1) expresses ideas similar to these in his seminal treatise on the misconceptions of anthropology in treating traditional indigenous societies as being constantly haunted by "the specter of starvation". On the contrary, Sahlins argues that such traditional societies were characterized by a kind of "affluence" due to having few needs that were adequately met. This may be a little unfair to Inglehart's thesis: his argument is that post-materialist values emerge as a result of the most basic material needs being met through industrial development, while Sahlins' argument is in relation to pre-

agricultural economies, whose needs are few (i.e. the 'Zen' path to affluence). Even so, the premise that modernization brings with it unparalleled levels of security is contentious in other ways. Many prominent contemporary cultural theorists such as Beck (1992), Giddens (1998) and Bauman (1998, 2000), have characterised late modern and postmodern society as being preoccupied with risk, and by definition, a certain kind of insecurity. Beck (1992) for example, argues that as countries eliminate material scarcity, new hazards and risks emerge in their stead. Bauman (2004) too stresses this point, maintaining that 'liquid modernity' is typified by a pervasive sense of uncertainty, anxiety, and insecurity. He describes this pervasive and overwhelming *Unsicherheit* (a "complex combination of uncertainty, insecurity, and lack of safety" (2004, p.7)), in very concrete and tangible terms:

Twenty years ago eighty per cent of the working and earning people of Great Britain had secure jobs, insured against sudden and unwarranted dismissals and offering their holders a safe future in the form of welfare and pension entitlements; only thirty per cent can boast such jobs now, and the percentage goes on falling. Some countries try hard to stem the tide, but the prospects of success are not particularly convincing. In virtually every country the part of the work-force still enjoying the old security of employment is crumbling fast, while almost all new jobs are of the part-time, temporary, fixed-term, no-benefits-attached, and altogether 'flexible' character. Add to this the new fragility of family units, brittleness of companionship, fluidity of neighbourhoods, the breath-taking pace of change of recommended and coveted life-fashions and of the market value of skills and acquired habits and it is easy to understand why the feeling of insecurity...is so widespread and overwhelming

(Bauman 1998, p.7)

Inglehart's proposition that the citizens of modern and particularly postmodern/post-industrial society are no longer existentially insecure seems wholly inconsistent with these theories. By extension, his theories on the decline in traditional values and religiosity seem equally precarious. Van Harskamp (2008) for example, argues that religion, particularly new forms of religiosity, provide individuals with the tools to cope with existential insecurities and uncertainties. Insecurities surrounding death, ennui, time and evil are put forward as areas that are as salient in modern times as they were before, but particularly in relation to the fractured and constructed self of the postmodern world. Interestingly, the suggestion that 'demand' for religion is a constant is the very argument put forward by 'new

paradigm' or 'religious economies' model in opposition to secularization (see section 2.6.5).

The preceding argument should not however be a condemnation of Inglehart's overall analysis of material security and its relationship to religion. He presents compelling evidence that increased material security, both at the level of the individual and at the level of nations, is linked with declining religiosity. It would seem likely therefore, that while there are other uncertainties that religion provides protection from, material ones seem to be particularly important.

2.6 Secularization

Thus far the review has focussed on the relationship between religion and values in reference to secularization in a quite general sense. With secularization being the paradigmatic lens through which the changing social significance of religion has been theorized, the theory and concept is given considerable attention here. Before addressing specifics of theories of secularization it is necessary to discuss the meaning of the concept of secularization itself, as it is a word that is very much loaded with different meanings and connotations, which have changed considerably over time, and have been met with much criticism. Casanova (1994, p.12) argues that the concept of secularization's "range of meanings and contradictions make it practically non-operational for the dominant modes of empirical scientific analysis". Turner (2005, p.304) maintains that "the secularization thesis has proved the least relevant component of the sociological theory of modernization". Martin (1965) suggests that perhaps the term should be removed from the sociological dictionary altogether, the uses (or misuses) of the term representing "a barrier to the progress of the sociology of religion" (although he has tended to not heed his own advice (Bruce 2001b)). Others argue that secularization is merely a doctrine that prophesises the inevitable demise or decay of institutional religion (e.g. Hadden 1987), used as a "tool of counter-religious ideologies" (Martin 1965, p.169). Furthermore, Finke (1992, p.145) notes that "perhaps more than any other topic, debate over the secularization model has fallen prey to subjective beliefs, personal experiences, and historic nostalgia".

2.6.1 Secularization: Etymological Heritage

A brief history and clarification of the term is important before considering the different theoretical arguments. Casanova (1994, pp.12-13) distinguishes roughly three "semantic moments" in the etymological heritage of the terms 'secular' and 'secularization', from the Latin *saeculum*. The earliest meaning of *saeculum* was a life-time, a generation, a century, or a specific temporal event. The second semantic moment of the term derives from Canon Law, where secularization refers to the return to the 'world' (*saeculum*) of a person of religious orders, becoming a

‘secular’ rather than a ‘religious’ individual (Berger 1967, p.106). Similarly, the terms ‘secular’ and ‘religious’ distinguished between clergy who had devoted themselves to the religious life of the cloister and those who lived in the secular world (Casanova 1994, p.13). Casanova (1994) points out that when Weber refers to the process whereby the idea of a calling in Calvinism loses its religious ethos, and moves from the religious to the secular sphere, it is this meaning of the term from which an analogy is drawn. The third semantic movement, referring to an actual historical process, and the usage of the concept ‘secularization’ that approximates its current usage, was first used to denote the transfer of property from ecclesiastical to civil control in peace negotiations following the Thirty Years War in the 17th century (Shiner 1967). By the 18th century it had already taken on ideological connotations, becoming associated with the principle that all ecclesiastical property should be at state disposal (Shiner 1967). The concept also took on other connotations, an example in the 19th century was in relation to a freethinker’s organisation called the “Secular Society”, where ‘secularism’ came to denote both a way of living without recourse to supernatural guidance, and also an indifference to religious practices, institutions and religious questions (Shiner 1967, p.208). As Shiner (1967, p.208) notes, the historical sediment of most of these past meanings still clings to ‘secularism’ and ‘secularization’ as they are employed today in ordinary discourse, and the connotations that continue to dominate are “indifference, anti-clericalism, and irreligion”. Despite its often cited ambiguous meaning, Casanova (2007, p.101) has recently pointed out that secularization means precisely what it has always meant in every dictionary of every Western European language, that of the third semantic moment, “the transfer of persons, things, meanings, etc., from ecclesiastical or religious to civil or lay use”. It has therefore “become customary to designate as secularization the appropriation, whether forcible or by default, by secular institutions of functions that had been traditionally in the hands of religious institutions (Casanova 1994, p.13). He argues that, although it is possibly now the most widespread usage, it is only in relatively recent times that the concept has come to take on the meaning of a decline in religious beliefs and practices.

In the field of sociology, Weber can be credited with its first use as an analytical and descriptive term. He did not however use the term ‘secularization’ very often, preferring instead to focus on more specific terms as disenchantment,

intellectualisation and rationalization (Hughey 1979). Rationalization, already touched upon in relation to the increasing systematization of man's relationship to God and the divine, and in terms of its pervasiveness in modern society more generally, is the central component of secularization in Weber's work (1958b, 1978, 1993, 2001), along with the related concepts of intellectualisation and disenchantment. In the religious sphere, the increasing rationalization of religion brings with it a discord between this-worldly and other-worldly orientations. In the most rationalized religions, such as Calvinism, the locus of religion is in worldly ascetic behaviour rather than other-worldly mysticism, other-worldly asceticism, or inner-worldly mysticism. Secularization for Weber amounted to the concessions of religious values and practices to more worldly values and practices of various secular institutions. Put simply, secularization consisted of the behaviours that are placed at a premium by religion being gradually eliminated, or losing their original religious meaning or ethos, through increasing rationalization, and becoming "adapted to purely secular purposes" (Hughey 1979, p.89). In terms of the discussion of religious belief systems discussed earlier, it is essentially the value system of a religion becoming divorced from the cosmology. The most well-known example of such a secularization would be in the Protestant ethic of asceticism, specifically the idea of a calling in Calvinism, losing its religious value, and becoming a secular value in itself (Weber 2001).

Casanova (1994, p.19) argues that despite a general acceptance of the secularization thesis (essentially that religion in all its forms would gradually disappear), it was not until the 1960s that a "systemic and empirically grounded formulations of the theory of secularization" emerged. Tschannen (1992, Chapter 2) offers a great deal of evidence to suggest that it was not until the 1960s that secularization became an important topic in the sociology of religion. A pivotal example of this is his analysis of the *Acts of the Conférence Internationale de Sociologie des Religions* (CISR), "the most important European organization in the sociology of religion". From its beginnings in 1948 to 1967, there was no mention of the concept of secularization, and it was not until 1969 that it was present in the title of a paper. Tschannen (1992) maintains that even in the late 1960s and early 1970s the concept was used carelessly and with little definitional specification. Shiner (1967, pp.209-217) for example, outlines six different "types" of the concept of

secularization in contemporary usage.⁹ In the 1960s and 1970s theorists such as Bryan Wilson and Peter Berger, amongst others, began to give the concept renewed theoretical attention.

Wilson (1969, p.11) defined as the process whereby “religion – seen as a way of thinking, as a performance of particular practices, and as the institutionalization and organization of the patterns of thought and action – has lost its influence”, or more succinctly, “the process by which religious thinking, practice and institutions lose social significance” (Wilson, 1969, p.14).

Berger (1967, pp.107-108) defined secularization as “the process by which sectors of society and culture are removed from the domination of religious institutions and symbols”. It is thus not only a social-structural change, but is paralleled by a change in “the totality of cultural life and of ideation”. Moreover, Berger argues that this has a “subjective side as well”. Accompanying the secularization of social structures and culture, there is a “secularization of consciousness”, where an increasing number of people who live their lives without reference to a “religious interpretation”.

One of the most prominent current secularization theorists, Steve Bruce (2002, p.3), offers a more expansive definition of secularization as:

a social condition manifest in (a) the declining importance of religion for the operation of non-religious roles and institutions such as those of the state and the economy; (b) decline in the social standing of religious roles and institutions; and (c) a decline in the extent to which people engage in religious practices, display beliefs of a religious kind, and conduct other aspects of their lives in a manner informed by such beliefs.

(Bruce 2002, p.3)

While it is difficult to locate any theorist who defines secularization *purely* in terms of a decline in beliefs and practices, many of those who see secularization as a flawed concept often refer to its focus on individual level beliefs (e.g. Stark 1999). As Hanson (1997, p.161) and other have pointed out, many of the arguments about secularization stem from the fact that “critics who adhere to one definition of

⁹ 1. A decline in religion 2. Conformity with “this world” 3. Disengagement of society from religion. 4. Transposition of religious beliefs and institutions. 5. Desacralization of the world. 6. Movement from a ‘sacred to a ‘secular’ society.

secularization critically evaluate theorists who hold to another definition”, as well as differing in their definitions of ‘religion’, and most importantly differing at what level or scope their definition and related argument lies. That is not to say that the academic debate about secularization are particularly unique in this regard, but that it is important to understand that the concept is a highly contested one. Casanova (2007) argues that European sociologists of religion tend to switch back and forth between traditional meaning of secularization in terms of the declining influence of religion over other institutional spheres (i.e. differentiation), and the more recent usage in terms of a decline in belief and practice. It is not simply that European sociologists are careless with their use of the term, but that:

European sociologists tend to view the two meanings of the term as intrinsically related because they view the two realities, the decline in the societal power and significance of religious institutions and the decline of religious beliefs and practices among individuals, as structurally related components of general processes of modernization.

(Casanova 2007, p.102)

One theorist who explicitly states that these two realities are causally related is Steve Bruce. While not foreclosing the possibility of secular society containing large proportions of individuals who are very religious to whom religion is very important, he states:

Three things are causally related: the social importance of religion, the number of people who take it seriously, and how seriously anyone takes it...[T]he declining social significance of religion causes a decline in the number of religious people and the extent to which people are religious.

(Bruce 2002, p.3)

2.6.2 Broad vs. Narrow Approaches

Hanson (1997) offers a simple “Broad Approach” versus “Narrow Approach” classification as a means to clarify these definitional differences. The narrow approach comprises definitions and theories that refer to religious decline at the level of individual consciousness, while the broad approach comprises definitions and theories that refer to decline in religious significance at the level of the social system. Hanson (1997, p.160) points out that although these differing conceptualisations of

secularization are not mutually exclusive, they represent “differing ways of measuring secularization, using different data, and resulting in different consequences”. It is clear that many of the difficulties in defining, operationalizing, and finding evidence for or against secularization stem from differing views on what the locus of secularization is, be it society, institutions, or consciousness (and the linkages between these). Key to understanding and defining secularization therefore is to adopt a multi-dimensional focus, looking at both the broad and narrow definitions and their accompanying arguments. The multi-dimensional nature of secularization does not however lend itself readily to empirical testing. The nature of empirical social science data is limited somewhat to the narrow approach, being predominantly focussed on individual indicators of religiosity. But combined with other attitudinal items and social-structural indicators, these micro-level indicators can be used to make quite far-reaching claims at higher levels of abstraction.

Hanson (1997) argues that Wilson’s definition is the most all-encompassing in this regard, drawing attention to the multiplicity of factors involved in the loss of the social significance of religion. She argues that Wilson makes clear that theorising about secularization can take place through the broad or narrow approach, and that secularization at the level of the social system does not necessarily entail secularization at the level of individual consciousness (Hanson 1997, p.160).

What is lacking in Hanson’s broad versus narrow approach however is any treatment of the linkages between the two approaches. There is no discussion of what relevance the declining significance of religion at the level of the social system might mean for the significance of religion at the individual level, and vice versa. In delineating “the two realities” of secularization at the social and the individual level, she evades any discussion about how they may be related, preferring instead to castigate theorists such as Bruce for mixing the two approaches. As this review proceeds it will become clear that these linkages are problematic in many ways, but also that there is merit in attempting to link the two.

Further attempts at clarifying the concept of secularization, focussing on the unproblematic aspects of the theory, sometimes labelling it ‘neo-secularization’, have been offered by Chaves’ (1994) and Yamane’s (1997), and Casanova (1994). Their definition narrows the focus of secularization, concentrating on the declining

authority, or scope of authority, of religion, at different levels of analysis. Yamane (1997, p.116) defines secularization as occurring when “religious authority structures decline in their ability to control societal level institutions, meso-level organisations, and individual level beliefs and behaviours”. Or to use Chaves’ (1994, p.757) earlier definition and clarification:

Secularization at the societal level may be defined as the declining capacity of religious elites to exercise control over the other institutional spheres. Secularization at the organisational level may be understood as religious authority’s declining control over organisational resources within the religious sphere. And secularization at the individual level may be understood as the decrease in the extent to which individual actions are subject to religious control.

(Chaves 1994, p.757)

One of Chaves’ (1994, pp.752-753) primary motivations for focussing on religious authority is to differentiate the theory of secularization from one that predicts the decline of religious beliefs in the modern world, something he regards as incompatible with the “uncomfortable fact that religion continues to hold on individual consciousness ...[and] it is no longer possible to truthfully assert that ‘modernity’ is incompatible with religious belief”. But Chaves also maintains that one of his main goals is to relate secularization to the level of individual behaviour and consciousness. He argues that the focus of secularization theory should not be on levels of religious belief, practice, and denominational membership, but rather religious control over individual action, or “the extent to which actions are regulated by religious authority”. Applying these ‘new’ insights, he focuses on religious intermarriage, one way that religious authority controls the conduct of individuals. Other behaviours such as diet, dress, and sexual activity are also offered as examples of domains where religious authority attempts to exert control.

While these ‘neo-secularization’ theorists do offer some explicit definitional specification of how secularization operates, they do not seem to offer much more than what has already been proposed by some of the key theorists in the secularization paradigm, which Chaves (1994, p.752) readily admits himself in relation to Wilson’s conceptualization of secularization. Furthermore, there seems to be more agreement on the meaning of secularization than is often purported by some

of the literature criticizing the concept. To offer some clarification for the rest of this review one can define secularization as “the process by which religious thinking, practice and institutions lose social significance” (Wilson, 1966, p.14), which entails “(a) the declining importance of religion for the operation of non-religious roles and institutions such as those of the state and the economy; (b) decline in the social standing of religious roles and institutions” and the aspect that may or may not be linked to this process, depending on the scope of a particular secularization theory “(c) a decline in the extent to which people engage in religious practices, display beliefs of a religious kind, and conduct other aspects of their lives in a manner informed by such beliefs” (Bruce 2002, p.3). This will be manifest in “the declining capacity of religious elites to exercise control over the other institutional spheres...religious authority’s declining control over organisational resources within the religious sphere...[and a] decrease in the extent to which individual actions are subject to religious control” (Chaves 1994, p.757), and again, depending on the scope of a particular theory of secularization, a decline in individual beliefs, practices, and conduct informed by such beliefs.

2.6.3 The Secularization Paradigm

Although there are several theories of secularization, Tschannen (1991, 1992) and Dobbelaere (1999, 2002) maintain that concepts shared by these separate theories allow them to be united within a coherent “secularization paradigm”. Similarly, Bruce (2002, p.2) argues that there is no single unified theory of secularization, but rather “there are clusters of descriptions and explanations that cohere reasonably well”. Casanova (1994, p.17) has argued that “the theory of secularization may be the only theory which was able to achieve truly paradigmatic status within the modern social sciences”. To understand this statement it is necessary to briefly discuss the meaning of the term ‘paradigm’. The terms ‘paradigm’ and ‘paradigm shift’ are derived from Thomas Kuhn’s *The Structure of Scientific Revolutions* (Kuhn 1962). Briefly stated, Kuhn (1962) argues that the history of science could be divided into different periods according to the dominant sets of assumptions that guide human thought. Such assumptions were what characterized the paradigm and governed what was true and what was false.

Paradigms change when the old paradigm is no longer able to explain the majority of observations. When this happens, a new paradigm, with a different set of assumptions must take over.¹⁰ To clarify Casanova's (1994, p.19) argument regarding the paradigmatic status of secularization, it is the idea that religion could not survive in the modern world (the secularization *thesis* rather than the theory) that was accepted as an "unstated premise of the founding father's theories". As noted above, it was not until roughly the 1960s that there began a systematic investigation of this thesis, and an attempt to formulate an empirically grounded secularization theory. Casanova (1994, p.19) maintains that it is here that the first criticisms of the paradigmatic status of the secularization thesis emerge. He argues that, for the first time, the theory of secularization could be separated from its ideological connotations as an Enlightenment critique of religion. Instead it would become a theory that stresses the functional differentiation of secular institutional spheres, and a theory that does not necessarily predict the disappearance of religion in the modern world. More precisely, Casanova argues that the emancipation of the secular institutional spheres does not necessarily mean there would be a decline in belief and practice, nor a privatization of religion.

Alternative theories of religious change, and critics of the secularization paradigm such as Stark and Bainbridge (1985, p.430, 1996, p.12), tend to sum up the secularization paradigm with the often quoted statement from introductory anthropology textbook:

The evolutionary future of religion is extinction...belief in supernatural powers is doomed to die out, all over the world, as a result of the increasing adequacy and diffusion of scientific knowledge....the process is inevitable"

(Wallace 1966, p.265).

In a landmark article Warner (1993) argued there was a paradigm shift that was taking place in the sociology of religion, between those who advocated the old paradigm of linear secularization and those who rejected it. In particular those who

¹⁰ This is precisely the reasoning eminent sociologists of religion such as Berger (2001, p.445) have for abandoning the old paradigm: "In my own thinking ... the major change-of-mind has been, precisely, the abandonment of the old secularization theory - not, I would like to emphasize, because of some philosophical or theological change, but because the theory seemed less and less capable of making sense of the empirical evidence from different parts of the world (not least the United States)".

subscribed to the 'religious economies' or 'rational choice' theories of religious change were at the forefront of the new paradigm (for a summary of these theories see Young (1997)). Essentially, this new paradigm took issue with the inability of the secularization paradigm to explain the obvious persistence of religiosity in the modern world, particularly in the United States.

Taking Wallace's statement as being reasonably representative of secularization in the "old paradigm", some sociologists of religion have attempted to counter these arguments by proposing a 'neo-secularization' theory. Bruce (2002, p.1) disputes Stark and Bainbridge's caricature of the secularization paradigm, arguing it is shallow and imprecise but further argues that attempts to counter it under the banner of 'neo-secularization' presented little more than what had already been expressed in the 'old paradigm'. The criticisms of the secularization paradigm being unable to explain the "mountain of obstinate facts" (Stark and Iannaccone 1992, p.2030), do however hold considerable weight. Not only is "U.S. religious history highly inconvenient to secularization theory" (Warner 1993, p.1048), but all over the world religion not only persists, but flourishes. The resurgence of Islam in Muslim countries and amongst their diasporas, the explosion of Evangelical Protestantism, and the revitalization of Catholicism in the developing world, to name but a few examples (Berger 2001a, p.445). Reflecting on these patterns Berger (2001a, p.446) concludes that Western and Central Europe remains "the only part of the world in which the old secularization theory continues to be empirically tenable". This does not lead Berger to the conclusion that there is no such thing as secularization, but rather that it is not a direct and inevitable consequence of modernization. It is precisely the fact that the phenomenon of secularization in Europe, as an exception to the worldwide pattern, and a worldwide pattern of religious vitality that, to some extent, has "always been around", that makes "Euro-secularity" so worthy of investigation. Berger (2001a, p.447) points to Ireland and Poland as particularly interesting cases in this regard, as areas where "Euro-secularity" has been "happening dramatically". It should also be noted that levels of religious participation in these two countries are still put forward as evidence against secularization theory (e.g. Featherstone and Sorrell 2007).

Other than the purported "mountain of obstinate facts" (Stark and Iannaccone 1992, p.2030), additional criticisms of secularization theory stem from those who

argue that it is nothing more than “a hodgepodge of loosely employed ideas rather than a systematic theory” (Hadden 1987, p.598). This is in fact a reasonably accurate portrayal of secularization theory: as stated above, there is no single unified theory of secularization (Tschannen 1991, Tschannen 1992). Rather, there is a core set of concepts, grounded in a concrete scientific community, that allow this scientific community to function “even in the absence if shared rules and theories”, that is, a paradigm in the Kuhnian sense (Tschannen 1991, p.396). In his systematization of the secularization paradigm Tschannen (1991) offers a “common exemplary infrastructure” or the “primitive cognitive apparatus” that is common to a number of these secularization theories. Three concepts: differentiation, rationalization, and this-worldliness, are the core elements, or ‘exemplars’ of Tschannen’s modelling of the secularization paradigm. Other exemplars of the paradigm are related to these three core elements. These include: autonomization, privatization, generalization, pluralization, and decline in practice (correlates of differentiation); scientization and sociologization (correlates of rationalization); and a collapse of the worldview and unbelief (floating correlates). Dobbelaere (1999) also uses these three core exemplars in mapping the secularization paradigm, adding some exemplars and downplaying others, but also differentiating between levels of analysis: the macro or societal level, the meso, subsystem or institutional level, and the micro or individual level. Although it may simplify somewhat the varied theories that fall under the concept of secularization, the “common exemplary infrastructure” used by Tschannen (1991) and built upon by Dobbelaere (1999) offers a useful platform on which to build and structure this review of the literature on secularization.

2.6.4 Secularization: The Macro Level

Dobbelaere (1999) delineates seven exemplars of secularization that are primarily societal phenomena: Institutional differentiation or segmentation; autonomization; rationalization; societalization; disenchantment of the world; privatization; and generalization. Critics of secularization theories, or the “secularization prophecies” such as Stark (1999, p.251), have argued that secularization theories are not primarily directed at these societal processes such as differentiation. Their “primary concern is with *individual piety*, especially *belief*”. Stark (1999, p.251) argues that secularization theorists have attempted to shift their definitions to more macro levels of analysis in order to avoid the “inconvenient facts” of individual piety and belief remaining strong. Dobbelaere (1999) maintains that secularization is situated primarily on the societal level, although he admits “in the literature, there is almost no discussion about the loss of social significance of religion on the societal level” (Dobbelaere 2006, p.142). A vociferous critic of secularization theories, Stark (1999, p.252) maintains that “if this were all secularization means, there would be nothing to argue about”. Throughout this section an attempt is made to relate these societal aspects of the secularization paradigm to the micro level of individual religiosity, values, and the relationship between them.

2.6.4.1 Differentiation

Martin (2005a, p.20) contends that social differentiation “offered the most useful element in the paradigm of secularization. It was the analytical core to which statistical data...should be related”. Casanova (1994, p.40) echoes this view, describing differentiation as “the unassailable core of modern theories of secularization”. Sommerville (1998, p.250) contends that when discussing social structures, or societies more generally, secularization means differentiation, that is, “we are not saying that differentiation *leads to* secularization. *It is* secularization”. Casanova (1994, p.18) maintains that “strictly speaking, the theory of secularization is nothing more than a sub-theory of general theories of differentiation, either of the evolutionary and universal kind proposed by Durkheim, or the more historically

specific kind of Western modernization theory developed by Weber”. Yamane (1997, p.115) claims this may be “taking the point a bit too far”, excluding institutional and individual aspects of secularization, but that differentiation is at the core of both the ‘old’ and the ‘new’ secularization paradigms.

A fundamental tenet, “social fact” and “structural trend that serves to define the very structure of modernity” is that social institutions becomes functionally differentiated (Chaves 1994, p.751, Casanova 1994, p.39). Differentiation entails the separation of society’s subsystems into separate institutions such as the polity, the economy or the market, science, law, education, welfare, and religion. Modern society organises itself according to the major societal functions, for example, satisfying needs and allocating resources through the economy.¹¹ These institutions become autonomized, becoming independent of the religious sphere, separated from its rules and regulations, and developing their own functional rationality (Dobbelaere 1999). Autonomization is not an automatic consequence of differentiation, but they are generally presented together. The more precise theorization is that differentiation is a prerequisite of autonomization (i.e. it would be possible to have a differentiated society where the differentiated spheres are not autonomous of the religious sphere) (Tschannen 1992). Dobbelaere, paraphrasing Berger (1967, p.107), outlines a few examples of this process:

emancipation of education from ecclesiastical authority, the separation of church and state, the rejection of church prescriptions about birth control and abortion, the decline of religious content in literature and the arts, and the development of science as an autonomous secular perspective.

(Dobbelaere 1999, p.231)

To relate these back to Chaves (1994, p.757) definition of secularization in terms of religious authority structures, these changes represent the “the declining capacity of religious elites to exercise control over the other institutional spheres”.

It is difficult to say when exactly religion held this all-encompassing authority over all the spheres of society. Martin (1969, p.30) remarks that “secularist

¹¹ Others institutional spheres and their functions include: the family (bearing and rearing of children); the political system (allocation of power); the legal system (control and the maintenance of social order); the stratification system (distribution of status); the educational system (socialization and training); recreational system (leisure) (Wilson 1976, p. 271).

history tends to accept the Catholic laments about the period when men were truly religious. In this instance, the backward-looking utopia of medievalism becomes the basis for writing about secularization". Similarly Bruce (2002, p.45) believes that the idea of a "Golden Age of Faith" is an unhelpful starting point, in that it is both a questionable depiction of the past, and its existence or non-existence is of little relevance to the secularization paradigm anyway.

Berger (2001a) considers the secularization process to have begun in Europe in the nineteenth century, its onset and course differing in different countries. Wilson's baseline was the period when the church controlled "the formal process of political, juridical, commercial, and social intercourse", that is, the zenith of papal authority in Europe, around the 12th Century (Wilson 1976a, pp.9-10 cited in Dobbelaere (2006, p.143)). Wilson contends that to label this a 'golden age of faith' is problematic, in that it was the "religiously prescribed social order" that differentiates this time from the present, and not necessarily the religiousness of individuals as such. Casanova (1994, pp. 20-35) offers one of the most in-depth accounts of the differentiation and secularization of Western European society, beginning in medieval Europe, and describing the differentiation of the religious and secular in much more detail than can be justified here. First he describes the medieval classification of reality into religious and secular, dictated by the church, in which all that was secular was an undifferentiated whole (*saeculum*), and the "official perspective from which mediaeval societies saw themselves was a religious one" (Casanova 1994, p.20). When the *saeculum* itself becomes differentiated, two spheres in particular come to dominate modern society: the state and the economy. The spatial structural analogy Casanova (1994, p.21) uses is particularly useful in understanding this development: in the past reality was structured around one main religious-secular axis; in a modern differentiated a "multiaxial space was created with two main axes structuring the whole":

In the new spatial structure, therefore, the religious sphere became just another sphere, structured around its own autonomous internal axis but falling under the gravitational force of the two main axes... [T]he religious sphere now became a less central and spatially diminished sphere within the new secular system.

(Casanova 1994, p.21)

Casanova (1994, p.21) argues that it is not of particular relevance what the “first cause” of this differentiation was, but rather that there are four “related and simultaneously unfolding developments” that served to undermine the mediaeval classification, with each “contributing its own dynamic to the modern process of secularization, that is, each of them were carriers of the process of secularization”: the Protestant Reformation; the formation of modern states; the growth of modern capitalism; and the early modern scientific revolution. While Casanova discusses each of these “carriers” at great length, it will suffice at this point (they are touched upon throughout the review) to simply state that each of these carriers operated differently in societies, and that the modern process of secularization follows slightly different paths in different societies.

Notwithstanding the debates on when secularization began, or what differing paths it takes, there is a general consensus that functional differentiation has diluted the authority of religion in advanced industrial societies. Thus, societies’ institutions are no longer integrated on the basis of an all-encompassing religious worldview:

Religion in advanced industrial societies is believed to have lost or abandoned its former function of supplying a sense of ultimate values and legitimacy for the entire social system. It is also said to have become less effective as a source of integrating individuals into society and of binding all the social institutions into a coherent whole

(Beckford 2003, pp.45-46).

This is somewhat in opposition to what has already been discussed in this review, in relation to Parsons’ and Bellah’s conceptualization of religion as being fundamental to the integration of societies, that of a “religiously based moral order” (Fenn 1970, p.112). Chaves (1994, p.751) argues that the concept of differentiation that was influentially formulated by Parsons (1966) needs to be reformulated in order to accommodate a more precise conceptualization of secularization. Drawing on the work of the prominent neo-functionalist Jeffrey Alexander, Chaves (1994, p.751) “separate[s] out what was unsustainable and problematic” in the Parsonian formulation of differentiation. The most important of these problematic elements is dispensing with the necessity of value integration, reflecting the ideas of Luhmann (1990), whereby it is quite possible that “the world can cohere though its values are incoherent” (Waters 1994, p.309). Another important point is rather than the ends of a particular societal sphere (e.g. the economy, science) being equated with the ends

of the society as a whole, no one institutional sphere is given primacy in encompassing the goals of society.

Instead of looking at either the persistence of religion's dominant position in society in terms of integration and legitimizing values and norms in separate spheres (as Parsons and Bellah do), or religion being necessarily overwhelmed by other societal spheres who come to dominate social life in its stead, Chaves' "new differentiation" looks at the scope of religious authority as being something that is historically variable and one that surely requires empirical investigation:

The broad shift in perspective appropriately highlights the political, conflictual and contingent nature of relations among societal institutions in general, and between religious and other spheres in particular. Here society is understood as an "interinstitutional system" rather than as a moral community.

(Chaves 1994, p.751)

In such an intersystemic system, religion (in a traditional substantive and institutional sense) is understood primarily as another 'mundane' institutional sphere, no longer claiming any necessary functional primacy. In this conceptualization, religion is neither relegated to a defunct position in modern society, nor elevated to a prime one. As such, the key aspect of secularization theory for Chaves is not the persistence or decline of individual religiosity (beliefs, practice, denominational affiliation) but rather the changing influence of religion, which is manifest in the extent to which religious sphere influences other institutional spheres at the societal level, and the extent to which individual action is influenced by religious authority. Strictly speaking, secularization, or the differentiation aspect of secularization, is only a description of the diminished influence of religion over the other institutional spheres, and the extent to which this affects the individual is controversial and much debated. It is one of the aims of this section to outline how these changes in the social significance of religion might manifest itself at the individual level.

In such an interinstitutional system, individuals now move between different roles and institutions that are no longer guided by a single uniting institution and a unified set of values. Rather, each separate institution is guided by its own autonomous rationality and its own autonomous values (Dobbelaere 1999). This is most thoroughly described by Luckmann:

In contemporary industrial societies, institutions have become highly interdependent elements of social subsystems. These subsystems, however, are relatively "autonomous" parts of the social structure. The norms of each subsystem are comparatively independent of the rules that govern action in other subsystems. From one domain to the other, institutionalized social interaction obeys norms that are not only different in content - this is a truism - but also in general moral style. The connection of these norms to a superordinated "logic," the "logic" of a transcendent reality, is attenuated or entirely severed.

(Luckmann 1990, p.133)

2.6.4.1.1 Compartmentalization

Because of this disintegration in the all-encompassing authority of religion, people became confronted with a value pluralism, and the unquestioned legitimacy of the moral values associated with the church deteriorate. As well as being relativized (discussed below) religious outlooks now become compartmentalized and segregated from values and motives in the other social spheres such as politics and work (Dobbelaere *et al.* 2003).

Thus, the more secularized a society, the more segregated values informed by religion become from values in other domains. Furthermore, as individuals move between differentiated institutions, each with their own separate values informed by their own functional rationalities, individuals are forced to consign their own personal beliefs to the private realm. This, along with other factors, which will be explained in more detail later, amount to the privatisation of religion (Dobbelaere 2002). It should be noted however that the privatisation of religion is by no means a foregone conclusion when a society becomes functionally differentiated. In fact, as Casanova (1994, p.215) puts it, the privatization of religion "is an historical option. To be sure it seems to be a modern 'preferred option', but it is an option nonetheless". This privatisation of religiosity is summed up by Berger:

Religiosity is limited to specific enclaves of social life that may be effectively segregated from the secularized sectors of modern society. The values pertaining to private religiosity are, typically, irrelevant to institutional contexts other than the private sphere. For example, a businessman or politician may faithfully adhere to religiously legitimated norms of family life, while at the same time conducting his activities in the public sphere without any reference to religious values of any kind"

(Berger 1967, p.134)

Berger describes this as “a severe rupture of the traditional task of religion”, that of providing “an integrated set of definitions of reality that could serve as a common universe of meaning for member of society”. Religion is relegated to constructing “sub-worlds” rather than all-encompassing ones, and fragmented rather than total universes of meaning. Berger describes this as religion becoming less of a reality, less real, lacking reality (Berger 1967, p.134). To truly understand this, one has to understand Berger’s theorization of the social construction of reality, and the place of religion within this theory:

Worlds are socially constructed and socially maintained. Their continuing reality, both objective (as common, taken-for-granted facticity) and subjective (as facticity imposing itself on subjective consciousness), depends upon specific social processes, namely those processes that ongoingly reconstruct and maintain the particular worlds in question. Thus each world requires a social “base” for its continuing existence as a world that is real to actual human beings. This “base” may be called a plausibility structure.

(Berger 1967, p.45)

When religion is relegated to the private domain, the plausibility structures, and the “social base” that makes the religiously legitimated world real (although it doesn’t solely apply to religious worlds and legitimations), is a much smaller one, perhaps no larger than the nuclear family. These plausibility structures, because they are so small, and because institutional formations in the private sphere are more fragile, are more tenuous and easily cast off. One might argue that churches and other religious associations could represent a powerful plausibility structure, but Berger argues that because they are voluntary and because they are primarily of the private sphere, they can only bolster the required plausibility structures to a limited extent.

Furthermore, as religion consequently becomes less of a guiding force and less important in structuring individuals’ everyday lives, this compartmentalization may be accompanied by a decline in individual religiosity, that of religious beliefs and practices (Dobbelaere 1995). As with privatization, this decline of religion can also be seen as an historical option, and by no means of a structural trend of modern society (Casanova 1994). Moreover, the chain of reasoning linking differentiation with a decline in individual religiosity seems quite malleable, and a secularised or

differentiated society inhabited by a religious population need not be a contradiction in terms.

A useful insight into this debateable causal chain would be to look at the viewpoint of Steve Bruce (2002, p.41), a theorist who has a self-declared “radical view” in relation to the decline in individual religiosity as a consequence of macro level changes, particularly the downstream effects of differentiation, that is, compartmentalization and privatization. Firstly, Bruce (2002, pp.41-43) vehemently points out that the “endpoint” of secularization is not universal atheism, but this is because Bruce maintains that to disavow religion is to give it some semblance of significance. It is indifference to religion that Bruce sees as the endpoint of secularization. And although he maintains this does not imply the disappearance of religion, there is a causal linkage between the declining social significance of religion and a reduction in the number of people interested in religion, and specifically the degree to which the same religious beliefs are widely accepted. He therefore sees relativism, the weakening of religious commitment, and “the popularity of religious beliefs as a useful index of secularization” (Bruce 2002, p.43).

2.6.4.1.2 The Debatable Consequences of Differentiation

Although there is general consensus about the disintegration of the sacred canopy and the dilution of religious authority, the consequences for individual religious behaviour and the values associated with it, are the subject of debate. Beckford (2003, p.46) argues that competing views on the consequences of differentiation for religion are where much of the debate and disagreement regarding secularization lie. One could argue that:

Secularization is not a necessary consequence of the functional differentiation of religion either because claims about its integrative function in the past have been exaggerated or because it continues to fulfil functions at other levels of the social system. For, instead of integrating the entire social system, religion can be said to function as the source of moral direction, spiritual guidance, identity and meaning for certain collectives and individuals.

(Beckford 2003, p.46)

Similarly, Martin asks:

Whether differentiation marginalises religion in its own specialised ghetto or creates a space in which faith can discover its own specific character, free from either the Constantinian constraints of establishment or seductive opportunities for political influence.

(Martin 2005b, p.146)

Parsons' view of the consequences of differentiation for religion was not of decline, but that religion (in the substantive sense) was liberated from the other spheres and could now "be itself" (Martin 2005a, p.20). Casanova mirrors this view:

From the new hegemonic perspective of modern differentiation one may add that, now for the first time, the religious sphere became fully into its own, specializing in "its own religious" function, and either dropping or losing many "nonreligious" it had accumulated and could no longer meet efficiently.

(Casanova 1994, p.21)

If one were to take this thesis to its logical conclusion one would expect differentiation to be accompanied by declining religious authority at the societal level, but that this would be inconsequential in relation to individual religiosity. One could even propose that now that the religious sphere has become free of its "Constantinian constraints", differentiation might lead to an expansion in religiosity. In essence, there could be a secular society inhabited by individuals with highly religious individuals. In this instance one might also expect religion to retain its role as a general source of moral guidance for individuals, perhaps now limited to only the private sphere. Although it might not be a perfect indicator of whether the church is now free to 'be itself' the one religious indicator that had not declined in Europe between 1981 and 1990 was whether the church is giving answers to people's spiritual needs (Lambert 2004, p.29). Moreover, one could argue that the society free from such "Constantinian constraints" *par excellence* is that of the United States, often highlighted as a bastion of religiosity despite or because of its historical separation of church and state.

2.6.4.1.3 Empirical Applications of Differentiation

Halman *et al.* (1999) sought to test some aspects of secularization theory in relation to differentiation using EVS data collected in 1990 and 1999 in five countries, selected on the basis of their differing degrees of secularization. They advanced four hypotheses relating to the diminution of the religious spheres influence over values in public and private domains as a result of differentiation:

1. The more secular a country is, the weaker the impact of religious values on the values in the other domains of society.
2. The impact of religious values on the values in the private sphere will be less weak than on the values in the public sphere, the more secular a country is.
3. The more a society has secularized in a particular period of time, the larger the decline of the impact of religious values on the values in the other spheres.
4. The more religiosity has decreased in a society, the larger the changes in values in the public and private sphere will be.

First, they found reasonable evidence of a link between ‘how secularized a country is’ and a stronger impact of religiosity on values in other domains, although this was only the case in relation to private (family) values. In relation to values allied to the more public domain of politics, the impact of religion was of a similar magnitude in the more and less secularized countries, and in relation to work the impact of religion was insignificant. Of some note was the fact that the associations between religiosity and family and political values were greatest in Ireland (the least secularized/most religious country). In testing the differential impact of religion on the public and private sphere within the countries, they found that, in general, religion has a more substantial impact on the private sphere (family values), but that in some countries (both more and less secularized) religion has an almost equally significant impact on the public sphere (political values). Thus, their analysis both substantiates and refutes their hypotheses, and provides very little resounding evidence linking secularization with value change in different domains. The final two hypotheses could not be confirmed. It is necessary to point out that their operationalization of how secularized a country is, seems somewhat simplistic. They begin by constructing a composite “general religiosity score”, comprising of

measures of personal religiosity, orthodoxy, and church adequacy. They then rank fifteen countries according to their scores on this index, where the higher the score, “the less the degree of general secularization”. They then go on to choose four countries, based on their differing degrees of secularization, for their more detailed analysis. While this may be a useful measure of calculating the average level of religiosity in a country, this does not necessarily amount to how secularized a society is. As already noted, it is a somewhat simplistic to conceptualize secularized and religious as opposite ends on a well-balanced scale, particularly when attempting to make claims about macro social structural changes and their relationship to changes in individual orientations. By arguing that secularization can be measured in this way, and that the differential impact of religion is mediated by a country’s relative position on this scale, it seems to be putting the cart of religiosity before the horse of differentiation. A more theoretically refined argument would be ‘how secularized a society is’ being measured in terms of extent of functional differentiation and the question of whether or not there is a decline in personal religiosity, orthodox beliefs, and church adequacy would then follow. Clearly it is difficult to specify the causal chain exactly, but specifying the most divisive aspect of the secularization paradigm (a decline in individual religiosity) as the principle measure of secularization seems theoretically problematic.

Dobbelaere *et al.* (2003, p.90) conducted a more focussed analysis of the relationship between functional differentiation and individual religiosity by exploring family values among people with different religious outlooks. The more theoretically refined question that guides their analysis explicitly questions whether secularization at the societal level (i.e. differentiation) is reflected at the individual level:

Even if one witnesses a functional differentiation on the *societal* level, does this result on the micro level, i.e., in the *individual* consciousness, in a compartmentalisation on the one hand, of a religious outlook and, on the other hand, the vision of politics, education, economy or the family?

(Dobbelaere *et al.* 2003, p. 77)

They conclude that the secularization of the social system has indeed promoted a compartmentalization of religious outlooks from views on the family, and that this is occurring in parallel with a decline of church involvement. They

found that the influence of the church on family life in the European populace was “rapidly dwindling”, and that the influence of the church still holds only for a limited and declining number of core members. Despite the fact they refer explicitly to the societal process of differentiation as the primary causal factor in this compartmentalization of individual consciousness, they do not operationalize it in any way, but rather investigate fourteen Western European countries using the 1990 wave of the EVS. Presumably, their logic is that being modern post-industrial societies, each society is equally functionally differentiated.

2.6.4.2 Rationalization & Disenchantment

Many writers (e.g. Beckford 2003) consider differentiation and rationalization to be two sides of the same coin, with many of the consequences of differentiation overlapping with those of rationalization. For example, when separate institutional spheres become separated from the over-arching religious one, they “start working on basis of criteria that are rationally related to their specific social functions, independently from any religious control or guidance” (Tschannen 1991, p.401). As already discussed, these competing rationalities ultimately relegate the religious to a compartmentalized and privatised domain.

But rationalization goes slightly further than differentiation in that it promotes a particular attitude amongst individuals that is in direct opposition to supernatural belief. This pervasive rationality in modern society therefore:

promoted an attitude in people that either they themselves or specialists could solve their problems, as they took command of their physical, social and psychological worlds, which removed God more and more from those worlds and stimulated unbelief.

(Dobbelaere 1999, p.240).

In their systematization of the secularization paradigm Dobbelaere (1999) and Tschannen (1991) are more specific about the mechanism by which rationalization impacts on religion, referring to two sub-processes that have particular consequences for the vitality of religion. One is “scientization”, the emergence of science as an interpretation of the world that now competes with the religious interpretation. The

second is “sociologization”, where the rational and scientific interpretation of the world is applied to human affairs, determining social life in a rational fashion, further undermining the religious influence. For example, we now look to social science rather than Christian ethics to solve our social problems (Tschannen 1991, p.401). Wilson for example (1969, p.10) positions this increasingly pervasive rationality in direct opposition to religious cognitions and beliefs, relegating them to the private domain, if even that:

Religious thinking is perhaps the area which evidences most conspicuous change. Men act less and less in response to religious motivation: they assess the world in empirical and rational terms, and find themselves involved in rational organizations and rationally determined roles which allow small scope for religious predilections as they might privately entertain.

(Wilson 1969, p.10)

Wilson’s (1969, p.17) theory of secularization focusses on the increasingly technical and instrumentally oriented roles individuals occupy in modern society. Rationality becomes embedded in social organization to such an extent that “consequently, at least in some measure” it permeates “our own habits of thought”. The key driver of this change for Wilson (1969, p.17) appears to be the evolution of technology itself, so that individuals now participate in “a society that is increasingly regulated by devices and machines which operate according to criteria of efficiency”. Individuals are now more occupied by “immediate, empirical ends and pragmatic tests”, and social affairs are dominated by “economic costing” rather than “spiritual aspiration”. Wilson (1969, p.18) goes as far as to state that while religion once satisfied man’s emotional need for reassurance, modern society is so dominated by intellectual criteria that “it may well be that what cannot be intellectually accepted cannot be emotionally reassuring”.

The idea of rational modes of thought becoming more and more pervasive is an idea that is at the very root of theories of modernization and secularization. As described in section 2.5, the basic idea of modernization is that the standard environments and standard institutional pressures of industrial societies, in particular the increasing emphasis on an economic and technical rationality in the workplace, create similar patterns of values, attitudes and experiences (Inkeles 1960, p.2). Berger’s theorization of this linkage between industrialization and secularization, and

that of individual consciousnesses in particular, represents an important explication of this idea.

A modern industrial society requires the presence of large cadres of scientific and technological personnel, whose training and ongoing social organization presupposes a high degree of rationalization, not only on the level of infrastructure but also on that of consciousness. Any attempts at traditionalistic *reconquista* thus threaten the rational foundations of modern society

(Berger 1967, p.132)

This increasingly pervasive economic and technical ethos at the expense of the spiritual and the traditional is encapsulated in Weber's (1958a) description of the disenchantment of the world. In his essay 'Science as a Vocation' Weber (1958a, p.155) wrote: "the fate of our times is characterized by rationalization and intellectualization and, above all, by the disenchantment of the world". For Weber, disenchantment had two distinct aspects, one related to the decline of the supernatural, the other the rise of "formal means-ends rationalities" of science and bureaucracy (Jenkins 2000, p.12). Following the process of rationalization and the sub-processes of scientization and sociologization, the natural world and all areas of human experience become less mysterious and more understood. This rationalization happens in the religious sphere itself, with magic and superstition being supplanted by more systematized ideas about man's relationship to the divine. This was a key idea in Weber's thesis on the rationalization of religion, which, he argued, would lead to its eventual demise. More generally, the world becomes knowable and controllable by man and science rather than by God, revelation and superstition. As with rationalization and differentiation, this has consequences for the authoritative over-arching worldview provided by religion.

In relation to values and attitudes a particularly interesting aspect of the relationship between rationalization and religion are those areas where it is unclear which mode of thought holds authority. Beckford (2003, p.48) cites the criteria for when life begins and ends as one of these particularly interesting "border disputes", something that resonates with the ideas of Finke and Adamczyk (2008) on the significance of religion in relation to morality that is contested. In this respect, a move away from church teachings on such matters towards more liberal and

permissive attitudes would suggest two processes in relation to the social significance of religion. One is that declining religious authority at the societal level means the religious sphere no longer controls the discourses of the legal and medical spheres of society. One would therefore expect that a general increase in liberal attitudes among the populace of a society as a whole (a macro-micro effect). The second is that individuals who are religious are increasingly ignoring the proscriptions of religious organizations on these matters, essentially compartmentalizing their religious outlook from their values in other spheres. While it is probable that views on such matters still vary according to the degree of individual religiosity, whether religiosity remains a powerful indicator of views on such matters would give an interesting insight into the degree to which rationalization (and differentiation) – a macro-level concept - has an effect on the micro-relationship between individual religiosity and values.

That rationalization and growing disenchantment have a negative impact on religion has however been met with several criticisms. Firstly, the assumption that religious and rational ways of thinking are mutually exclusive, and incompatible, could be seen as a weakness, or at least a contentious aspect, of the theorisation of rationalization as a secularizing force (Beckford 2003). Confidence in rational and scientific methods are by no means clearly associated with the abandonment traditional religion, nor have these rational and scientific solutions necessarily supplanted all alternatives. There is a dearth of studies that actually investigate this proposed opposition between a “rationalist worldview” and a religious one (Houtmann and Aupers, 2007, p.308).

Houtmann and Aupers (2007) cite Inglehart’s (1997a) findings of diminishing confidence in science, and technology in helping to solve humanity’s problems in the most economically advanced societies as possible evidence that a “rationalist worldview” does not necessarily accompany modernization. This underlines an often overlooked aspect of the link between rationalization, disenchantment and the decline of religious beliefs. Houtmann & Mascini (2002) maintain that Weber’s thesis about the disenchantment of the world was not solely focussed on the declining significance of supernatural explanations, but of any objective meaning at all. As such, Houtmann and Mascini argue that rationalization and disenchantment are two distinct theses. They argue that since the 1960s there has been a progressive

erosion of traditional religious, but also scientific, explanations. They argue that this change has taken place amongst the general publics of post-industrial societies, most prominently amongst the academy and intellectuals, particularly in the arts and humanities. This “radicalized scepticism” can be seen in the conviction that knowledge is not simply discovered (or revealed for that matter), but is itself a man-made construction (and awaiting deconstruction) (Houtman and Mascini 2002, p.457). It would require too lengthy a discussion to even touch upon ideas regarding the status of knowledge in post-industrial society in postmodern theory. It is very basically one where religious and cultural ideas are relatively indistinct from scientific ideas, in that none have any objective truth, and some are merely more preferable or more legitimate in specific contexts (see for example Lyotard (1984)).

In light of these arguments, it appears that the most acceptable way of conceptualizing the relation between religious and rational modes of thought, is in terms of compartmentalization. That is, religious beliefs and practices become increasingly limited to their own religious sphere, or to the private realm. One might tentatively conclude that rationalization has not necessarily made us into atheists but it does “make us less likely than our forebears to entertain the notion of the divine” (Bruce 2001b, p.255).

2.6.4.3 Privatization

Privatization is positioned by Tschannen (1992) as a correlate of the core element of differentiation. A consequence of the differentiation, autonomization and rationalization of the secular spheres is that religion “reorganizes its forces within society by partially changing its location and function”, leading to both the privatisation and generalization of religion (Tschannen 1991, p.401). Although the concept of generalization represents an important theorisation of this reorganization (see for instance, Herberg (1955, 1962), Bellah (1970), Parsons (1999), Edgell *et al.* (2006)), the concept of privatization will be focussed on here.

As already mentioned in the more detailed discussion of differentiation, individual values are now compartmentalized as individuals move between the different institutions, each with their own values and autonomous rational logics.

Religion is pushed into the private realm, where it no longer informs values in the other spheres. That is, diminution of the religious spheres influence over the other institutional spheres is thus theorised to be especially conspicuous in the public rather than private sphere. Values in the private spheres, such as the family, may retain, or be more inclined to retain, a certain amount of deference to religious authority, while the public sphere, and values related to work or politics, they will defer less to religious authority (Halman *et al.* 1999, p.145).

Luckmann (1967, 1979, 1990) offers one of the most comprehensive discussions of privatisation of religion. In Europe of the Middle Ages, Luckmann describes that there was a “unique and transitory historical situation” whereby the Christian “sacred universe”, a “construct of transcendence in terms of a salvation goal taken to be superordinated to ordinary life” was both “an institutionally specialized *and* socially universal religion” (Luckmann 1990, p.131). With differentiation, and the impact of many of the other “carriers” discussed earlier, the link between this “sacred universe” and everyday life becomes significantly weaker, in the way described above, whereby individuals move between different institutions each governed by their own values, with religion pushed to the private sphere. As everyday life ceased to be informed by this sacred universe, so too did reference to the “great transcendences”, and life became increasingly oriented to the intermediate and little transcendences, those that were naturally more worldly oriented and derived from “secondary institutions” (e.g. politics, the family) (Luckmann 1990, p.136). Thus, Luckmann (1990, p.136-138) concludes that there is a “shrinking of transcendence” but “an expansion of religion in the form of secondary institutions”. In particular, the locus of religion in the modern world has shifted to little transcendences, particularly in terms of self-realization and self-fulfilment, or “modern solipsism”. Luckmann (1990, p.135) describes this as a “‘sympathetic’ relationship” and an “elective affinity” between structural privatization (i.e. the change of location of religion within the institutional order owing to differentiation) and the “sacralisation of subjectivity”. Individuals now have to construct themselves “systems of ultimate significance” from these various sources. Thus, ‘religion’, in Luckmann’s terms, has vacated the institutional churches and become located in the self, with the more worldly concerns of self-realization and self-expression becoming the “invisible religion” of the modern world (Casanova 1994, p.36).

A more somewhat contradictory argument, and one that fits better with what has already been discussed in terms of religion occupying a variable position in an “interinstitutional system”, neither providing an over-arching consensus, nor being relegated to a position that is necessarily redundant, is offered by Casanova (1994). He argues that it is quite possible that religion may still play a very important role in modern society, in terms of offering a critique of dominant historical trends. It is an important argument because in positioning religion as a sphere that still has some salience in a modern differentiated society it does not claim that religion must necessarily seek to renew its control over the secular spheres, or “impose its agenda upon society or press its global normative claims upon the autonomous spheres”, as this is regarded by Casanova as both unlikely and undesirable.

But by crossing boundaries, by raising questions publicly about the autonomous pretensions of the differentiated spheres to function without regard to moral norms or human considerations, public religions may help to mobilize people against such pretensions, they may contribute to a redrawing of boundaries, or, at the very least, they may force or contribute to a public debate about such issues.

(Casanova 1994, p.43)

A simple concrete example might be a church speaking out on issues regarding euthanasia or abortion, providing an alternative interpretation than scientific expertise or legal proscriptions. The argument that religion has been completely relegated to the private realm and has no salience in shaping individual values to these issues would seem short-sighted. That is not to deny the fact that religion has lost much of its importance in the public sphere but that the importance of religion in shaping values and attitudes towards these issues is a question that warrants empirical investigation.

2.6.4.4 Societalization

Societalization expresses many of the same features that were addressed in relation to rationalization, but with a specific emphasis on the decline of communal bonds, and its consequences for religion in modern society. It refers to one of the classic themes of sociology, first theorised by Tönnies (1964): the movement from *Gemeinschaft* to *Gesellschaft*, or from community to society. One of the

fundamentals of Bryan Wilson's (1969, 1976, 1982), and later Steve Bruce's (2001b, 2001a, 2002) theory of secularization, societalization describes the process whereby the close-knit traditional communities lose their "power and presence to large-scale industrial and commercial enterprises, to modern states co-ordinated through massive, impersonal bureaucracies, and to cities" (Bruce 2001b, p.252). By 'society' Wilson (1976) does not merely refer to social collectivity, but to a:

self-defined, autonomous, ongoing, internally structured, coherent system of segmented relationships that embrace more or less totally a large number of people who share at least the broad outlines of a cultural system and who are controlled by an identifiably common normative framework and, more important, a common political system. Society is thus a structured system of considerable scale and complexity.

(Wilson 1976, p.259-260).

More simply, society is organized on the basis of large social institutions, big cities and anonymous social processes, globally rather than locally, and formally rather than personally (Northcott 1999). The society/*gesellschaft* is one in which people do not know each other personally, interaction is based on role-performances, with relationships based on the fulfilment of some purpose or interest. This contrasts with the community/*gemeinschaft*, in which relationships are based on strong personal ties, often through kinship (Northcott 1999). At its core, societalization expresses many of the same ideas as rationalization, and indeed Wilson himself states that the decline of community is the result of rationalization:

The development of new means of communication, new forms of energy, new techniques of control, and a new rationalization of labor have all led to the breakdown of effective community life.

(Wilson 1976, p.264)

From a functional perspective, religion has its source in, and draws its strength from the community. The demise of community, by definition, weakens the importance of religion in daily life (Bruce 2001b). Wilson (1976, p.260) sees religion as a remnant from our "pre-societal" and communal past, where it was once vital in structuring our everyday life. As society rather than community becomes the locus of individual's lives, religion loses many of its important functions. Bruce offers a description of how religion and community were reified through the shared religious routine in the community:

The church of the Middle Ages baptized, christened and confirmed children, married young adults, and buried the dead. Its calendar of services mapped onto the temporal order of the seasons. It celebrated and legitimated local life. In turn, it drew considerable plausibility from being frequently reaffirmed through the participation of the local community in its activities.

(Bruce 2002, p.14)

While one could argue that in many societies the church still performs these functions, according to Wilson (1976), in our modern nation-states, religion has lost much of that importance. Where morals with a religious basis once controlled and structured life in the community, control has shifted to bureaucratic regulations, technical controls, contractual relations, rationality and instrumental values (Northcott 1999, Aldridge 2000, Wilson 1976). Together with rationalization, societalization diminishes the plausibility and utility of an over-arching moral and religious system, and while it remains subjectively relevant for some, religion has lost its “objective taken-for-grantedness” in daily life (Bruce 2001b, p.252). In short, where religion was once at the heart of community, it is now pushed to the margins of society. For Wilson this change was the focal point of secularization:

Community is in marked decline throughout the world, and most of all in advanced nations. My thesis is that secularization is the decline of community: secularization is a concomitant of societalization.

(Wilson 1976, p.266)

Luckmann (1967, pp.29-30) also maintains that in Europe religion has been pushed to the periphery of society. Only those who occupy this periphery, those who are relatively unimportant for the functioning of modern society, the old, the very young, women not in the labour force and those living in rural areas, retain their deference to religion. Berger (1967, p.108) also argues this point, that while “secularization may be viewed as a global phenomenon of modern societies, it is not uniformly distributed within them”. He outlines how different groups of the population are affected by secularization differently: the impact being stronger amongst men than women; the middle age range than the very old or very young; in urban rather than rural; in classes connected with modern industrial production- particularly working classes- rather than traditional classes such as artisans and small shopkeepers; and Protestants and Jews more than Catholics. The key to different

strata being affected differentially by secularization is therefore “their closeness to or distance from these [capitalistic and industrial] processes” (Berger 1967, p.129). He concludes that, in Europe, church-related religiosity is strongest on the “margins of industrial society”- both in terms of “marginal classes” and “marginal individuals” (Berger 1967, p.108). Berger (1967, p.129) uses the analogy of a centrally located core, one that represents something of a “‘liberated territory’ with respect to religion”. From this core, secularization extends its grip outwards into other areas of society, into the most public spheres with relative ease (e.g. the state), but failing to reach so easily into the private sphere (e.g. the family). Berger (1967, p.129) offers the adage that “religion stops at the factory gate” with the rejoinder that neither does one inaugurate a marriage without traditional religious symbolization. In different terms, Berger describes this process of core-periphery change in terms of a cultural lag between the secularization of different spheres, the economy being the prime mover, followed by the state and the family. The simplest example of this lag is in terms of traditional religious legitimation of the political order persisting for a time in modern industrial societies. Berger (1967, p.130) however highlights less examples than exceptions to his proposed temporal order because of “peculiar historical factors” in individual countries.

David Martin (1978, 2005a) stresses similar views about the continuing vitality of religion at the peripheries, but in regional rather than class/individual terms. Martin’s (2005a) analysis in terms of this core-periphery divide is an extremely complex one, in that he argues that the ways in which secularization affects different sections of a population, and how secularization proceeds in different societies, must utilize “historical filters” of a certain region/country, particularly the extent of pluralism or religious monopoly, and the relations between religion and politics, particularly a country’s geopolitical position (i.e. proximity to a dominating secular or denominationally-different power, or proximity to a major religio-political border). The peripheral countries/regions Martin (2005a, p.60-61) offers as examples are Ireland, Finland and Greece and Catalonia, where religion is “reinforced by the heightened self-consciousness of a threatened or dominated nation and, ... [in three of the four] there is further reinforcement of proximity to a major religio-political border”. Furthermore, “that reinforcement in turn relates to geopolitical position”, so that in the Irish case it has historically been “an embattled

periphery of England seeking alliances with Catholic France and Spain (and now pursuing close ties with the EU)". Martin's analysis goes much deeper than this, but the basic idea of religion being reinforced at the peripheries, even in these terms of nationalism and ethno-religious divides, is an extremely important one.

2.6.5 Secularization: The Meso Level

Referring back to Chaves' (1994, p.757) definition, "meso level secularization may be defined as religious authority's declining control over organisational resources within the religious sphere". Dobbelaere (1999) outlines three exemplars of secularization that take place at the institutional level: pluralization, relativization and (this) worldliness. The three concepts are closely tied together, and feature most prominently in the secularization theories of Peter Berger (1967, 1974) and Thomas Luckmann (1967, 1979, 1990)¹². Naturally, with any discussion meso-level changes, the macro and micro causes and consequences are not easily separable, and although it may be reiterating many aspects of the paradigm that have been discussed previously, for the sake of theoretical clarity there may be significant overlap with the macro exemplars.

2.6.5.1 Pluralization & Relativization

Tschannen (1991, p.401) refers to pluralization as the process whereby "the monopoly of religion crumbles, giving way to a number of competing denominations" as a result of political authority ceasing to reinforce the authority of religion. As such, pluralization can only come about when religion and political authority become differentiated (and that is not to say that pluralization is a necessary consequence of differentiation, in relation to religious denominations at least – see below). The once objective knowledge that religions laid claim to became relativized, in that there are now numerous competing explanations to choose

¹² Luckmann is not a secularization theorist as such, in that his analysis of religious change is somewhat in opposition to prominent theories of secularization. But his work on privatization and worldliness are of particular relevance to the paradigm as a whole. Thus Tschannen (1992, p.187) describes him as a "passive carrier" of the paradigm.

between. In this case, pluralization combines with rationalization (or perhaps acts on its own) to further undermine the plausibility of a single religious worldview.

Pluralism represents an important exemplar in relation to the link between secularization at the social-structural level and secularization at the level of the individual. Berger describes this important linkage in readily understandable terms:

Subjectively, the man in the street tends to be uncertain about religious matters. Objectively, the man in the street is confronted with a wide variety of religious and other reality-defining agencies that compete for his allegiance or at least attention, and none of which is in a position to coerce him into allegiance. In other words, the phenomenon called "pluralism" is a social structural correlate of consciousness. This relationship invites sociological analysis.

(Berger 1967, p.127)

Furthermore, Berger's discussion of pluralism represents an exemplary exposition of his dialectical interpretation of the relationship between the religion and society. Berger's (1967, p.129) analysis does however lean towards the social-structural rather than ideational determinants of secularization/pluralism, arguing that this approach "avoid[s]the pitfall (to which religiously observers are particularly prone) of ascribing secularization to some mysterious spiritual and intellectual fall from grace (the term itself is descriptively useful) in empirically available social-structural processes".

The archetypal instance of secularization as the relativization of the religious sphere, and in a sense the birth of pluralism, is the Protestant Reformation. Casanova (1994, pp.21-22) describes how this relativization acted as the "corrosive solvent" to the old organic order, one that unwittingly helped dissolve the union of the religious and secular spheres.

By undermining the very claims to unity, sanctity, catholicity, and apostolicity of *the* church, which from now on will require the qualifiers Roman Catholic to distinguish it from other competing Christian churches, it destroyed the system of Western Christendom and thus opened up the possibility for the emergence of something new.

(Casanova 1994, p.21)

Interestingly, one could argue that this is a case where pluralization was the cause of differentiation, but the relative ordering of these events is usually the other way round: with the separation of church and state, no longer is the state charged

with using its coercive power to ensure conformity. What is more important however, is that pluralisation can be conceptualised as simply referring to competing religious denominations, but also competition from secular worldviews (Berger 1967).

One of the difficulties encountered in the section on rationalization was with the notion that rationalization produces an (rational) attitude in individuals that is opposition to a religious worldview. Berger (1967) provides a more nuanced argument in this respect, and positions pluralization and relativization as the key elements that undermine a religious worldview, not necessarily rationalization (Tschannen 1992, p.205). In this respect, Berger argues that it is not only religious worldviews that lose plausibility, but that *all* worldviews, religious and secular alike, lose an element of credibility as a result of pluralization. Casanova refers to the new pluralism that emerged from Protestant Reformation acting as a “corrosive solvent” to the old organic order, and Berger (2001b, p.203) uses a similarly evocative term for the effects of pluralisation on individual consciousnesses: that of “cognitive contamination”. It is essentially the same logic as the effects of the Reformation: there is no longer the objective and stable knowledge that your traditional way of looking at the world is the only plausible one - “that maybe these other people have a point or two” (Berger 2001b, pp.203-204). At first, this is merely a narrow opening, but Berger stresses that it has a way of rapidly radiating. The endpoint of such expansion is a “pervasive relativism[,]...few certainties, convictions become mere opinions and one becomes accustomed to considering just about any view of things” (Berger 2001b, p.204). Again it should be stated that Berger (2001b, p.204) argues that this pluralism and relativism does not need any ‘help’ from rational worldviews (science and technology) in the secularization of consciousness. The example he offers of a case where pluralism worked on its own to have “secularizing effects” is that off the Hellenistic period (although he merely names it as an example), a civilization characterized by rapidly expanding avenues of other-cultural contact.

2.6.5.2 Pluralization and the Religious Economies Model

The consequence of pluralization is the key area where the religious economies model and secularization theories differ. Where secularization theory attests that pluralism will undermine religious beliefs, the religious economies model identifies pluralism as a catalyst for competition and therefore religious vitality. Confronted with data evidencing increasing religious participation in the United States and some evidence that it has remained relatively constant in Europe, a group of theorists elaborated a theory of religious change that focussed on the supply-side theory of religious change (Finke *et al.* 1988, Iannaccone 1991, Finke and Stark 1988, Stark and Iannaccone 1994). Rather than religiosity varying according to degrees of modernization, the religious economies model identifies the true driver of change is the “religious market” (Iannaccone 1991). According to this perspective the religious market becomes stale in areas where there is no competition, particularly where a state religion that has a monopoly over the religious sphere. The opposite of this situation would be where church and state are separated, and there may be many competing denominations, each vying to attract religious ‘consumers’ to their particular faith. In such a situation, these competing denominations offer different incentives and a better religious ‘product’ than in a situation where consumers have no choice:

Because it defines secularization as a decline in religious demand, and because it defines religious demand as a constant, the religious economies model simply defines secularization out of existence.

(Gorski and Altinordu 2008).

Unfortunately there is little evidence to support the thesis that competition in the religious market increases religious vitality. In their review of the topic Chaves and Gorski (2001, p.262) conclude that “the empirical evidence does not support the claim that religious pluralism is positively associated with religious participation in any general sense”. The majority of attempts to replicate the earlier findings in the field have failed to show significant positive effects of religious competition on the vitality of religion (Bruce 2001b). Bruce (2001b, p.260) cites the fact that in Europe the countries that have a religious monopoly, such as Ireland and Poland, have the highest rates of religious attendance, much higher than those characterised by

religious pluralism such as Britain. Chaves and Gorski (2001) reinforce this argument, noting that this is also the case in Austria and Italy, countries where Catholicism and national emancipation were not as historically intertwined as in Ireland and Poland. Some scholars have questioned whether the religious economies model has any relevance outside the United States (e.g. Sharot 2002), and even Chaves and Gorski (2001, p.272) question whether much of the U.S. evidence relating to membership and attendance is historically accurate.

2.6.6 Secularization: The Micro Level

The main discussion of secularization for the purposes of this review is at the individual level. While many of these concepts have already been touched upon in the discussion thus far, an attempt here will be made to relate these micro-level processes back to the macro and meso level, as well as discussing these processes in more detail. Dobbelaere (1999) identifies four exemplars at the micro or individual level in the paradigm of secularization: Bricolage; Unbelief; Decline of church religiosity or decline in practice; and Individualization.

Over forty years ago, in an undergraduate textbook on the anthropology of religion, it was stated that “the evolutionary future of religion is extinction. ... Belief in supernatural powers is doomed to die out, all over the world, as the result of the increasing adequacy and diffusion of scientific knowledge” (Wallace 1966, pp.264-265). Stark (1999, p.249) sees this as the epitome of the secularization thesis, arguing that since the 17th Century, successive generations of western intellectuals have believed that “within another few decades, or possibly a bit longer, humans will ‘outgrow’ belief in the supernatural. This proposition soon came to be known as the secularization thesis”.

While micro-level indicators of individual religiosity at first seem the most basic and obvious level at which one can measure secularization, it is in fact the most controversial, and is cited as being only tenuously linked to the overall process of secularization (e.g. Chaves 1994, Stark 1999). Dobbelaere (1999, p.239) for example states that “the religiousness of individuals is not a valid indicator in evaluating the process of secularization”, rather it is a fundamentally societal

process. Stark (1999, p.251) would argue that such a statement is a merely avoiding “inconvenient facts” by shifting the definition of secularization solely to the macro level. He argues that institutional differentiation is not the primary focus of secularization, its focus is actually on individual religious beliefs and practice. Where secularization “prophets” do express an interest in macro level changes such as declining church power, it is only to claim that they have an effect on personal piety, or that the decline in personal piety has an effect on the church power (Stark 1999).¹³ In reference to Dobbelaere’s claim that religiousness is not a valid indicator, Stark claims it is “breath-taking evasion” that is “historically false” and “insincere” (Stark 1999, p.252).

Stark (1999) goes on to state that a decline in belief and practice has simply not occurred. Firstly, he presents evidence from the United States, where church affiliation and indices of religious commitment have either risen or remained steady since the mid-19th century (see also Presser and Chaves 2007 on more recent stable trends). Secondly he argues that religious participation in Northern and Western Europe was low before the onset of modernization and before many of the societal level changes outlined above began to have an effect. A decline has therefore simply not occurred, other than the fluctuations brought about by “profound social dislocations such as wars and revolutions” (Stark 1999, p.254). Thirdly, he argues that subjective religious belief remains high, even in countries where practice is low. Stark’s main criticism is therefore that the empirical facts don’t fit the theory, and that Dobbelaere (1999) and others have shifted the emphasis of the theory in order to accommodate these inconvenient facts. At the theoretical level, in Tschannen’s (1991) systematization of the secularization paradigm, neither unbelief nor decline in practice occupy a key position. Indeed both are treated rather peripherally, indicating that none of the major theorists treat unbelief and decline in practice as an important “index of secularization” (Tschannen 1991, pp.410-411). This would seem to point to a conclusion that, individual indicators of religiosity are of little consequence in the theorization of secularization either.

¹³ Dobbelaere does in fact stipulate unbelief and practice can be influenced *by* societal secularization (as this has been discussed throughout this review). He also stipulates that growing unbelief and decline in practice, or distancing from the church, may influence secularization at the societal level

Despite this apparent peripherality to the paradigm, many secularization theorists have made this link between societal and individual change explicit in their theories (e.g. Berger 1967, Wilson 1969, Bruce 2002). Berger for example speaks of “secularization of consciousness” as a correlate of secularization at the societal level, although he has been criticised for inadequately tracing the relationship between the two (Goldstein 2009) Bruce strongly links the two realities, stating that:

the decline of social significance and communal support causes a decline in the plausibility of religious beliefs. Changes at the structural and cultural level bring about changes in religious vitality that we see in the declining proportion of people who hold conventional religious beliefs and the commitment they bring to those beliefs.

(Bruce 2002, p.30)

Ester & Halman (1994, p.84) maintain that secularization can be observed in society in three different ways:

1. In individual behaviours such as the decrease in church attendance; 2 In the diminished influence of religion in daily life, reflected by the decline of the social significance of religious institutions, activities and consciousness; 3. In the decrease of religious orthodoxy” [by which they refer to traditional Christian beliefs].

(Ester and Halman 1994, p.84)

One can therefore conclude that although secularization is seen as predominantly a societal level process in the theoretical terms, evidence is generally looked for at the individual level. Gorski (2008) has argued that although secularization theory has been defended adequately in theoretical terms by focussing on the multiple levels of secularization, the empirical work has mainly taken a one-dimensional approach. His explanation for this disparity is that there is no clear recipe for investigating macro and meso levels of secularization. Lechner (1989, p.139) states that “strictly speaking secularization refers to a pattern of societal change for which individual data are at best indirect indicators”.

Halman & Draulans (2006, p.263) state that “the sharply declining levels of church attendance in Europe are often regarded as evidence that this part of the world is being secularized”. Speaking in 2000, Peter Berger asks:

How does European secularity manifest itself empirically? It does most clearly in ... a dramatic decline in people's participation in church life, in the influence of religion in public life, and in the number of people choosing religious vocations. But it also manifests itself in the declining number of people who profess traditional religious beliefs.”

(Berger 2001a, p.445).

Indeed Europe, once the example of secularization to be followed by the rest of the world, has now been identified as a situation where decline in belief and practice marks it out as an exceptional case. Putting aside for the moment those who argue that belief and practice was never high in Europe, there is a reasonably firm and empirically-based consensus that religious practice, and to a lesser extent belief, has declined, and continues to decline in much of Europe (e.g. Dogan 1995, Dogan 1998, Bruce 2001a, Dogan 2002, Houtman and Mascini 2002, Hamberg 2003, Halman and Draulans 2004, Crockett and Voas 2006, Halman and Draulans 2006, Inglis 2007a, Pollack and Pickel 2007, Wolf 2008). To use Berger's description, the “old” secularization thesis seems to hold in Europe. For these reasons Berger concludes that “I still think that the European case can be subsumed under the category of secularization” (Berger 2001a, p.446).

One aspect of the European case that does not fit neatly within the “old” paradigm of secularization theory is that of the persistence of religious belief and related concepts such as the importance of such beliefs. In fact, much of the contemporary debate regarding religious change in Europe revolves around this issue. The various theories and descriptions of these trends in Europe, of a decline in church-oriented religiosity on the one hand, and the persistence of religious belief on the other, can be broadly subsumed under the concept of religious individualisation.

2.6.6.1 Religious Individualisation

Although religious individualisation may be regarded by some to be an alternative process of religious change to that of secularization, individualisation is treated by Dobbelaere (1999) as one of the sub-processes of secularization.

Tschannen (1991) however does not include it at all in the paradigm.

Individualisation can also be seen as part of a wider process of change related to modernization, and not something strictly limited to the religious sphere (see section

2.5.2) Individualisation has been defined as “the social and historical process in which values, beliefs, attitudes and behaviour are increasingly based on personal choice, and are less dependent on tradition and social institutions” (Ester *et al.* 1993, p.7).

According to the religious individualisation thesis, modernization does not lead to a decline in religion, as is the case with at least some versions of secularization, but rather to a change in its social forms (Pollack and Pickel 2007). This perspective is no different from secularization theory in the sense that traditional and institutionalized forms of religiosity are increasingly replaced by more subjective, individually chosen beliefs, detached from the institutional church. This move towards a more personally chosen religion is most clearly apparent in the development of religious ‘bricolage’. Religious bricolage refers to individuals constructing their own version of religion from various sources. It has been described as an ‘a la carte’ religiosity, a mixing of codes from various religious, magical, spiritual and secular sources (Dobbelaere 1999).

The key difference in the religious individualisation thesis is that a decline in traditional institutionally based religiosity “goes hand in hand with a rise in individual religiosity” (Pollack and Pickel 2007, p.604). The phrase coined by Davie (1990, 1994) of “believing without belonging” captures this distinction, and has been described as “the catchphrase of much European work on religion in the past decade” (Voas and Crockett 2005, p.11). While the religious economies model has been the main antagonist of secularization theory in North America, the individualisation thesis has become most prominent within the sociology of religion in Europe. This may be in a large part due to the fact that sociologists of religion in Europe have been forced to concede that traditional institutional religion has suffered an undeniable decline in most of Europe, compared to its relative vitality in North America and elsewhere. In light of this decline in institutional religion, the religious individualisation thesis seeks to describe and explain the persistence of religious beliefs. Both theories stress the underlying principle that “faith may change but it does not fade away” (Voas and Crockett 2005, p.12, Pollack and Pickel 2007).

According to Grace Davie (1994) institutionalized religion and individual belief are inversely correlated with each other, with decline in church oriented

religiosity accompanied by an increase in individual religiosity, particularly “extra-church religiosity” such as Zen meditation, occultism, astrology, and other New Age religions (Pollack 2008, p.171). While both the secularization and individualisation thesis consign this new religiosity to the private realm, the key difference between the secularization and religious individualisation thesis is that instead of rationalization and disenchantment signalling the demise of belief, belief flourishes in unorthodox ways. Instead of a quantitative decline in individual level religious belief, belief experiences a qualitative change. Martin sums this up quite eloquently:

In many European countries, as Régis Debray has put it, the Twilight of the Gods turns out to be Morning for the Magicians. Of course, in Latin Christendom, there has always been a syncretistic underlay of semi-magical paganism and the ancient gods of fortune, but this now emerges as a melange of attitudes outside the sacred canopy of the Church. Such a melange is hardly the anticipated triumph of reason.

(Martin 2005b, pp.156-157)

One could, however, argue quite vehemently that secularization does incorporate such changes into its broad theoretical framework, most evidently in the theory that religion becomes more privatised and becomes more about religious bricolage than adherence to orthodox beliefs. This leads into one of the major difficulties with this approach: what to define as ‘believing’ and what not to. Voas & Crockett (2005) differentiate between strong and weak versions of ‘believing without belonging’ (BWB). The strong versions stress that religious belief, whether Christian or more unorthodox, remains strong, and that religious practice is in clear decline.

The difference in the weak version of BWB is that it allows for much more leeway in what can be described as ‘belief’, and may include all manner of vaguely religious considerations, such as being concerned about the meaning of life, the purpose of existence, or the ecological future of the planet (Davie 1990, Voas and Crockett 2005). While many New Age beliefs and alternative spiritualities seem to be quite legitimate operationalizations of ‘belief’, widening the operationalization in the weak version of BWB may simply obscure the concept of religious belief itself (Voas and Crockett 2005). Indeed Davie (1994, 2000) maintains that the term ‘believing without belonging’ is more of description rather than a theory, put forward

to document the changes in religion in Britain and Europe, to promote further discussion and analysis.

Voas & Crockett (2005, p.14) argue that the very investigation of BWB as something notable and worthy of scrutiny may be somewhat unfounded. They point out that if every view and belief to which individuals have allegiance was backed up by active membership there would be little time for anything. They go on to argue that as the nature of religion is fundamentally a social pursuit, then if people choose not to 'belong' then this is "a clear sign they do not believe in religious doctrine".

This leads to the question of what relevance religious belief, in isolation, may have for values. While the relevance of the declining societal and institutional significance of religion for individual values has been already outlined, the relationship between having certain beliefs and values is unclear. Voas and Crockett (2005, p.14) see "the basic problem with evidence of residual religiosity is that it is easy to forget that such beliefs often have little personal, let alone social significance".

2.7 Summary

This review was concerned with the changing relationship between religion and values. These changes were situated and interpreted within the broad theoretical framework of modernization and secularization. Within this framework, the changes in the religious sphere were outlined at different levels of analysis: the macro (societal), the meso (organizational), and the micro (individual), and noted the importance of a multi-level approach in understanding the nature and consequences of secularization. As the empirical instrument is primarily situated at the individual level the aim was to link these broad societal level changes, such as differentiation, rationalization and other macro processes, with their consequences at the individual level. Principally, the discussion was centred on how differentiation leads to declining religious authority over the different institutional spheres, and how this ultimately makes individuals more likely to compartmentalize and locate their religious convictions within the private realm. Thus, values become compartmentalized from religious ones, with religious authority no longer shaping the values and behaviour of individuals in other institutional spheres and life-worlds.

It was proposed that this declining authority would be particularly apparent in the public rather than private sphere, with religion more likely to retain some of its influence in realm of family values and sexual ethics as opposed to the more public values related to politics and work. The possibility was offered that religion may now be free to 'be itself', that differentiation may result in an invigoration of religion's more apposite functions, such as spiritual needs and moral guidance. The relevance of the development of rationalization was then delineated, and how this undermined the explanations and influence of religion, leading to disenchantment and a new ethos that the problems of life could be solved by technical and rational means. It was noted how some secularization theorists place such rationality in direct opposition to religious belief and other notions of the spiritual and magical, and also how such claims may not be completely accurate or justified. The importance of 'border disputes' between rational and religious modes of thought was discussed, and how these may give an insight into the changing relationship between religion and values, and the extent of secularization more generally. The decline of community is a particularly important factor in the changing importance of religion in daily life, and how those at the margins of society may feel the effects of secularization less severely than those fully integrated into modern society. The origins and consequences of the privatisation of religion were then examined, and how this leads to declining social support for, and in the importance of, shared beliefs and values, ultimately leading to their relativization and fragmentation.

In the discussion of the micro level, the contentiousness of a decline individual belief and practice in the theorisation of secularization at the individual level was considered. It was concluded that belief and practice do represent an important aspect of some theories of secularization, particularly when operationalizing secularization in empirical studies, and particularly when the aim is explaining patterns of secularization in the somewhat exceptional case of Europe. It was argued that one of the most fundamental changes in individual religiosity is a move away from church oriented religiosity towards a more personally chosen individualistic religious orientation. The review then examined the divergences between the religious individualisation thesis and the secularization thesis, asking what relevance the rise of believing without belonging might have for values.

The aim of this chapter was to delineate the complex relationship between religion and values at different levels of analysis, situating these relationships within paradigmatic theories of social change – that of modernisation and secularisation. The gaps in understanding pertaining to these relationships that this thesis seeks to address, can be summarised as follows.

First, there is the relationship between religion and values at the micro level. In empirical studies on the relationship between religiosity and values, religiosity is often treated as a one-dimensional whole, and the “exact relationship” between religion and values is “understudied” (Storm 2016, p.111). Seminal sociological theories and some contemporary evidence however points to precise relationships between different dimensions of religiosity and values. Furthermore, studies of religious change often purport that different dimensions of religiosity are more resilient than others in modern societies. The significance of these forms of religiosity has been theorised and questioned, but rarely subjected to empirical analysis. By assessing the relative relationship between each dimension and values therefore, this thesis will provide empirical evidence that is both deficient and pertinent to the field.

Second, there is the relationship between the macro level changes of modernisation and that of religiosity. While there is an abundance of research that relates modernisation with the decline of religiosity, such studies are often one-dimensional and poorly related to theory. This thesis operationalises aspects of modernisation and analyses their main and interaction effects with different dimensions of religiosity.

Third, there is the relationship between religion and values at the macro level of the cultural system. Here the theoretical literature points to a fundamental change in the values of modern societies when religion no longer holds authority over the other spheres of society. Although there are several explanations that could account for this value shift (such as Inglehart’s economic security theory or an increasing emphasis on education), the analysis aims to test this proposition by assessing the relationship between values and differing levels of societal modernisation.

Fourth, there is the relationship between religiosity and values relative to the modernisation and secularisation of society. While studies of religious change and

modernisation often equate a decline in religiosity as evidence of secularisation, this evidence is only partial. A true test of secularization theory looks at the changing significance of religiosity in modern society. By assessing the strength of the relationship between religiosity and values relative to the degree of modernisation of society, this study provides a much needed test of the significance of religion at the individual level, an important part of the theory but one that is lacking in empirical research.

3 Methodology

3.1 Introduction

This chapter will outline the variables that are used in the analysis, the hypotheses to be tested, and the statistical methods that will be used to test the hypotheses. Drawing from previous literature and empirical studies, variables in the EVS that are expected to measure certain underlying orientations and values, or dimensions of orientations and values, are explored using principal component analyses. These analyses inform the construction of scales that measure these orientations. These scales are subjected to reliability analyses and tests of equivalence, first using the entire pooled data of the four waves of the EVS, and then separately in each wave and country. Factor scores, and factor-based scores are calculated for each of these scales (Rourke and Hatcher 2013).¹⁴ These scales are then used in the final analysis on a subset of selected countries and waves. The socio-demographic variables, or the social correlates that are relevant to the hypotheses are delineated. The contextual level variables, principally scales on which to measure theoretically relevant characteristics of societies, are discussed and selected. Finally, each of the hypotheses to be tested in the analysis are put forward, summarily detailing theoretical and operational definitions of the concepts used in each hypothesis. The theoretical linkage that forms the basis of each hypothesis are stated, followed by the corresponding operational linkage. The operational linkages are accompanied by the statistical methods used to test each hypothesis in the analysis.

¹⁴ Factor scores are a “linear composite of the optimally weighted observed variables” calculated in the principal component analysis by determining the factor weights, multiplying these weights by individual responses, and summing the products. Factor-based scores are linear composites of the variables which loaded meaningfully on a component (Rourke & Hatcher 2003, p. 23)

3.2 Approach

Although principal component analyses and reliability analyses are conducted using the pooled data, more detailed analyses will be limited to a subset of countries. The logic of selecting a subset of particular countries for the final analysis is twofold: first it is informed by the data - only a portion of the countries surveyed in the most recent wave of the EVS have taken part in all four waves - this continuity is a feature that will be important and distinctive for the analyses. Secondly, it would not be feasible to compare every country in detail. The approach adopted is to conduct detailed analyses of the pooled data (of the selected countries), and in some instances, where necessary, to conduct detailed analyses on one particular country – Ireland (section 4.5). The subset of countries is made up of number of theoretically interesting groups, chosen based on the predominant religious denomination and levels of affiliation in that country. The majority Catholic countries of France, Italy, Spain, Belgium, Poland, and Slovakia, are selected, each with varying levels of denominational affiliation. The Scandinavian countries with a Protestant majority, Denmark, Iceland, Norway and Sweden with comparatively lower levels, are also selected. Denominationally mixed countries such as Germany, the Netherlands, Northern Ireland and Britain are also selected. Poland and Slovakia and Norway have however completed only three survey waves. Norway is selected on the basis of it being one of the countries that took part in the initial 1981 survey, but unfortunately did not take part in the 1999 survey. In the more descriptive parts of the analyses (such as plotting trends), values are imputed for Norway based on an average of the 1990 and 2008 scores on items. For more comprehensive analyses, the values are left as missing. Poland and Slovakia are chosen as they provide an Eastern European dimension to the analyses, as opposed to including additional Western European countries that have completed three waves, such as Portugal and Austria.

The logic of conducting principal component and reliability analyses on the pooled data, is that although the dimensions uncovered will only be applied to a subset of countries in further analyses, it is advocated that these dimensions that are inferred from the observed data in the whole sample will generally apply to the

populations of each country across time. In describing an example study of values in twenty European countries Steele (2008) describes this reasoning:

The target of inference could be a wider population of countries from which those in the study can be considered a random sample. However, it is not clear which countries such a population would contain. In this case, it is more natural to think of the sample data as if they were a set of realisations from some underlying process that could extend through time and possibly space.¹⁵ This process has driven the observations, but the statistics we compute from the observed data refer to a particular point in time and are subject to random fluctuations. We are interested in the underlying process that has generated the data we observe, and use the ‘sample’ data to make inferences about this process.

(Steele 2008, p.6)

3.2.1 Equivalence Testing of Factorial Structure

To test if the factors calculated were equivalent in each society in the analysis, a comparison of the factor structure (component loadings) in each society was carried out, followed by a comparison of the factor structure from the pooled dataset with each of the societies in the analysis. The congruence coefficient, or Tucker’s ϕ , was calculated between the pooled factor structure and the factor structure in each society. The criterion of .90 is the generally accepted standard for congruence (e.g. Georgas *et al.* 2004), with Lorenzo-Seva and ten Berge (2006) stating values between 0.84 to 0.9 to be adequately congruous, and values over 0.95 signifying thorough equivalence. With some minor exceptions, the factor structure of each of the scales used in the analysis was deemed adequately congruous.

Furthermore, it has been suggested when using Tucker’s ϕ as a metric of congruence, procrustean rotation should be used on one of the factor solutions, in order to make it as similar as possible with the solution to which it is being compared (this would generally increase the congruence coefficient) (Laher 2010). After assessing the factor congruence without procrustean rotation however, it was decided it was largely unnecessary. Similar equivalence tests of factorial structures have been carried out in studies such as Georgas *et al.* (2004) using Tucker’s phi, and Scheepers *et al.* (2002), using correlations. Tucker’s phi was calculated between the

¹⁵ “In survey sampling this abstract notion of a target population is called a super-population. A super-population is infinite, while a population consisting of a fixed number of countries (e.g. all European countries) is finite”.

pooled factor solution (χ) and the solution in each society (γ) according to the

formula:
$$\varphi_{xy} = \frac{\sum x_i y_i}{\sqrt{\sum x_i^2 \sum y_i^2}}$$

3.3 The Data

The data used in the analysis comes from the four waves of the European Values Study. Specifically the data file employed is the European Values Study Longitudinal Data File 1981-2008 (EVS 2011). The European Values Study is a cross-national and longitudinal inquiry into the basic values of Europeans in the realms of religion, politics, family, work, and society in general, along with a range of socio-demographic measures. The EVS represents a particularly suitable instrument for the purposes of this study. Firstly, the research questions that initially motivated and guided the design of the EVS (and continue to do so) are ones that align with those of this research. The relationship between broad social and cultural changes such as modernization and secularization, and that of changing values and beliefs, were the central concern of the initiators of the EVS study (Arts *et al.* 2003b). In this respect, the EVS provides both a comprehensive and theoretically relevant series of measures to the research.

Secondly, the cross-national and longitudinal nature of the survey are of particular value to the research. With surveys that have been meticulously constructed, administered, collected and collated cross-nationally and repeatedly, the EVS represents the ideal instrument with which to conduct research on the relationship between changing macro-level societal characteristics and micro-level beliefs and values. As well as being theoretically relevant to the research questions, the geographical and temporal scale of the study (and the number of observations this entails) imbues the findings of the research with substantial generalisability and validity.

Four surveys have been completed to date, taking place approximately every nine years, with the number of countries expanding in each wave. Twelve countries

have participated in all four waves of the study, and a further fourteen have taken part in three waves. Forty-seven countries took part in the most recent wave in 2008 (see table 3-1, figure 3-1).¹⁶ The study had a mean sample size of 1211 in 1981, 1317 in 1990, 1246 in 1999, and 1442 in 2008. Unless otherwise stated, weights are applied in the analysis, specifically the weight variable supplied by participating countries from 1981 to 1999, and calculated by the EVS in 2008. These weights correct for gender and age (and region in 1999) discrepancies between national populations and the sample. Where no weights are available (see EVS and GESIS (2011, p.29)), the weights are set to one.

Thirdly, there is a large and established body of research utilizing the EVS (and also the WVS), to which this research can draw from and contribute to (e.g. Norris and Inglehart 2004, Arts and Halman 2004, Arts *et al.* 2003, Halman and Riis 2003, van Deth and Scarbrough 1995, Halman and Vloet 1994, Ester *et al.* 1993). As mentioned previously, the initial research of Halman and others provide some of the foundational methodological and theoretical literature on which the present research builds. The conceptualisations and operationalisations of key concepts in relation to values, religion and modernisation provide an invaluable resource on which this research draws and builds upon. The scales and indices with which various dimensions of religiosity and values are operationalised in the sections below are examples of how this previous work is utilised and developed. In addition to these foundational works, there is an extensive body of empirical research based on EVS data to which the present research can directly compare and contrast its findings. Modernization theory, secularization theory, and various other theories of social change in particular, have been studied using EVS and WVS data, providing this research with a vibrant field from which to draw upon, situate its findings, and contribute to.

¹⁶ Although some countries completed their fieldwork in different years, 1981, 1990, 1999, and 2008 will be used to refer to the first, second, third, and fourth waves.

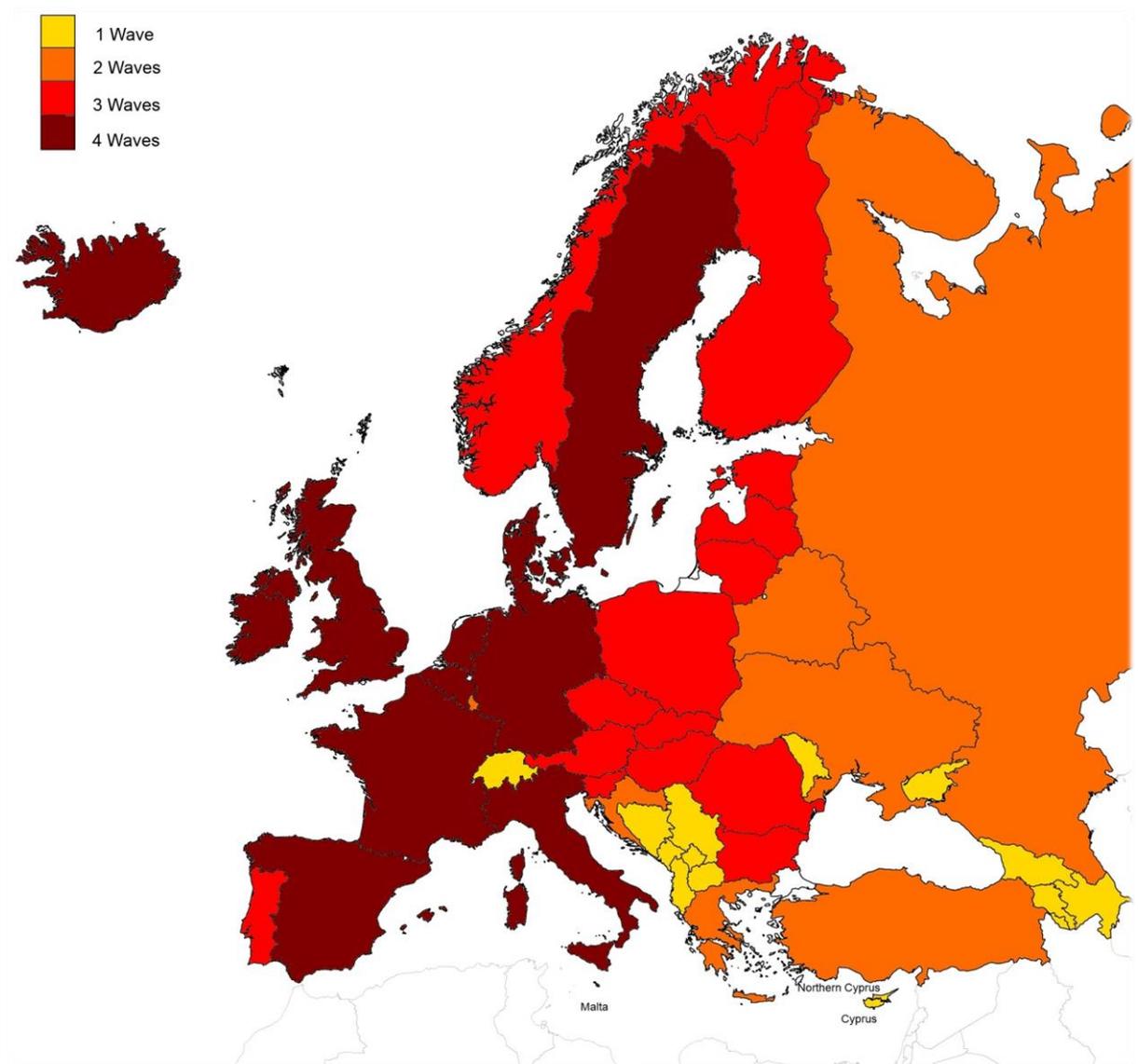
Table 3-1: Country Participation in the EVS

Country Participation in EVS Waves				
Belgium	1981	1990	1999	2009
Denmark	1981	1990	1999	2008
France	1981	1990	1999	2008
Germany (1981 only West Germany)	1981	1990	1999	2008/2009
Great Britain	1981	1990	1999	2009/2010
Iceland	1984	1990	1999	2009/2010
Ireland	1981	1990	2000	2008
Italy	1981	1990	1999	2009
Malta	1984	1991	1999	2008
Netherlands	1981	1990	1999	2008
Northern Ireland	1981	1990	1999	2008
Spain	1981	1990	1999	2008
Sweden	1982	1990	1999	2009/2010
Norway	1982	1990		2008
Austria		1990	1999	2008
Bulgaria		1991	1999	2008
Czech Republic		1991	1999	2008
Estonia		1990	1999	2008
Finland		1990	2000	2009
Hungary		1991	1999	2008/2009
Latvia		1990	1999	2008
Lithuania		1990	1999	2008
Poland		1990	1999	2008
Portugal		1990	1999	2008
Romania		1993	1999	2008
Slovak Republic		1991	1999	2008
Slovenia		1992	1999	2008
Belarus			2000	2008
Croatia			1999	2008
Greece			1999	2008
Luxembourg			1999	2008
Russian Federation			1999	2008
Turkey			2001	2008/2009
Ukraine			1999	2008
Albania				2008
Armenia				2008
Azerbaijan				2008
Bosnia and Herzegovina				2008
Cyprus				2008
Northern Cyprus				2008
Georgia				2008

Kosovo	2008
Macedonia, Republic of	2008
Moldova, Republic of	2008
Montenegro, Republic of	2008
Serbia	2008
Switzerland	2008

(Source: EVS and GESIS 2011, p.22)

Figure 3-1: Country Participation in EVS Waves 1981-2008



3.4 Variables

3.4.1 Religiosity

It is proposed that there are four basic dimensions of individual religiosity, one denoting denominational belonging, one related to religious belief, one related to attitudes towards the church, and one concerning religious practice. While it is expected these dimensions are very much related, it is theorised that they represent qualitatively different dimensions of individual religiosity. The conceptual distinctiveness of each dimension is laid out in each relevant section below (and discussed in section 2.3.2 above), but it is also recognised that statistically these dimensions of religiosity may be highly correlated with each other, which may pose particular problems in the analysis.

Specifically, the collinearity between the religiosity dimensions becomes particularly important in the multivariate regression analyses carried out below, particularly Hypothesis 7 (section 4.7), where the aim is to identify the relative significance and strength of the relationship between each of the independents on the dependent variables (as opposed to an analysis where prediction of the dependent is the main aim, where multicollinearity would pose less of a problem). With a very high degree of collinearity between dependent variables, the parameter estimates of the regression analyses may be unreliable, and the interpretation of their relative effects will be questionable (Hutcheson and Sofroniou 1999, pp.78-79).

There are several approaches to estimating the extent and significance of collinearity.¹⁷ The simplest method is through examination of the correlation matrix between the independent variables. The correlation matrix for each of the religiosity variables is shown in the table below. The results of these initial analyses confirm the expectation that each of the dimensions are highly correlated with one another, but slightly less than the degree of correlation that would suggest problems with multicollinearity. This method however, yields only a very rough approximation of collinearity. The more advanced method of evaluating collinearity entails calculation

¹⁷ Field (2013) suggests correlations above .80 between independent variables signify significant multicollinearity

of tolerance statistics and the related variance inflation factor (VIF) (Field 2013, Hutcheson and Sofronioum 1999). These diagnostics are detailed accompanying each of the regression analyses in the relevant section below (section 4.7.1 and 4.7.2). The results of these diagnostics suggest that the degree of multicollinearity between the religious dimensions is not significant enough to have a substantial effect on the parameter estimates or their interpretation.

3.4.1.1 *Belief Dimension*

Five items concerning theological beliefs are asked in all four waves of the EVS – God, the Afterlife, Heaven, Hell, and Sin. The exact wording of the question is as follows: “Which, if any, of the following do you believe in?” with response categories of “yes”, “no”, and “don’t know”. Although the “don’t know” category may signify an agnostic or sceptical view on the part of the respondent, it was decided to treat this response, like every other “don’t know” response in the EVS questionnaire, as missing data (Jagodzinski and Dobbelaere (1995a) adopt a completely different procedure on this – treating “don’t know” responses as “no” or non-believers).

A principal components analysis of these five items yields one component (see table 3-2), and each of the items load heavily on it (loadings of 0.892 to 0.713). Eigenvalues for this component are very robust at 3.278, explaining 64% of the total variance. Reliability analyses indicate it is a very robust scale, with a Cronbach’s alpha of 0.868 in the pooled dataset. Removing any of the items from the scale does not improve the reliability. Cronbach’s alpha values and descriptive statistics for each wave are presented in table 3-3 below. A histogram of the distribution from the pooled data is shown in figure 3-2. The scale is constructed by means of factor-based scores, in a simple additive technique, where zero indicates no beliefs, and five the entire set of theological beliefs.

Table 3-2: Component matrix of belief variables

	Component
	1
f050 do you believe in: god	.713
f051 do you believe in: life after death	.799
f053 do you believe in: hell	.842
f054 do you believe in: heaven	.892
f055 do you believe in: sin	.792

Figure 3-2: Histogram of number of beliefs

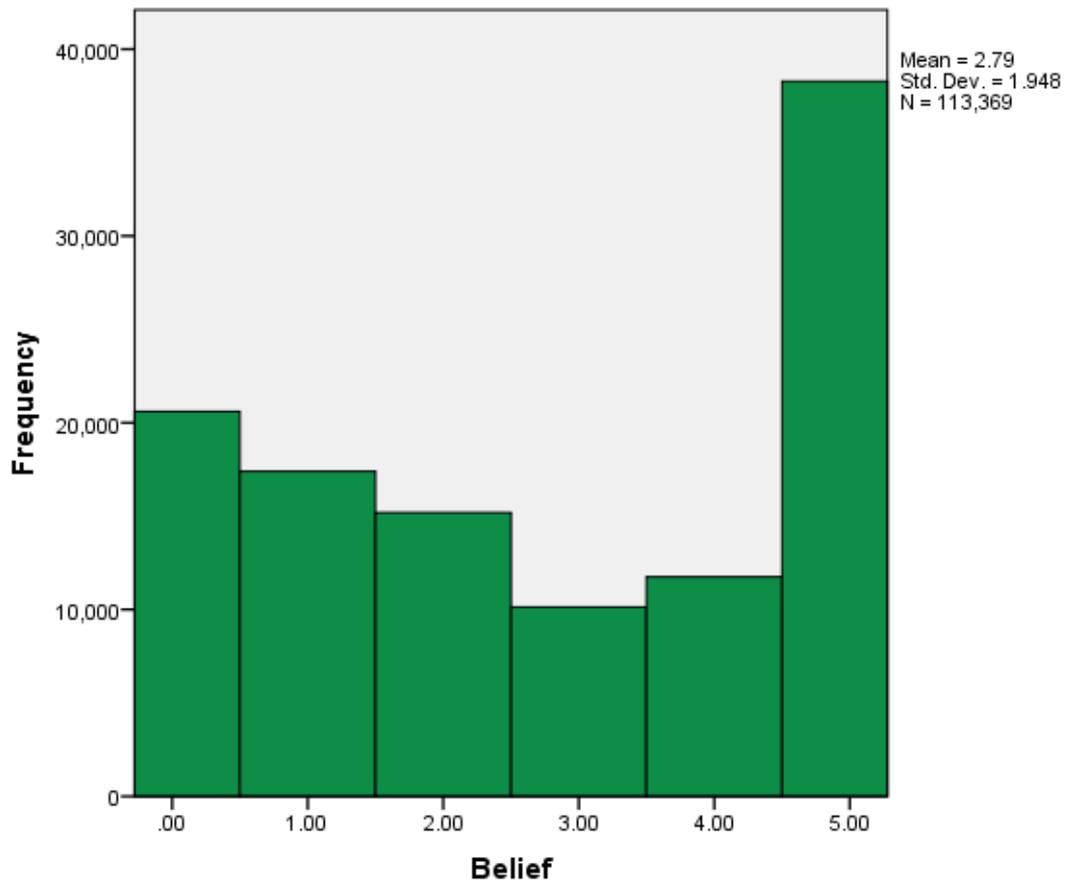


Table 3-3: Reliability and scale statistics of number of beliefs

Belief	Cronbach's Alpha	N of Items	Mean	Median	Mode	Variance	Std. Deviation
All Waves	.868	5	2.79	3.00	5.00	3.80	1.95
1981	.852	5	2.87	3.00	5.00	3.51	1.87
1990	.859	5	2.46	2.00	5.00	3.71	1.93
1999	.868	5	2.78	3.00	5.00	3.80	1.95
2008	.874	5	2.93	3.00	5.00	3.82	1.96

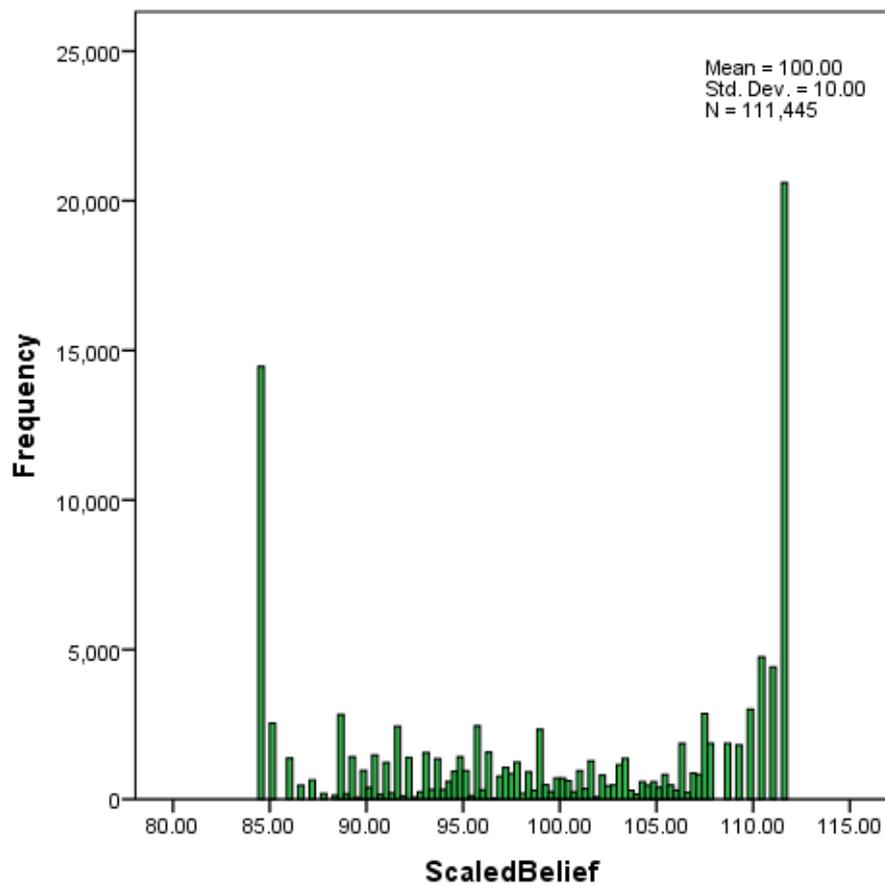
Another aspect of the religious belief dimension theorized in the literature is that in addition to simply considering whether an individual believes or not, there is also the significance of these beliefs to the individual, or the importance individuals attach to these beliefs. Dobbelaere and Jagodzinski (1995a, p.201) define this as “the centrality of religious beliefs” and operationalize it using the question of “how important is God in your life”. The exact wording of this question in the EVS questionnaire is as follows: “And how important is God in your life? Please use this card to indicate - 10 means very important and 1 means not at all important” (EVS and GESIS 2011, p.411).

When this item is added to the principal component analysis with the previous items, it loads heavily (.830) on the one component as the belief items, with an eigenvalue of 3.894, explaining 65% of the variance (table 3-4). A new scale is generated from the factor scores and then transformed to give a mean of 100 and a standard deviation of 10 in order to aid in interpretability (as in Halman and Pettersson (2006, p.43)). A histogram showing the distribution of this scale in the pooled dataset is shown in figure 3-3.

Table 3-4: Component matrix of belief dimension

	Component
	1
f050 do you believe in: god	.759
f051 do you believe in: life after death	.777
f053 do you believe in: hell	.811
f054 do you believe in: heaven	.870
f055 do you believe in: sin	.782
f063 how important is god in your life	.830

Figure 3-3: Histogram of belief dimension



3.4.1.2 *Organizational Dimension*

The second aspect of religiosity outlined in the literature is that of an individual's orientation toward the organization of religion. This has been conceptualised and operationalized in several ways, for example the degree of integration into a religious system (Bréchon 2003), membership of a moral community (Gill 1999), religious commitment (Riis 1994), religious adherence (Procter and Hornsby-Smith 2003), or church engagement (Jagodzinski and Dobbelaere 1995b). The present analysis followed the example of the conceptualisation and operationalization of Halman and Pettersson (2006, p.41-42), where they operationalize "church-oriented religion" as a composite of church attendance, church adequacy, and confidence in the church.

A principal component analysis using the pooled dataset is conducted on these five variables¹⁸ all load heavily on a single component with an eigenvalue of 3.002, and explaining 60% of the total variance (see table 3-5). Reliability analyses however, prove the scale to be less robust than anticipated, with a Cronbach's alpha for the scale of 0.63. Furthermore, if the attendance variable is deleted from the scale, Cronbach's alpha increases to 0.761. Accompanied by the fact that attendance also had the lowest loading in the component matrix, it seems likely that attendance might tap a dimension somewhat more independent of the other items than anticipated. In order to test this, a confirmatory factor analysis was conducted with the two competing models using AMOS (Arbuckle 2006), one with attendance, and one without. The adjusted goodness-to-fit index of the model with attendance was 0.841, and Rmsea of 0.163 (n=115007). The adjusted goodness-to-fit index of the model without attendance was 0.976, and Rmsea of 0.069 (n=115007). This appears to indicate that the model without attendance is a slightly better fit than the one with attendance. On reflection, theoretically distinguishing attendance from attitudes towards the church appears to be a more accurate conceptualisation of the dimensionality of religiosity. Whereas attitudes towards the church are cognitive appraisals of the organization of the church, attendance is a self-reported behavioural measure of one type of religious activity. It seems quite probable that in some cases,

¹⁸ How often attend religious services (7-point scale) Church answers to: moral problems (dichotomous yes/no); Church answers to: family life problems (dichotomous yes/no); Church answers to: spiritual needs (dichotomous yes/no); How much confidence in: church (4-point scale).

these two variables will move in opposite directions. For example, many people could have a negative opinion of the organization of the church, but still attend religious services regularly, or have a positive opinion of the church but never attend religious services. It was therefore decided that the organizational dimension should comprise only those items related to confidence and church adequacy, and retain a separate scale for attendance at religious services. The component matrix for the scale without the attendance variables is shown in table 3-6 below.

As with the belief scale, factor scores were generated and transformed to give a mean of 100 in order to aid in interpretability. The items in the scale were also reverse coded, whereby low scores represented less confidence, less adequacy and less attendance, higher scores representing high attendance, high adequacy and high confidence. Table 3-7 details the reliability analyses of the scale for each wave, and the histogram in figure 3-4 shows the distribution of the scale in the pooled data.

Table 3-5: Component matrix of organizational dimension (with attendance)

	Component
	1
f028 how often attend religious services	.689
f035 church answers to: moral problems	.829
f036 church answers to: family life problems	.813
f037 church answers to: spiritual needs	.761
e069_01 how much confidence in: church	.774

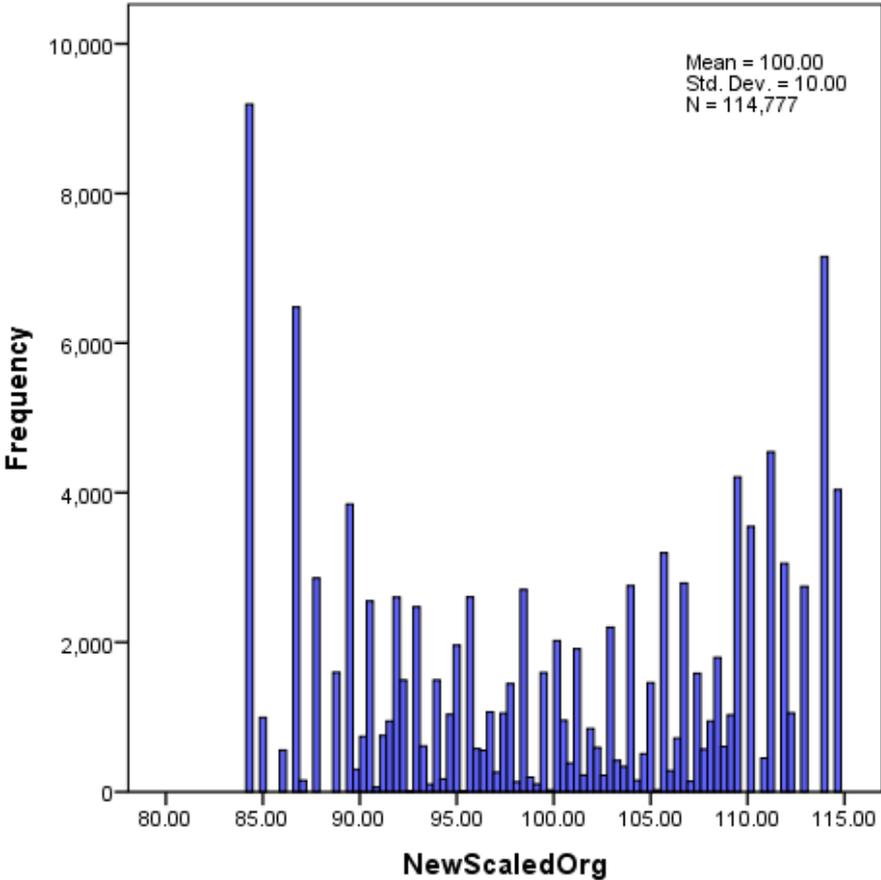
Table 3-6: Component matrix of organizational dimension (without attendance)

	Component
	1
f035 church answers to: moral problems	.863
f036 church answers to: family life problems	.841
f037 church answers to: spiritual needs	.783
e069_01 how much confidence in: church	.736

Table 3-7: Reliability statistics of organizational dimension scale

Reliability Statistics		
	Cronbach's Alpha	N of Items
All Waves	.630	5
1981	.643	5
1990	.637	5
1999	.623	5
2008	.628	5

Figure 3-4: Histogram of Organizational Dimension



3.4.2 Moral Values

Two scales were constructed that span the 1981 to 2008 datasets using a series of questions relating to the justifiability of certain actions, rated by respondents on a scale of one to ten, where one is never justified and ten is always justified. The exact wording is as follows: “Please tell me for each of the following whether you think it can always be justified, never be justified, or something in between” (EVS and GESIS 2011, p.434).

Similar scales have been constructed using EVS data in numerous studies, theorised and constructed in several ways. Halman & Vloet (1994, p.30-34) for example, distinguish two moral dimensions, civic virtues/morality and micro-ethical issues or permissiveness.¹⁹ Bréchon (2003, p. 122-123) constructs two similar scales, one of moral rigourism, comprising of attitudes towards sexuality and life, and civic rigourism, comprising of attitudes towards “incivilities and cheating”. Draulans and Halman (2005) (also Draulans and Halman (2003)) distinguish three dimensions, self-determination, personal interest morality, and civic sense versus permissiveness.²⁰

A principal component analysis with varimax rotation was carried out on the pooled data to assess the common dimensions underlying these items (see table 3-8). Contrary to the previous studies, that carried out their analysis on one or two waves of the survey, only those items (14 in total) asked in all four surveys were considered in this analysis. Two components emerged from the analysis, the first explaining 35% of the total variance, with an eigenvalue of 4.825, the second explaining 14% of the variance, with an eigenvalue of 1.988. The remaining components had eigenvalues of less than 1. Items relating to divorce, abortion, homosexuality, euthanasia, prostitution, and suicide loaded heavily (0.793 to 0.637) on the first

¹⁹ Permissiveness: married men/women having an affair, sex under the legal age of consent, homosexuality, prostitution, euthanasia, suicide, killing in self-defence. Civic Morality: claiming state benefits illegally, avoiding a fare on public transport, cheating on tax, buying something you knew was stolen, taking a car that is not yours, keeping money that you have found, lying in your own interest, someone accepting a bribe,

failing to report damage on a car, threaten strike-breakers, political assassinations

²⁰ Self-determination: Abortion, divorce, homosexuality, euthanasia and suicide. Personal Interest Morality: cheating on tax, paying cash to avoid taxes, claiming state benefits illegally, lying in one’s own interest. Civic Sense-versus-Permissiveness: Driving under influence of alcohol, littering, joyriding, speeding.

component. The justifiability of accepting a bribe, cheating on tax, avoiding fare on public transport, claiming state benefits, joyriding, and lying in own interest loaded heavily (0.699 to 0.632) on the second component. The remaining two items – adultery and taking soft drugs – also loaded on the second component, but to a conspicuously lesser extent (0.496 – 0.472). On conducting the same principal component analysis separately on the four different waves, three components emerge in 1990 and 1999, with these two items loading on a third component. In general however, the results are largely equivalent to the pooled data for all waves. The rotated component matrix for the pooled data is shown below.

Table 3-8: Rotated (varimax) Component Matrix of Justified Variables

	Component	
	1	2
do you justify: divorce	.793	.062
do you justify: abortion	.786	.064
do you justify: homosexuality	.755	.065
do you justify: euthanasia	.683	.108
do you justify: prostitution	.650	.292
do you justify: suicide	.637	.221
do you justify: accepting a bribe	.089	.699
do you justify: cheating on tax	.101	.685
do you justify: avoiding fare on public transport	.187	.655
do you justify: claiming state benefits	-.002	.642
do you justify: joyriding	.044	.639
do you justify: lying in own interest	.285	.632
do you justify: adultery	.406	.496
do you justify: taking soft drugs	.405	.476

The first component appears to tap an orientation towards a personal morality. Each of the studies outlined above identify an orientation where the items relate to self-determination in one’s personal choices around private life. Draulans and Halman (2005) would label this orientation self-determination, while Bréchon (2003, p. 122-123) would identify it as “moral rigourism”. This component is labelled personal morality. Except lying in one’s own interest, the second dimension encompasses behaviours that are all illegal. With the exception of joyriding, Draulans and Halman (2005) theorize that these items pertain to behaviours that benefit the individual at the expense of others, and include joyriding in a separate dimension (that they argue does not immediately benefit the individual). That

distinction however, seems dubious, both theoretically and according to the data: it could be argued that joyriding does benefit the individual in some way, and the loadings for joyriding appear to confirm that it is tapping the same dimension as the other items. Bréchon (2003, p. 122-123) would label this item “civic rigourism”, but as Draulans and Halman identify, it also taps and self-serving above civic interest orientation. To avoid confusion with the personal morality dimension therefore, it is labelled civic morality. Reliability analyses of the two scales indicate they are quite robust (see table 3-9, 3-10). Cronbach’s alpha values for the entire pooled data, and for each wave are itemized below. The alpha values are consistent and strong overall and in each wave. Furthermore, alpha values were not increased in any of the waves by eliminating any of the items in each scale (not shown).

Table 3-9: Reliability and Scale Statistics of Initial Personal Morals Scale

Personal Morals	Reliability Statistics		Scale Statistics		
	Cronbach's Alpha	Items	Mean	Variance	Std. Deviation
All Waves	.829	6	22.75	162.581	12.751
1981	.843	6	21.81	169.259	13.010
1990	.816	6	22.72	148.451	12.184
1999	.808	6	24.66	157.706	12.558
2008	.839	6	22.28	168.300	12.973

Table 3-10: Reliability and Scale Statistics of Initial Civic Morals Scale

Civic Morals	Reliability Statistics		Scale Statistics		
	Cronbach's Alpha	N of Items	Mean	Variance	Std. Deviation
All waves	.761	6	13.14	64.990	8.062
1981	.735	6	12.18	55.018	7.417
1990	.732	6	13.13	62.035	7.876
1999	.741	6	14.29	67.237	8.200
2008	.788	6	12.96	67.323	8.205

The two scales were initially constructed in a simple additive technique, and divided by the number of items (6) to return the scale to the original range of 1-10 and aid in interpretability. After comparing countries scores on these items however, it became apparent that there was a large amount of missing data in each of the scales, approximately 25% of the pooled data. This was principally caused by one item in the scale not being posed in a particular country in a particular wave. In Italy in 2008 for example, the question regarding the justifiability of homosexuality is omitted from the pooled dataset because the phrasing of the question meant it was not directly comparable with the questions on homosexuality asked in the previous waves. Missing one item in the scale therefore rendered the scale completely missing in 2008 in Italy. As one possible solution, the scale was instead constructed by means of pro-rating the mean rating of items that were answered.²¹ So if five out of the six items were answered, a score would still be generated on the scale.²² Utilizing this method, missing data on the scale reduced from approximately 25% to 7% on the personal moral scale, and from 15% to 2% on the civic moral scale. This however proved unsatisfactory, as it merely concealed those countries and waves which had not asked a particular question, and possibly distorted their scores. Instead it was decided to omit the most problematic items in the scale – avoiding a fare on public transport (missing from eight national datasets), and prostitution (missing from seven national datasets). The modified scales and their alpha values are detailed in the tables 3-11 and 3-12 below. The alpha values are lower than the six item scale, but not considerably so.

Histograms showing the distribution of scores in the pooled four wave dataset are shown in figure 3-5 below. What is clear from both the charts and tabular data is that the personal morality scale has considerably more variance than the civic morality scale, and civic morality has a much lower mean than personal morality, but that both are heavily skewed towards one (the never justified value)

²¹ E.g. Compute Personal Morals = (mean.5 (f118, f119, f120, f121, f122, f123)).

²² Questions not asked or not directly comparable from each dataset: 1981 Homosexuality in Malta; 1990 Abortion in Denmark 1999 Prostitution in Denmark, France, Malta, Netherlands, Poland Slovakia, Sweden; Avoiding a fare in Iceland, Ireland, Malta, Poland, Slovakia, Spain, Sweden and Northern Ireland; 2008 Homosexuality: Italy.

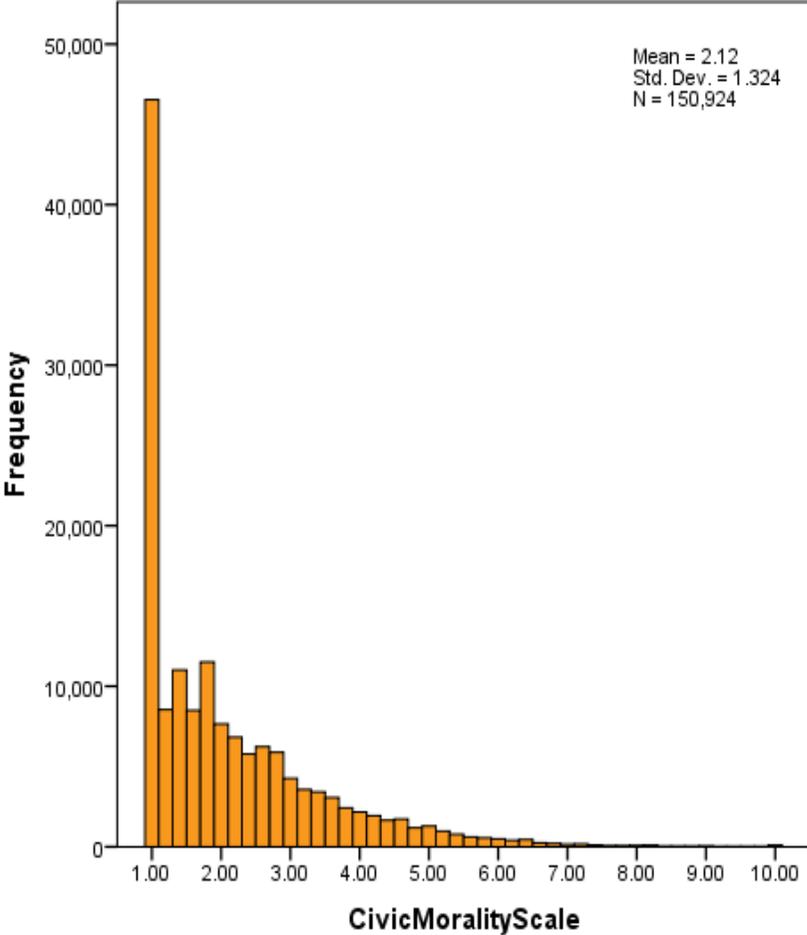
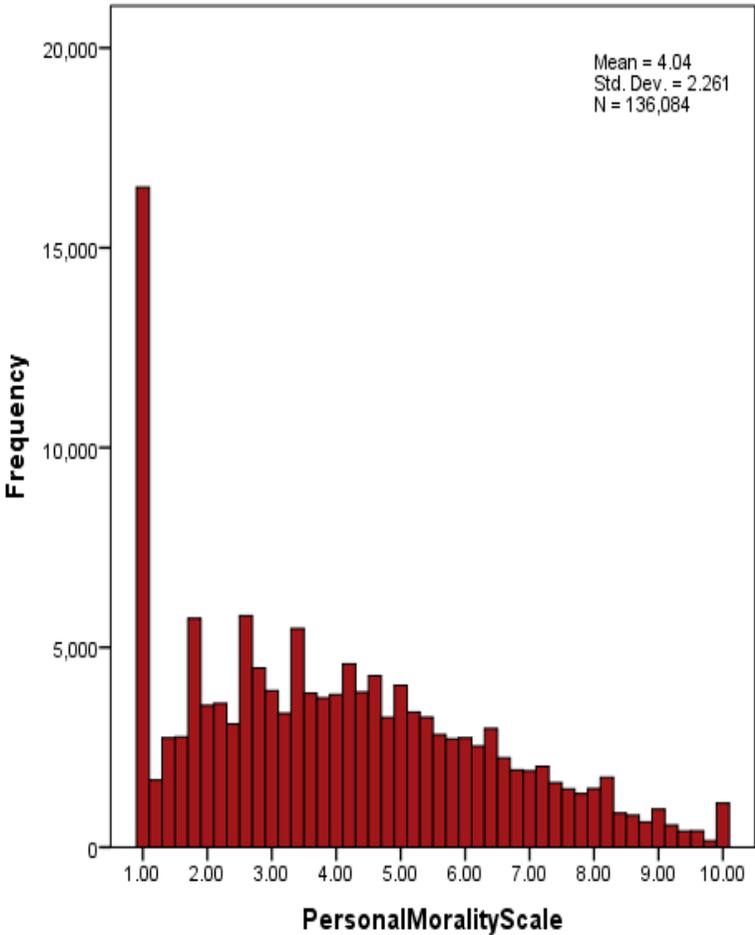
Table 3-11: Reliability and Scale Statistics of Personal Morals

	Personal Morals		Scale Statistics		
	Cronbach's Alpha	N of Items	Mean	Variance	Std. Deviation
All Waves	.813	5	20.21	127.752	11.303
1981	.816	5	18.98	125.739	11.213
1990	.786	5	19.95	110.585	10.516
1999	.810	5	21.65	131.894	11.485
2008	.826	5	19.74	132.594	11.515

Table 3-12: Reliability and Scale Statistics of Civic Morals

	Civic Morals		Scale Statistics		
	Cronbach's Alpha	N of Items	Mean	Variance	Std. Deviation
All Waves	.720	5	10.59	43.798	6.618
1981	.671	5	10.14	38.091	6.172
1990	.677	5	10.88	43.112	6.566
1999	.718	5	10.82	44.260	6.653
2008	.756	5	10.40	45.036	6.711

Figure 3-5: Histograms of Personal Morals (left) and Civic Moral (right)



3.4.3 Political Values

Two sets of value orientations are focussed on in terms of political values. The first is materialism- postmaterialism. The materialist postmaterialist value orientation is described by its primary theorist Ronald Inglehart (1977, 1990) as a change/opposition in value priorities that emphasize economic and physical security to ones that emphasize freedom, self-expression and quality of life. Following Inglehart's construction of the Materialist-Postmaterialist index, and following numerous studies that have employed the index (e.g. Scarbrough 1995, Lee and Kidd 1997, Reháková 2001, Taniguchi 2005), the index is constructed from the following four survey items, where individuals are asked to indicate their two most important political goals: a. Maintain Order in the nation; b. Give people more say in the decisions of government; c. Fight rising prices; d. Protect freedom of speech. Responses combining (a) and (c) indicate a materialist orientation, combining (b) and (d) a postmaterialist orientation, and all other combinations a mixed orientation. The mixed orientation may also be split into two groups, mixed with a materialist or postmaterialist preference depending on whether they chose a postmaterialist (b) or (d), or materialist (a) or (c) as first and materialist second.

The second set of political value orientations is a left or right political/economic orientation, conceptualised in various studies as left-right materialism (Knutsen 1995) ,an aspect of socio-economic justice norms, (Arts *et al.* 2003a), or socialist views of state responsibility vs. liberal views of personal responsibility (Hagenaars *et al.* 2003, p.55). Following Knutsen (1995, p.163), left-right materialism and materialism-postmaterialism are conceptualized as two distinct sets of value orientations. For example, whether one is materialist or postmaterialist or mixed, one will still adopt a position regarding left-right materialism. The logic of this approach is that even though the postmaterialism-materialism axis is an significant distinction, and the rise of postmaterialism an important development in advanced industrial societies, left-right materialist orientations are still central ones in political conflict in most Western societies (Knutsen 1995). Additionally, it is expected that self-placement on the left-right scale will be a reflection of this underlying value orientation. The dimension is constructed from four survey items, asked in the 1990, 1999 and 2008 surveys only. Respondents were asked to place their views on a scale of 1 to 10 on a series of opposing statements, where 1 accorded

to one statement and 10 accorded to the opposite statement. The exact wording of the question was as follows: “On this card you see a number of opposite views on various issues. How would you place your views on this scale?” (EVS and GESIS 2011, p.207). The statements are detailed in table 3-13 below. A principal components analysis was conducted using the pooled dataset with the four items. All items loaded on a single component (table 3-14).

Table 3-13: Response Categories in State vs. Personal Responsibility

Rightist Liberal Personal Responsibility (10)	Leftist Socialist State Responsibility (1)
The state should give more freedom to firms	The state should control firms more effectively
Individuals should take more responsibility for providing for themselves	The state should take more responsibility to ensure that everyone is provided for
People who are unemployed should have to take any job available or lose their unemployment benefits	People who are unemployed should have the right to refuse a job they do not want
Competition is good. It stimulates people to work hard and develop new ideas	Competition is harmful. It brings out the worst in people

Table 3-14: Component Matrix of State vs. Personal Responsibility

	Component
	1
e036 private vs. government ownership business	.677
e037 individual vs. state responsibility for providing	.701
e038 take any job vs. right to refuse job when unemployed	.574
e039 competition good vs. harmful for people	.674

The first principal component had an eigenvalue of 1.733, explaining 43.255% of the variance. All other components had eigenvalues of less than 1. Reliability analyses of a scale of the four items in each of the EVS waves indicate that the scale is adequate at best. Cronbach’s alpha values and descriptive statistics of the scale for each wave are detailed in table 3-15.

Table 3-15: Reliability and Scale Statistic of State vs. Personal Responsibility

	Reliability Statistics		Scale Statistics		
	Cronbach's Alpha	Mean	Variance	Std. Deviation	N of Items
All waves	.558	18.32	48.728	6.981	4
1990	.534	17.17	46.567	6.824	4
1999	.549	18.25	48.600	6.971	4
2008	.568	18.93	48.826	6.988	4

The composite scale was constructed based of the factor scores, using a simple additive scale of each of the responses, divided by the number of items, and reverse coded from the original coding so that leftist orientations were at the low end of the scale, and rightist orientations at the upper end of the scale. Gamma correlations were then computed between the composite left-right scale and self-placement left-right scale item, within each country and wave (table 3-16). The correlations are highly significant in every country and wave, with the exception of some waves in Northern Ireland, Ireland, and Poland. The strength of the association is however, quite weak, with average gamma coefficients of approximately .2 to .25. This may indicate either that the composite scale is not measuring effectively what it was intended to measure, or that self-placement on the left-right scale is inaccurate. On examining gamma correlations between left-right self-placement and the items that made up the scale (not shown), the correlation strengths proved quite similar to the composite scale, with only the private vs. state control of firm's item showing slightly higher correlations than the composite scale.

Table 3-16: Gamma Correlations of Self Left-Right Scale and SVP Scale

	1990	1991	2008
Belgium	.174**		.180**
Denmark	.348**		.393**
France	.271**	.219**	.310**
Germany	.255**	.137**	.196**
Iceland	.288**	.301**	.300**
Ireland	.108**	.111*	.067
Italy	.173**	.178**	.218**
Malta	.302**		.192**
Netherlands	.299**	.214**	.182**
Norway	.292**		.336**
Poland	.127**	.033	-.025
Slovak Republic	.198**		.130**
Spain	.254**		.117**
Sweden	.383**		.470**
Great Britain	.312**	.208**	.203**
Northern Ireland	.044	.065*	-.028

** $p < .001$, * $p < .05$

On considering these problems with the scale (particularly the weak correlations with the left-right self-placement scale), it was concluded that the scale may be a poor measure of left-right materialism. Arts *et al.* (2003a, p.198-199) conceptualise a scale made up of three of the four items in this scale not as the broader concept of left-right materialism, but rather as the more particular concept of “public support for government intervention”, one aspect of socio-economic justice norms. Hageaars *et al.* (2003) use the four items in the scale, but conceptualise it as “state responsibility above individual responsibility”. It is therefore more accurate to conceptualise the scale not as left-right materialism, but as simply one aspect of left-right materialism, a dimension which emphasizes personal responsibility on one side, and state responsibility on the other, in the socioeconomic domain. Rather than be a perfect reflection of this dimension then, it is expected that one’s ideological stance (left right self-placement) will be one on several individual level characteristics, such as age or income, that shapes one’s orientation on this dimension, and studies such as Arts *et al.* (2003a) have theorised and tested this proposition. One could also tentatively suggest that this may explain why these two items correlate poorly in

countries such as Ireland and Northern Ireland, where political cleavages may be less socioeconomically aligned as in the rest of Europe.

3.4.4 Work Values

A classic distinction made in relation to work values is between extrinsic and intrinsic orientations towards work (Ester *et al.* 2006). Drawing on Herzberg's (1968) seminal model of job satisfaction, it has been used in several previous studies using EVS data, such as de Vaus and McAllister (1991), Harding and Hikspoors (1995), Zanders and Harding (1995), Ester *et al.* (2006), and Halman and Muller (2006). Harding and Hikspoors (1995, p. 445-446) demarcate personal development, comfort, and material conditions as three dimensions representing different work values. The first item, personal development includes the items 'using one's initiative', 'a responsible job', 'a job where you feel you can achieve something', 'meeting one's abilities' and 'an interesting job'. Comfort encompasses the congeniality of working conditions, comprising of 'good hours', 'generous holidays', 'not too much pressure' and 'a respected job'. Material conditions entails 'good pay' and 'job security'. Harding and Hikspoors (1995) align their dimensions with that of the definitive work of Herzberg (1968) by stating their model of comfort and material conditions epitomise intrinsic work values, and personal development extrinsic work values. Intrinsic work values therefore are more conventional and traditional, emphasizing the maintenance of material security and welfare, while extrinsic values are more non-material or postmaterial in nature, emphasizing autonomy, growth, and personal development (Ester *et al.* 2006).

The EVS question that probes work values has been asked in all four waves and is as follows: "Here are some aspects of a job that people say are important. Please look at them and tell me which ones you personally think are important in a job". Respondents are presented with a list of items, thirteen of which have been asked in each wave. A principal component analysis using varimax rotation was conducted on these 13 items using the pooled EVS data. The analysis yielded two components, the first with an eigenvalue of 4.368 explaining 33.6% of the variance, the second with an eigenvalue of 1.267, explaining a further 9.7% of the variance (in total 43%). The rotated component matrix is detailed below in table 3-17. The two

components concur with the theoretical distinction between extrinsic and intrinsic orientations towards work, with the first seven items in the matrix loading on the extrinsic component, and the final five items loading on the intrinsic component. The item ‘pleasant people’ loads on both components fairly equally but with an appreciably lesser loading than the other items, and it is therefore not assigned to either orientation. The factor loadings accord almost precisely with the findings of Halman (1996) who conducted a factor analysis (with obliminal rotation) on work qualities in 21 countries in the 1990 wave of the EVS. The scale of the intrinsic and extrinsic work values is constructed by a simple additive method of the items in each scale, divided by the number of items. Reliability statistics are detailed in tables 3-18 and 3-19.

Table 3-17: Rotated (varimax) Component Matrix of Work Values

	Component	
	1	2
c016 important in a job: use initiative	.734	.111
c019 important in a job: responsible job	.686	.116
c018 important in a job: achieving something	.685	.099
c024 important in a job: useful for society	.615	.231
c025 important in a job: meeting people	.598	.227
c021 important in a job: meeting abilities	.592	.244
c020 important in a job: interesting job	.557	.194
c022 important in a job: pleasant people	.412	.347
c015 important in a job: good hours	.210	.705
c017 important in a job: generous holidays	.214	.664
c011 important in a job: good pay	-.008	.639
c012 important in a job: not too much pressure	.286	.604
c013 important in a job: job security	.227	.545

Table 3-18: Reliability and Scale Statistics of Intrinsic Work Values

Intrinsic Work Values					
	Reliability Statistics		Scale Statistics		
	Cronbach's Alpha	Mean	Variance	Std. Deviation	N of Items
All waves	.688	2.65	2.447	1.564	5
2008	.692	2.94	2.400	1.549	5
1999	.675	2.66	2.332	1.527	5
1990	.655	2.31	2.312	1.521	5
1981	.672	2.20	2.423	1.557	5

Table 3-19: Reliability and Scale Statistic of Extrinsic Work Values

Extrinsic Work Values					
	Reliability Statistics		Scale Statistics		
	Cronbach's Alpha	Mean	Variance	Std. Deviation	N of Items
All waves	.793	3.62	5.329	2.308	7
2008	.812	3.85	5.545	2.355	7
1999	.795	3.67	5.341	2.311	7
1990	.749	3.38	4.774	2.185	7
1981	.767	3.05	4.943	2.223	7

3.4.5 Family Values

Analyses of changing family values and structures through modernization and secularization have taken several approaches. Voas (2003) and O’Leary (2001) identify religious intermarriage as a key indicator and theoretical lens through which they examine the changing relationship between the family and religion. Using EVS data, Abela (2003) builds a descriptive map of Europe’s family values, analysing every item pertaining to the family in the EVS dataset. Abela (2001) uses attitudes towards divorce and their intrinsic link to the meaning of marriage itself to assess the state of family values in Malta relative to the rest of Europe. Heimdal and Houseknecht (2003) assess the strength of the family as an institution via a combination of divorce rates and percentage non-marital births, as well items from the WVS on the importance individuals attach to the family relative to other societal institutions such as leisure, politics and religion. Hagenaaers, Halman and Moors (2003) organize items in the EVS pertaining to the family into four relatively distinct groupings: marriage, parental values for children (child-rearing values); the importance of marriage and children (traditional family pattern); and women’s roles. In addition to these there are also items on the relative importance of the family, and items relating to the justifiability of divorce and abortion. The present study will focus on at least some aspects of each dimension.

3.4.5.1 *Marriage Values*

Several previous analyses of EVS data have theorised and operationalized changing family values in terms of the qualities individuals believe to be important to a successful marriage. Out of the several items in the EVS that probe these qualities in 1981 and 1990, van den Akker *et al.* (1994) distinguish four aspects: a personal bond; pair orientation; direct situational conditions; and cultural homogeneity.

Using the pooled data, a principal component analysis using varimax rotation was carried out on the ten items that have been asked in all four waves of the EVS survey (table 3-20). The analysis yielded four components, the first component with an eigenvalue of 2.522 and explaining 25% of the variance. The three other components had eigenvalues greater than 1, explaining a further 34% of the variance (all four explain 59%). The first component reflects the cultural homogeneity dimension, the third pair orientation (what van den Akker *et al.* (1994, p.104) describe as “to really be a pair and to have the opportunity to live as a pair”). The second component appears to measure adequate material conditions (van den Akker (1994) include presence of children in this dimension and name it situational conditions). And the fourth component appear to tap the core institutional aspects of marriage – the production of children and faithfulness. There is clearly some deviation from van den Akker’s (1994) dimensioning. Using the 1999 data, Hageaars *et al.* (2003) distinguish four dimensions, but also differing slightly in their makeup: emotional qualities; cultural homogeneity; mutual bond qualities; and material conditions. The two most consistent dimensions therefore appear to be cultural homogeneity and material conditions – the first two components of the principal components analysis. These two components were therefore retained and the other two discarded, and factor-based scores (i.e. adding the original items that make up the scale) were generated for each dimension. Each score was rescaled to range from one to three, where low values indicate cultural homogeneity / material conditions are important, and high values unimportant. Reliability statistics for each of the scales are detailed in tables 3-21 and 3-22.

Table 3-20: Rotated (varimax) Component Matrix of Marriage Values

	Component			
	1	2	3	4
d033 important in marriage: agreement on politics	.769	.049	.137	-.048
d031 important in marriage: shared religious beliefs	.768	.052	-.029	.254
d029 important in marriage: same social background	.678	.314	.032	.011
d028 important in marriage: adequate income	.114	.852	.040	.067
d032 important in marriage: good housing	.185	.767	.165	.095
d036 important in marriage: happy sexual relationship	-.066	.176	.707	.145
d035 important in marriage: live apart from in-laws	.116	.064	.677	-.227
d037 important in marriage: share household chores	.093	-.010	.659	.221
d027 important in marriage: faithfulness	.065	-.050	.025	.795
d038 important in marriage: children	.081	.262	.112	.638

Table 3-21: Reliability and Scale Statistics of Cultural Homogeneity

Cultural Homogeneity					
	Reliability Statistics		Scale Statistics		
	Cronbach's Alpha	Mean	Variance	Std. Deviation	N of Items
All Waves	.656	6.98	3.025	1.739	3
1981	.628	6.81	2.988	1.729	3
1990	.595	7.08	2.714	1.647	3
1999	.650	7.17	2.833	1.683	3
2008	.689	6.84	3.262	1.806	3

Table 3-22: Reliability and Scale Statistics of Material Conditions

Material Conditions					
	Reliability Statistics		Scale Statistics		
	Cronbach's Alpha	Mean	Variance	Std. Deviation	N of Items
All Waves	.639	3.42	1.300	1.140	2
1981	.606	3.52	1.303	1.141	2
1990	.616	3.50	1.249	1.117	2
1999	.640	3.49	1.281	1.132	2
2008	.654	3.32	1.319	1.149	2

3.4.5.2 *Child-Rearing Values*

With regard to the qualities children should be encouraged to learn at home, Dobbelaere, Gevers and Halman (2003) contend that underlying these qualities are more general orientations, and their factor analyses yielded two dimensions on which individual responses lie. They theorize that these reflect an achievement orientation, and conformist orientation. Using the same items, Hagenaars, Halman and Moors (2003) theorize the dimensionality of these items slightly differently. They argue that there is a single underlying dimension that the items reflect, one of authority versus autonomy. They construct a scale whereby if items on the authoritarian side of the scale are chosen (Hard work, Thrift, Religious Faith, Obedience) they are added to the scale, and if autonomy items are chosen (Independence, Feelings of Responsibility, Imagination, Determination & Perseverance) they are subtracted from the scale. The parallel in Dobbelaere, Gevers and Halman's (2003) analyses is the conformity/nonconformity orientation, containing all the same items replacing thrift and hard work with good manners on the conformist/authority side of the scale, and excluding feelings of responsibility from the nonconformist/autonomy side of the scale.

A principal component analysis using the eleven items asked in each of the four surveys (a series of items were posed in the 1981 wave only, and are therefore not included) was conducted to assess the suitability of such a scale (table 3-23). The analysis yielded four components (see below for the un-rotated solution), with eigenvalues of 1.675 for the first component, and 1.208, 1.137, and 1.019 for the second third and fourth components. The first component explained 15% of the total variance, and along with the additional three components, explained 45% of the total variance. The first component appears to be very similar to the authority /autonomy conformity/non-conformity described in the previous studies, with positive loadings on independence (.578), determination (.421), responsibility (.398) and imagination (.393), and negative loadings on obedience (-.543), religious faith (-.443), thrift (-.352), good manners (-.319) and hard work (-.297). Unselfishness particularly, and to a lesser extent tolerance, do not appear to be part of this dimension. There also appears to be evidence of Dobbelaere, Gevers and Halman's (2003) achievement dimension in the second component, with strong negative loadings on hard work (-.548) and thrift (-.461) and to a lesser extent responsibility (-.244), accompanied by

strong positive loadings on unselfishness (.574) and tolerance (.322). The third component is more difficult to theorize: it comprises of strong positive loadings on tolerance (.582), responsibility (.468) and good manners (.458), accompanied by only one strong negative loading – imagination (-.406). It appears to tap a socially conscious orientation and a positive orientation towards one’s civic responsibility, possibly to the detriment of one’s own personal individuality. The final component comprises of strong positive loadings on tolerance, determination, and unselfishness accompanied by strong negative loadings on good manners, independence and imagination. This appears to be a mix of the previous components, with no well-defined dimension immediately apparent.

Table 3-23: Component Matrix of Child-Rearing Values

	Component			
	1	2	3	4
a027 learn children at home: good manners	-.319	.047	.458	-.534
a029 learn children at home: independence	.578	-.147	-.169	-.344
a030 learn children at home: hard work	-.297	-.548	-.167	.247
a032 learn children at home: feeling of responsibility	.398	-.244	.468	.004
a034 learn children at home: imagination	.393	.213	-.406	-.373
a035 learn children at home: tolerance & respect	.211	.322	.582	.383
a038 learn children at home: thrift	-.352	-.461	-.016	.101
a039 learn children at home: determination, perseverance	.421	-.121	-.260	.372
a040 learn children at home: religious faith	-.443	.208	-.207	.076
a041 learn children at home: unselfishness	.023	.574	-.157	.312
a042 learn children at home: obedience	-.543	.276	-.111	-.132

Hagenaars, Halman and Moors (2003) construct a scale from these items whereby the conformity responses are coded as plus one, and non-conformity responses coded minus 1, creating a simple additive scale. Reliability analyses conducted here however, prove this scale to be quite poor, with Cronbach’s alpha values generally less than 0.4. Houtman and Aupers (2007) found similarly poor reliability statistics for their scale of conformity versus self-direction. Moreover when cross-tabulations and correlational analyses are conducted, the items seem relatively independent of each other. For example, two of the items one would expect to be at opposite ends of a conformity spectrum, obedience and independence,

are actually slightly positively correlated with each other. And almost 40% of individuals who encourage children to be obedient also encourage their children to be independent. In a paper specifically concerned with the measurement and scaling of child rearing values Voicu (2002), tests the validity of the summative scales created by Hageñaars *et al.* (2003) and others (e.g.Rabušicová and Rabušic 2001). Finding similarly inconclusive factor structures as the analysis here, he concludes that rather than the summative scales used in studies such as Hageñaars *et al.* (2003), a more accurate method of analysing child-rearing values would be to examine each item individually.

3.4.5.3 Traditional Family Pattern

Halman and Petterson (2003) operationalize “non-traditional family values” using four items: whether children need a father and mother to grow up happy; whether one approves of a woman having a child outside a stable relationship; and two items assessing whether the relationship between parents and children is based on a strict hierarchy. The reliability of their scale however is very poor, with a Cronbach’s alpha of 0.31.

Scott and Braun (2006) distinguish two dimensions that assess the degree to which traditional family values have changed: pro-motherhood attitudes, and pro-marriage attitudes. The exact wording in the EVS questionnaire is as follows. For pro-motherhood: “Do you think that a woman has to have children in order to be fulfilled or is this not necessary?” with response categories “Not necessary” or “Needs children” (EVS and GESIS 2011, p.162). And for pro-marriage: “Do you tend to agree or disagree with this/the following statement? Marriage is outdated”. In their analysis Scott and Braun (2006) do not attempt to sum these items into any composite measure, but rather compare means and perform logistic regressions using the dichotomous items.

Hageñaars *et al.* (2003) pair the pro-motherhood item with a different item concerning marriage/partnership: “A marriage or a long-term stable relationship is necessary to be happy” on a five-point agree/disagree scale (EVS and GESIS 2011, p.165). They sum the responses of each of these items to produce a scale where high

values indicate that children and marriage are not necessary. After recoding the items where a high score indicates a non-traditional orientation, a principal components analysis was conducted on the items. It yields a single component with an eigenvalue of 1.453, explaining 48% of the variance (table 3-24). The items in Hageaars *et al.* (2003) load heavily, while the outdated marriage item loads positively but to a much lesser extent. It both confirms that Scott and Braun (2006) were correct in analysing their two items separately, and that the composite scale used by Hageaars *et al.* is an accurate one. Unfortunately however, the item on “a long term relationship”, and therefore the composite scale, is only present in the 1999 and 2008 waves of the survey. In the 1999 and 2008 datasets, a factor-based composite scale of the two items is constructed, and rescaled to range from 1 to 5, with high values indicating marriage and children are unnecessary, and low values indicating they are necessary.

Table 3-24: Component Matrix of Traditional Family Pattern

	Component
	1
d022 marriage is outdated	.421
d019 women need children in order to be fulfilled	.790
d026 long-term relationship necessary to be happy	.807
Extraction Method: Principal Component Analysis.	
a. 1 components extracted.	

3.4.6 Demographic Variables

3.4.6.1 Age

As well as an item on age at the time of a particular survey, the EVS also has an item measuring an individual's year of birth. Both items are recoded into categories, which are detailed below in tables 3-25, 3-26, and figure 3-6 in relation to the pooled dataset.

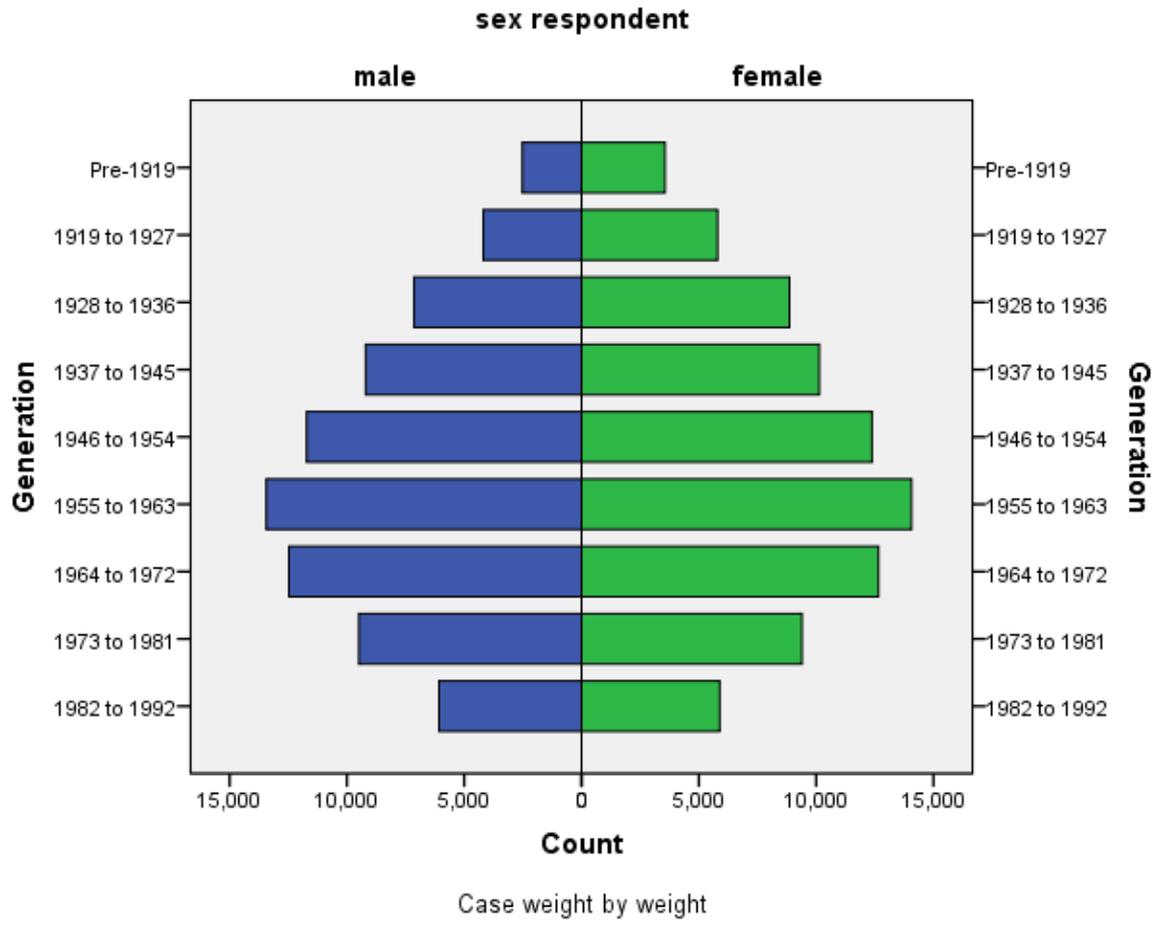
Table 3-25: Age Categories

Age Categories		
	N	Percent
15-24	22125	13.9
25-34	31079	19.5
35-44	30297	19.0
45-54	27164	17.1
55-64	21810	13.7
65 and more years	26271	16.5
Valid	158745	99.8
Missing	297	.2
Total	159042	100.0

Table 3-26: Generational Categories

Generation		
	N	Percent
1982 to 1992	11960	7.5
1973 to 1981	18887	11.9
1964 to 1972	25138	15.8
1955 to 1963	27510	17.3
1946 to 1954	24108	15.2
1937 to 1945	19354	12.2
1928 to 1936	16011	10.1
1919 to 1927	9985	6.3
Pre-1919	6090	3.8
Total	159042	100.0

Figure 3-6: Population Pyramid of Generation and Gender in Longitudinal Dataset



3.4.6.2 Education

The only variable related to education that is present in all four waves of the EVS is that of ‘age completed education’. This is recoded into categories that are slightly different from the default coding used in the longitudinal data-file (EVS 2011). On examining the distribution in each wave, only in 2008 was there a category of ‘no formal education’, and in 1981, there were no values recorded below the age of 12 (despite being coded as such in the EVS-GESIS recoding into categories) , nor any values recorded over the age of 21. To arrange the values into meaningful categories therefore, age completed education is recoded into four groups: aged 12 or less, including no formal education; aged 13 to 16; aged 17 to 20; and 21 or over. It is estimated that these four categories will correspond reasonably with: primary or no formal education; first stages of secondary education; completed secondary or post-secondary non-tertiary education; and completed tertiary education. This assumption is very approximately tested by cross-tabulating the one digit ISCED coding of education in the 2008 dataset with the coding put forward here. With the exception of some sizeable proportions in the middle of the two scales, it is a reasonable approximation (see tables 3-28, 3-29). And unlike the ISCED coding, it can be used for over all four waves.

Table 3-27: Age Completed Education Categories

	N	Percent	Valid Percent
12 or less	10808	6.8	7.1
13 to 16	44876	28.2	29.4
17 to 20	54668	34.4	35.8
21 or over	42165	26.5	27.6
Total	152517	95.9	100.0
Missing Cat (no answer etc.)	6525	4.1	
	159042	100.0	

Table 3-28: Comparison of ISCED Educational Coding and Age Completed Education Categories (n)

ISCED One Digit	Age Completed Education				
	12 or less	13 to 16	17 to 20	21 or over	Total
0 : Pre-primary education or none education	1488	269	24	12	1793
1 : Primary education or first stage of basic education	2705	2776	216	61	5758
2 : Lower secondary or second stage of basic education	127	6750	2910	679	10466
3 : (Upper) secondary education	78	2823	18216	4980	26097
4 : Post-secondary non-tertiary education	6	79	1879	1689	3653
5 : First stage of tertiary education	22	317	1528	12904	14771
6 : Second stage of tertiary education	0	8	17	411	436
	4426	13022	24790	20736	62974

Table 3-29: Comparison of ISCED Educational Coding and Age Completed Education Categories (percentages)

ISCED One Digit	Age Completed Education				
	12 or less	13 to 16	17 to 20	21 or over	Total
0 : Pre-primary education or none education	83.0%	15.0%	1.3%	.7%	100.0%
1 : Primary education or first stage of basic education	47.0%	48.2%	3.8%	1.1%	100.0%
2 : Lower secondary or second stage of basic education	1.2%	64.5%	27.8%	6.5%	100.0%
3 : (Upper) secondary education	.3%	10.8%	69.8%	19.1%	100.0%
4 : Post-secondary non-tertiary education	.2%	2.2%	51.4%	46.2%	100.0%
5 : First stage of tertiary education	.1%	2.1%	10.3%	87.4%	100.0%
6 : Second stage of tertiary education		1.8%	3.9%	94.3%	100.0%
	7.0%	20.7%	39.4%	32.9%	100.0%

3.4.6.3 Additional Socio-Demographic Variables

Marital status of the respondent is recoded from the six category item in the Longitudinal Dataset (EVS 2011) into a four category item, collapsing the categories of ‘Married’ and ‘Cohabiting’ into a single category, and collapsing ‘Divorced’ and ‘Separated’ into a single category. ‘Single/never married’ and ‘widowed’ make up the additional categories. This item is further transformed into four dichotomous dummy variables in the analysis. The item in the EVS that examines the size of the settlement in which an individual lives is made up of an eight category ordinal scale that ranges from ‘under 2000’ to ‘500,000’ or more. The classification offered by British Office for National Statistics (2013) is applied to dichotomise this scale between urban and rural settlements. A settlement is defined as urban if it has a population of more than 10,000, and rural if it has 10,000 or less. This item however, was not used in the 1981 waves of the EVS. Instead, a subjective item asking individuals “would you say you live in a: rural area or village; a small or middle size town; or a big town” (EVS and GESIS 2011, p.826). The item identifying “a rural area or village” is therefore coded as rural, and the other two categories coded as urban in the constructed dichotomous measure. Calculating proportions in each of the waves, with only the subset of countries, indicates it is probably a reasonably accurate merging of the two items.

Table 3-30: Urban Rural Categories EVS 1981-2008

Urban-Rural 1981-2008					
	1981	1990	1999	2008	Total
Urban	61.8%	66.2%	68.4%	65.4%	65.7%
Rural	38.2%	33.8%	31.6%	34.6%	34.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Employment status is recoded into from an eight category variable in the Longitudinal Dataset (EVS 2011) to a four category variable which is further transformed into five dichotomous dummy variables in the analysis. The primary change is recoding ‘Full time employment (30 hours a week or more)’, ‘Part-time employment (less than 30 hours a week’, ‘Self-employed’ and ‘Retired’ into one category of simply ‘Employed (or ever employed)’. ‘Housewife’, ‘Student’ and ‘Unemployed’ make up the other three categories.

3.4.7 Contextual Level Variables

A number of contextual level variables are used in the analysis. These are primarily at the level of societies, principally in terms of the structural or cultural characteristics of a society that are expected to have a bearing on religion, values and their relationship. The principal societal characteristics of interest are the degree of modernisation and the national religious context.

Firstly, societies are concisely defined as “clustering of institutions across time and space”, generally connected with a particular territory, composed of members who have some sort of common identity (Giddens 1984, p.164-165). The modern nation-state is typical of this definition of society. The sample of respondents in each nation state and wave is used as an operationalization of membership of a particular society at a particular point in time. For example, Irish society in 1981 and Irish society in 2008, will have different structural or institutional characteristics, and they will have different structural or institutional characteristics to other societies at a particular points in time.

The degree of modernisation of a society is operationalised in the analysis using three variables: Gross Domestic Product per capita (GDP), the Human Development Index (HDI), and the proportion of the workforce engaged in agriculture (AGRI).²³ These variables are related to the key concepts of modernisation and secularisation theory below. An effort is made to relate these general operationalisations of modernisation to the specific structural changes that are at the core of secularisation and modernisation theory – that of differentiation and rationalization. At the same time, it is recognised that these variables represent very general indicators of modernisation and development, of which differentiation and rationalization are one aspect.

The national religious context is operationalised here using two variables: the degree of denominational pluralism, measured by the Herfindahl index, and the degree to which there is a supportive (or unsupportive) religious context, measured by the proportion of individuals who never attend religious services.

²³ GDP is used to refer to GDP per capita throughout the thesis unless otherwise stated.

Finally, the degree to which religion and the state are separated in society is operationalised using the SRAS index developed by Fox (2006). Church-state separation is a concept that is related to both the modernisation and the religious context of a society. On the one hand, the degree to which the state supports or opposes religion is measured by the index. On the other, the separation of the religious sphere from the state is a particular case of the more general process of functional differentiation, a core aspect of modernisation.

3.4.7.1 *Modernization*

Functional differentiation and rationalization are core aspects of the wider process of modernisation. Despite being central theoretical concepts however, operationalisations are rare and problematic. The most practical approach to operationalizing functional differentiation is to recognize that it is a core aspect of modernisation, societal complexity and development, and that it will be attendant with other core aspects of modernisation. The approach therefore, is to focus on those established indicators of modernisation, while specifying how they are theoretically linked to functional differentiation and rationalization.

Differentiation in general is defined as the process and state whereby the structural units of a social system multiply into more functionally specialized and distinct structural units that function more effectively (Parsons 1966, Marsh 1967, p.31). Functional differentiation is the most advanced form of differentiation, and is attendant to modern societies (the other forms being segmentation, stratification, and centralization) (Luhmann 1977, Roth 2014). Naroll (1956, p.687), for example, states that “society is the most evolved which has the highest degree of functional differentiation, whether in the form of occupational specialization or organizational complexity”. At the macro level, it involves the institutional spheres of society becoming dissociated from each other, developing their own autonomous logic or rationality (rationalization) related to their function (Eisenstadt 1964, p.376). Functional differentiation is therefore concomitant with rationalization.

Functional differentiation is one of the primary concepts used to classify societies in term of societal complexity, societal development or socio-cultural evolution (Morris 2013). In theorizing rationalization and functional differentiation as concomitant processes, Jagodzinski and Dobbelaere (1995b) propose that in

societies where rationalization and differentiation are developed, their effect is one of effect of increasing productivity, and thus increased economic performance. In Parsons' (1966) theorization for example, the specialization brought about through functional differentiation precipitates an adaptive upgrading – whereby there is an increase in productivity and efficiency. The reasoning of Jagodzinski and Dobbelaere (1995b) is that this productivity and efficiency will be especially apparent in the economic sphere. Functional differentiation can therefore be indirectly measured using economic development, where functional differentiation increases efficiency and productivity, and this will be evident in greater levels of economic development. Rationalization is theorised to operate in parallel with functional differentiation, and as one of the core processes of modernization: “although macro indicators of economic performance are not direct measures of the degree of rationalization, in the long run, rationality should become manifest on high productivity and economic wealth” (Jagodzinski and Dobbelaere 1995b, p.83). Jagodzinski and Dobbelaere (1995b) use Gross Domestic Product per capita (GDP) as a “crude indicator” of economic performance and subsequently functional differentiation and rationalization. Jagodzinski and Dobbelaere (1995b) do however specify that imputing these processes from differences in economic performance may only be possible with long-term data within a country, or in the sharp contrasts one might see in economic performance between countries with very different levels of economic development. Having based their analysis on only two waves of the EVS, using four waves will likely prove more reliable. Halman and Pettersson (2004, p. 331) also use GDP as a proxy for modernization and functional differentiation, arguing it has served as a “potent proxy” in previous studies. GDP is used as one indirect measure for the degree of functional differentiation and rationalization in a society. Statistics regarding GDP per capita (in US dollars) are taken from the World Bank World Development Indicators (2014) for each survey wave, 1981, 1990, 1999, and 2008. They are presented in table 3-31.

Table 3-31: GDP per Capita (\$)

GDP Per Capita (\$)				
	1981	1990	1999	2008
Belgium	\$10,663	\$20,679	\$25,392	\$48,563
Denmark	\$11,984	\$26,862	\$33,441	\$64,182
France	\$11,127	\$21,834	\$24,800	\$45,417
Germany	\$10,170	\$22,220	\$26,756	\$45,635
Ireland	\$5,980	\$14,017	\$26,244	\$60,971
Iceland	\$15,310	\$25,675	\$32,271	\$55,446
Italy	\$7,600	\$20,765	\$21,946	\$40,661
Malta	\$3,898	\$7,192	\$10,301	\$20,896
Netherlands	\$11,329	\$20,937	\$27,823	\$56,631
Norway	\$15,335	\$27,732	\$35,645	\$95,190
Poland	\$1,698	\$1,698	\$4,351	\$13,906
Slovak Republic	\$2,396	\$2,396	\$5,635	\$18,559
Spain	\$5,359	\$13,773	\$15,859	\$35,580
Sweden	\$15,367	\$30,162	\$30,577	\$55,747
United Kingdom	\$9,567	\$18,633	\$26,555	\$45,171

Another indicator of modernisation and development is the Human Development Index. Described as the “yardstick” for an index of social development (Morris 2013, p.24), the HDI measures three societal traits: aggregate measures of health, education and standard of living. As with GDP, one would expect that, as well as having more efficient economic systems, differentiated societies have more efficient education, health and welfare systems, evident in the aggregate benefit to their members. And like the original rationale of Ul Haq (1995) in creating the index, the HDI offers a less narrowly economic measure of these dimensions of modernisation and societal development than GDP alone. Although some have questioned the appropriateness of comparing societies across time using the standard HDI (Morris 2013), the Hybrid HDI modifies the original index so as to better distinguish between countries and make comparisons possible across time (United Nations Development Programme 2010). Mean years of schooling and expected years of schooling are used to measure educational development, as opposed to literacy in the original HDI. Standard of living is measured with Gross National Income (GNI) per capita, as opposed to GDP per capita in the original HDI, so as to account for differences between the domestic output of a country and the actual

wealth of its citizens. Finally, the aggregation of these three measures is modified slightly in the hybrid HDI, using the geometric rather than arithmetic mean, and changing the maximum values of each dimension to the observed maximum rather than a pre-determined maximum (United Nations Development Programme 2010, p.15). To avoid confusion this hybrid HDI will simply be referred to as the HDI hereafter. The HDI of the selected countries for years 1981, 1990, 2000 and 2008 are taken from the *Human Development Report 2010* and presented in table 3-32 below. These countries, along with approximately thirty others, occupy the highest quartile, categorised as “very high human development” (United Nations Development Programme 2010, p.139).

Table 3-32: Human Development Index (Hybrid HDI)

HDI (Hybrid)	1980	1990	2000	2008
Belgium	0.753	0.805	0.873	0.873
Denmark	0.781	0.806	0.859	0.896
France	0.722	0.779	0.848	0.875
Germany	0.739	0.782	0.854	0.902
Iceland	0.754	0.800	0.858	0.886
Ireland	0.734	0.775	0.862	0.902
Italy	0.718	0.763	0.825	0.868
Malta	0.704	0.730	0.770	0.809
Netherlands	0.783	0.826	0.874	0.901
Norway	0.793	0.841	0.910	0.937
Poland	0.687	0.714	0.784	0.817
Slovakia	†	0.747	0.776	0.824
Spain	0.702	0.755	0.826	0.857
Sweden	0.776	0.807	0.889	0.891
United Kingdom	0.735	0.768	0.863	0.890

Marsh (1967) is one of the few theorists who explicitly attempts to operationalize a cross-cultural and historical index of functional differentiation. He bases his index on Murdock’s (1957) coding of the World Ethnographic Sample into degrees of political integration and degrees of social stratification. While Marsh’s (1967, p.329) aim was to compare relative levels of “primitive, historical and contemporary” levels of differentiation, this feature is redundant when only looking at contemporary societies then (as contemporary societies all occupy the highest levels of societal differentiation on these two indices). To distinguish between levels

of differentiation between contemporary societies Marsh constructs an index based on two variables: the percentage of employed males in each society who are in non-agricultural occupations; and the gross energy consumption in megawatt-hours per capita for one year. He standardizes these two scores and combines them into a single index of societal differentiation of contemporary societies. He does however point out that although the scale is a continuous one, and any modern-traditional typology based on the scores would prove arbitrary, with most of the nations of North America and Western Europe treated as relatively “similar” in terms of differentiation (Marsh 1967, p.36). Marsh (1967, p.35) concedes that “if we want some measure of differentiation for a larger number of societies, we must adopt a less-than-ideal temporary set of indicators”. His operationalization is not without merit however, particularly his use of the occupational structure of society. It reflects the move away from traditional socioeconomic structure of society based in agriculture and rural life, towards more industrial and post-industrial urban society, societal changes that typify the process of modernisation. As mentioned in the literature review, the technical and economic rationality characteristic of industrial and post-industrial society is theorised to extend outwards from the economic domain as more traditional economic base of society diminishes, and this will be reflected in the proportion of individuals in a society still engaged in more traditional enterprises such as agriculture. Furthermore, the declining proportion of individuals employed in agriculture is predicated on an increase in economic productivity itself, implying an increased emphasis on industrial and technical development, core aspects of the modernisation and rationalization of a society. Percentages employed in agriculture (including forestry and fishing) in each society (country and wave) are taken from the *World Bank World Development Indicators* , with any omissions taken from the *CIA World Factbook* (1982, 1990) for the given year. They are presented in table 3-33.

Table 3-33: Percentage Labour Force Employed in Agriculture

Percentage employed in Agriculture				
	1981	1990	1999	2008
Belgium	3.1	3.1	2.4	1.6
Germany^a	5.6	4.8	2.8	1.8
Denmark	7.4	5.5	3.3	2.5
Spain	18.8	11.8	7.2	4
France	8.1	5.6	4.2	2.7
United Kingdom	2.6	2.1	1.6	1.1
Ireland^b	26	12.7	7	5.3
Iceland^c	14.4	10.8	8.9	4.6
Italy	13.2	8.8	5.4	3.7
Malta^d	6	4	2	1.7
Netherlands	5.3	4.5	3	2.6
Norway	8.2	6.4	4.6	2.6
Poland	29.1	25.2	18.1	14
Slovak Republic^e	14	12.3	7.4	4
Sweden	5.6	3.4	2.5	2.1

a. Germany 1981 and 1990 taken from CIA World Factbook (1982, p.81-82; 1990, p.111-112). b. Ireland 1981 take from CIA World Factbook (1982, p.111). c. Iceland 1981 and 1990 based on CIA World Factbook (1982, p.103; 1990, p.141). Malta 1981 and 1990 taken from CIA World Factbook (1982, p.151; 1990, p.196). E Slovak Republic based on values for Czechoslovakia in 1981 and 1990 in the CIA World Factbook (1982, p.54; 1990, p.79).

3.4.7.2 Separation of Religion and State

The separation of religion and state (SRAS) is defined as a particular case of the more general process of functional differentiation, a core feature of modernization. Although it represents an important aspect of modernization, it is a much more specific phenomenon than the general indicators of modernization outlined above. Whereas the functional differentiation of society in general terms entails all institutional spheres of society becoming differentiated and autonomous of each other, the degree of separation between religion and state focuses on this process between these two institutional spheres, the religious and the political.

There are a few notable operationalizations of the concept of church-state separation (sometimes termed regulation) that allow for cross-national comparison. (e.g. Chaves and Cann 1992, Norris and Inglehart 2004, Chaves *et al.* 1994, Robbers 1996) One of the best is that of Fox (2006, p.538), in which he defines separation of

religion and state as “no government support for religion and no government interference in the religious practices of both the majority and minority religions in a state”. It is a robust definition because other studies often include state regulation or restriction of religion as indicative of greater separateness/secularity, when, as Fox points out, this is actually indicative of the continuing affiliation of these two institutions. Rather, Fox’s definition identifies SRAS as the complete absence of government involvement in religion, be it positive or negative, and as such more accurately defines the relations one would expect to see if these institutions were wholly autonomous, as in a functionally differentiated society. Using the recently created second wave of the Religion and Society (RAS2) dataset, Fox (2015) operationalizes this definition using a vast number items (110 in total) on state religion policy. These policies can be subsumed under the following three categories: support for religion; regulation, restriction, and control of religion; and/or religious discrimination. Of the 177 countries studied by Fox, only one country, South Africa, did not engage in any of these policies, and can be categorised as full SRAS. Furthermore, there has been a general increase in most countries between 1990 and 2008, rather than the decrease one would expect with increasing differentiation, in the number religion policies worldwide. The scores on each aspect of Fox’s (2015) index, as well as the total index score, for 1990, 1999, and 2008 are detailed in tables 3-34 to 3-37 below.

Other related indices include the Religious Freedom Index developed by Norris and Inglehart (2004), which was based on Chaves and Cann’s (1992) initial religious regulation index; Grim and Finke’s (2006) Government Regulation, Government Favouritism, and Social Regulation indices. Other notable scales are Robbers’ (1996) separation scale, Barbier’s (1995) laicism scale and Messner’s (1999) openness scale, all of which are summarized by Minkenberg (2011), and distilled into his own scale of state-church fusion vs. separation, regulation vs. deregulation. None of these indices however, offer the same breadth of cross-national and cross-time comparability as that of Fox (2006, 2015). Minkenberg (2011) does however show that there is considerable accord between his own scale and that of Fox (2006), and these scales are useful in relating scores on Fox’s index back to the more concrete typologies of Minkenberg and others.

Table 3-34: Religion Policy: Discrimination

Religion Policy: Discrimination	1990	1999	2008
Belgium	9.00	13.00	16.00
Denmark	4.00	4.00	6.00
France	9.00	13.00	15.00
Germany	19.00	19.00	22.00
Iceland	4.00	4.00	4.00
Ireland	0.00	0.00	0.00
Italy	3.00	4.00	5.00
Malta	0.00	0.00	1.00
Netherlands	1.00	1.00	1.00
Norway	6.00	6.00	8.00
Poland	5.00	5.00	8.00
Portugal	0.00	0.00	0.00
Slovakia	7.00	7.00	3.00
Spain	5.00	7.00	7.00
Sweden	5.00	8.00	10.00
UK	3.00	3.00	4.00

Table 3-35: Religion Policy: Regulation

Religion Policy: Regulation	1990	1999	2008
Belgium	2.00	2.00	2.00
Denmark	2.00	2.00	2.00
France	6.00	6.00	10.00
Germany	9.00	9.00	9.00
Iceland	4.00	3.00	2.00
Ireland	2.00	2.00	2.00
Italy	2.00	2.00	2.00
Malta	0.00	0.00	0.00
Netherlands	3.00	3.00	3.00
Norway	4.00	4.00	4.00
Poland	3.00	3.00	3.00
Portugal	3.00	3.00	3.00
Slovakia	1.00	1.00	1.00
Spain	0.00	0.00	2.00
Sweden	8.00	11.00	5.00
UK	6.00	6.00	10.00

Table 3-36: Religion Policy: Legislation

Religion Policy: Legislation	1990	1999	2008
Belgium	8.00	8.00	8.00
Denmark	12.00	12.00	12.00
France	7.00	7.00	7.00
Germany	11.00	11.00	12.00
Iceland	9.00	9.00	9.00
Ireland	7.00	7.00	7.00
Italy	5.00	6.00	6.00
Malta	5.00	6.00	6.00
Netherlands	4.00	4.00	4.00
Norway	10.00	10.00	10.00
Poland	6.00	8.00	8.00
Portugal	5.00	5.00	5.00
Slovakia	10.00	10.00	12.00
Spain	10.00	10.00	10.00
Sweden	13.00	13.00	11.00
UK	11.00	10.00	11.00

Table 3-37: Religion Policy: Total

Total Religion Policy	1990	1999	2008
Belgium	19.00	23.00	26.00
Denmark	18.00	18.00	20.00
France	22.00	26.00	32.00
Germany	39.00	39.00	43.00
Iceland	17.00	16.00	15.00
Ireland	9.00	9.00	9.00
Italy	10.00	12.00	13.00
Malta	5.00	6.00	7.00
Netherlands	8.00	8.00	8.00
Norway	20.00	20.00	22.00
Poland	14.00	16.00	19.00
Slovakia	18.00	18.00	16.00
Spain	15.00	17.00	19.00
Sweden	26.00	32.00	26.00
UK	20.00	19.00	25.00

3.4.7.3 *Religious Context*

The first aspect of the religious context of a society is the degree of denominational pluralism. Beckford (2003) distinguishes this as religious diversity, as opposed to ‘pluralism’. Alesina *et al.* (2003) and Norris and Inglehart (2004, p.43) refer to it as religious “fractionalization”, but pluralism is the term most often used for the concept (see Chaves and Gorski (2001) for a review of research relating pluralism and religious participation). The Herfindahl index, a measure initially used to measure market concentration, is the ubiquitous operationalization of religious pluralism or diversity in relevant studies (Voas *et al.* 2002). The degree of denominational pluralism is calculated as one minus the Herfindahl index of the market share of denominations. The index represents the probability that two randomly selected individuals in a society will belong to the same religious denomination (Norris and Inglehart 2004). The Herfindahl index of a society (H_j) is calculated as the sum of the squared proportions of the denominations present in a society ($\sum p_i^2$), according to the formula:

$$H_j = 1 - \sum p_i^2$$

The index is calculated using the EVS item asking respondents to which religious denomination do they belong (for useful example of calculation of the index for denominational pluralism see Norris and Inglehart (2004, p.269). The scale ranges from zero to one, with high levels of pluralism approaching one, and a total monopoly of a single denomination equalling zero. The scores on the index, sorted according to lowest levels of pluralism in 1981, are presented in table 3-38. When the scores are calculated the majority of countries, with the exception of Britain, Northern Ireland, Germany and the Netherlands, have low levels of denominational pluralism.

Table 3-38: Denominational Pluralism (Herfindahl) Index

	1981	1990	1999	2008
Malta	0.008547	0.010376	0.018105	0.032536
Italy	0.014183	0.034618	0.014606	0.026035
Spain ^a	0.02455	0.019163	0.028204	0.387601
Iceland	0.04911	0.067927	0.093235	0.218873
Poland	0.053722	0.053722	0.032165	0.041472
Denmark	0.069929	0.050062	0.062471	0.049193
Ireland	0.071518	0.061152	0.079911	0.105541
France	0.085666	0.115959	0.155982	0.243099
Sweden	0.091718	0.129217	0.145742	0.167219
Belgium	0.100438	0.063424	0.174449	0.199245
Norway	0.117923	0.090486	0.141193	0.191901
Slovakia	0.310594	0.310594	0.284529	0.200497
Great Britain	0.42516	0.480951	0.520126	0.535813
Germany	0.510286	0.508891	0.567485	0.561772
Netherlands	0.624573	0.594888	0.668706	0.668943
Northern Ireland	0.683037	0.668074	0.640863	0.558842

a. Spain exhibits an abnormally large increase in pluralism in 2008, a result of a large proportion of ‘other’ denomination being recorded.

The second aspect of national religious context is the level of religiosity of a society. The simplest conceptualisation and operationalization, that is used in many studies (e.g. Gelissen 2003), is the aggregate level of religiosity in a society. The most conceptually robust version of this theorisation is that of high aggregate levels of religiosity conceptualised as a social context that is supportive to religion – one’s potential or actual pool of friends, partners, co-workers etc. is more likely to be religious. Therefore the individual therein is more likely to become or remain religious, or be influenced by religious peers (Kelley and Graaf 1997). And naturally, the contrary will be apply to societies with low aggregate levels of religiosity. Although Kelley and Graaf (1997) operationalize this in terms of aggregate levels of belief, it seems equally reasonable to be able to operationalize this in terms of denomination, practice, and other composites of religiosity (for example Scheepers *et al.* (2002) measure of national religiosity). The more conceptually fragile version of this theorisation is that aggregate levels of religiosity reflect the degree of secularization in a society (e.g. Halman *et al.* 1999). This is a convenient operationalization of secularization but a theoretically weak one. While

one would expect that in a society where aggregate levels of religiosity are/were high or low that the institutions of society would reflect this to an extent, the credible prospect of a secular society with a religious population makes this theorisation somewhat unsound. The variable is operationalized in this analysis as the proportion of the population of a society who never attend religious services. These proportions, taken from the pooled EVS data, are detailed in table 3-39.

Table 3-39: Proportion who never attend religious services

	1981	1990	1999	2008
Malta	3.9%	4.8%	4.2%	8.5%
Ireland	4.4%	3.7%	9.4%	15.3%
Northern Ireland	11.5%	13.2%	19.8%	25.8%
Italy	21.3%	15.2%	13.9%	15.8%
Germany	22.1%	25.0%	28.8%	35.3%
Spain	25.2%	28.7%	31.5%	49.9%
Norway	34.7%	40.1%		40.4%
Belgium	35.5%	43.9%	46.5%	51.2%
Sweden	37.6%	48.8%	45.6%	56.2%
Iceland	38.3%	33.0%	32.3%	38.5%
Netherlands	42.6%	42.9%	48.3%	46.5%
Denmark	42.7%	43.9%	42.7%	33.2%
Great Britain	47.3%	46.2%	55.8%	56.5%
France	56.9%	52.1%	60.3%	60.6%
Poland		3.5%	5.2%	5.9%
Slovak Republic		26.8%	23.1%	25.2%

3.5 Theoretical and operational definitions and linkages

3.5.1 Hypothesis 1

Those belonging to a religious denomination will be more conservative than those who do not. Those who do not belong to a religious denomination will be more liberal than those who do.

H1 IV Concept Definition: Denominational Belonging: Belonging to a religious denomination is conceptualised as declaring membership of a religious denomination. It is recognized that this may encompass a wide variety of senses and consequences of ‘belonging’ on the part of the member, from a nominal declaration of membership to active involvement in the church that guides their everyday life (see, for example, Inglis 2007a).

DV1-DV9 Concept Definition: *Values* are latent constructs – they are not directly observable but can be detected as a patterning or constraint among attitudes or inferred through observation of patterned behaviour.²⁴ They determine²⁵ or influence²⁶ behaviour, as guiding images of social action²⁷, designating some actions as good or bad, desirable or undesirable, acceptable or unacceptable, as moral judgements about the rightness or wrongness of certain actions. They exist as guiding images at the level of individual cognition – as a part of cognitive system (the focus of social-psychological conceptualizations of values such as Rokeach (1973, 1969b, 1969a) and Schwartz (2007, 1995, 1992, 1987)), but more importantly at the level of collectivities – groups, communities and societies to which the individual belongs – it is from participation in collectivities that individuals come to have specific values. The shared values of a group/society are one of the primary

²⁴ While still latent, values may be expressed in art, architecture etc. and not just attitudes (although these expressions might fall under the rubric of behaviour). Martin (1985) attempts to map the values of Protestants and Catholic societies in this way.

²⁵ Situational factors, such as material limitations, will always shape individual behaviour, and it is seldom possible for individuals/ groups/ societies to entirely fulfil their values (Gundelach 1992).

²⁶ “Values are not about action as such but, rather, abstract principles with which action is to conform; concepts of purposes or ends to be realized in determining course of action, rather than determinate principles of action” (van Deth and Scarbrough 1995, p.30)

²⁷ “Sometimes such [moral] judgements are made by isolated individuals standing in opposition to their own society. Most of the time, however, these judgements are collective, that is, held in common by most member of a particular group or society” Berger, P. L. and Berger, B. (1972) *Sociology: A Biographical Approach*, New York: Basic Books.

constituents of its culture (along with other phenomena such as language and beliefs). The social context of values is of particular importance, and while some values may have a degree of trans-situationality, individuals will possess a collection of values with each according to a particular social setting, such as work or the family. Values also differ in their level of generality, from universal values at the most general, to societal values, to situational values, to attitudes at a lower conceptual level.

DV1 Concept Definition - Personal Morality: An orientation concerned with behaviours in the private lives of individuals. Being liberal in terms of personal morality implies self-determination and personal choice should guide behaviour, conservatism implies moral codes and regulation should guide behaviour.

DV2 Concept Definition: -Civic Morals: An orientation towards actions that emphasize personal interests or gain to the detriment of civic or social interests. Being liberal in terms of civic morality implies actions should be guided by personal interests, being conservative implies actions should be guided by social interests.

DV3 Concept Definition - State vs. Personal Responsibility: An orientation that emphasizes personal versus state responsibility in the socioeconomic domain. Being conservative indicates personal responsibility is important, being liberal indicates personal responsibility being important.

DV4 Concept Definition - Materialism/Postmaterialism: An orientation that emphasizes self-expression, quality of life, and subjective well-being (postmaterialism) versus economic and physical security (materialism).

DV5 Concept Definition - Intrinsic Work Values: An orientation that emphasizes the importance material security and welfare in the domain of work. Emphasizing the importance of these qualities implies a more traditional orientation.

DV6 Concept Definition - Extrinsic Work Values: An orientation that emphasizes the importance non-material aspects of work, particularly autonomy and personal development. Emphasizing the importance of these qualities implies a less traditional orientation.

DV7 Concept Definition - Marriage Values of Cultural Homogeneity: An orientation that emphasizes the importance of shared social, religious and political characteristics to a successful marriage. Emphasizing the importance of these qualities implies a conservative or traditional orientation, de-emphasizing these qualities implies a more liberal orientation.

DV8 Concept Definition - Marriage Values of Material Conditions: An orientation that emphasizes the importance of material conditions to a successful marriage. Emphasizing the importance of these qualities implies a conservative or traditional orientation, de-emphasizing these qualities implies a more liberal orientation.

DV9 Concept Definition - Traditional Family Pattern: An orientation regarding the importance of the traditional family model of a marriage and children.

H1 Theoretical Linkage: Denominational belonging, unsubstantiated by other dimensions of religiosity, is expected to have a small but significant effect on values, in that it will differentiate individuals from those who have either had a secular background, or have renounced any denominational affiliation they had. As such, it is theorised that those who belong to a religious denomination will be moderately influenced by the teachings of religious organizations and by religious communities.

H1 Operational Definition: Denominational Belonging: A dichotomous variable of whether an individual currently belongs to a religious denomination.

H1 Operational Linkage: Denomination-Values: Those that belong to a religious denomination will have significantly more conservative or traditional values than those who do not belong to a religious denomination. Independent samples *t*-tests are conducted to test this hypothesis where the assumption of homogeneity of variances is met. Where the assumption of homogeneity of variances is not met, the modified or Welch's *t*-test are conducted. Chi-square tests of association are conducted to test the hypothesis in relation to materialism and postmaterialism. Analyses are conducted using IBM SPSS Statistics (Version 22.0).

3.5.2 Hypothesis 2

The more religious individuals are on the belief dimension of religiosity the more conservative or traditional they will be on each set of values, the less religious the more liberal.

H2 IV Concept Definition: Religious belief dimension of religiosity: Principally, the acceptance veracity of an existence of a reality beyond one's ordinary life. (Singular theological belief(s)). Secondly, the aspect of the belief dimension that entails the acceptance of a series of propositions about the nature of reality beyond the ordinary, systematized by theological specialists and religious organizations. Here, it is not simply belief in single propositions, but accepting the veracity of a set of theological propositions (systematized theological belief system). While there may be many systems of beliefs from which the individual can draw, acceptance or non-acceptance of the dominant Christian tradition is the focus here. Thirdly, there is the aspect of the belief dimension that reflects the strength or importance of these beliefs - in one way how it approaches the level of faith- rather than simply accepting the veracity of propositions. While faith is something of a *sui generis* concept, the subjective importance individuals attach to their beliefs approximates the concept.

H2 Theoretical Linkage: Belief Dimension: The religious belief dimension and values in different domains are theorised as idea-elements (values, attitudes, beliefs) within a belief system, between which there are varying levels of constraint or interdependence. The source of this constraint between religious beliefs and values is theorised to be principally at the level of religious organizations and specialists. Holding no beliefs, singular beliefs, or high level of systematised beliefs, coupled with the importance individuals attached to such beliefs is therefore theorised to reflect the degree to which individuals reject, are indifferent to, or accept the teachings of religious organizations/specialists in relation to the religious sphere in the first instance, and other spheres of life in the second. This encompasses specific proscriptions and teachings of the church in relation to the morality and the family, but may also encompass general principles that apply to other domains.

H2 IV Operational Definition: Religious belief dimension of religiosity: A composite scale of whether one believes in god, life after death, heaven, hell, sin, and the importance of god in one's life.

H2 Operational Linkage: Belief dimension-Values: A strong positive correlation between religious belief dimension and conservatism or traditionalism. Pearson product-moment correlations are calculated to test whether the more religious individuals are on the belief dimension the more conservative they are in values. Where the scale on which the values are operationalized is considerably different from an interval scale, Spearman rank-order correlations are calculated on these ordinal scales. Analyses are conducted using IBM SPSS Statistics (Version 22.0).

3.5.3 Hypothesis 3

The more religious individuals are on the organizational dimension (or the more positive attitudes towards the church) the more conservative or traditional they will be on each set of values, the less religious the more liberal.

H3 IV Concept Definition: Organizational dimension of religiosity: The degree to which an individual approves or disapproves of the conduct of religious organizations (whether they express confidence in the church, and whether they believe the churches are adequately performing their role in relation to the family, morality and spirituality).

H3 Theoretical Linkage: Organizational Dimension: Having high levels of approval or disapproval for the institutional church will reflect the degree to which individuals are more likely to accept or reject the proscriptions of religious organizations which individuals reject, are indifferent to, or accept the teachings of religious organizations/specialists in relation to the religious sphere in the first instance, and potentially other spheres of life in the second. Additionally, rejecting certain proscriptions of religious organizations will influence the degree to which individuals approve or disapprove of them. For example, one might reject the Catholic Church's proscriptions on abortion, and then come to hold a negative view of the church. It is therefore likely that there will be a degree of reciprocity in the relationship between the two.

H3 IV Operational Definition: Organizational dimension of religiosity: Composite scales of confidence in the church, and whether the church is providing answers to the problems of family life, moral problems, and spiritual needs.

H3 Operational Linkage: Organization-Values: A strong positive correlation between the organizational dimension and conservatism or traditionalism. Where the scale with which the values are operationalized is considerably different from an interval scale, Spearman rank-order correlations are calculated on these ordinal scales. Analyses are conducted using IBM SPSS Statistics (Version 22.0).

3.5.4 Hypothesis 4

The more regularly individuals engage in religious practice, the more conservative or traditional they will be on each set of values, the less the more liberal.

H4 IV Concept Definition - Religious Practice: Religious practice is defined as the “the set of rites, formal religious acts, and sacred practices which all religions expect their adherents to perform” (Stark and Glock 1968, p.15). It is expected that the practice dimension will be reflective of the previous dimensions. How often they attend religious service will likely be related to their approval or disapproval of the church, and the how often they attend will be indicative of the degree to which individuals demonstrate and substantiate their religious beliefs and denominational belonging. Most importantly, the distinctive aspect of the practice dimension is that it denotes a social aspect, that of participation in a religious community.

H4 Theoretical Linkage - Practice Dimension: Two aspects of the practice dimension are theorised to have an effect on values - first participation in religious services is theorised to reflect the degree to which individual reject or accept the teachings of a religious organization, as participation is something that religious organizations expect their members to perform. Second, the collective aspect of practice involves participating in a religious and moral community that promotes and sustains beliefs and values (Gill 1999). Gill (1999) for example, argues that churchgoing communities form a distinctive culture, and participation in these communities reinforces distinctive beliefs and values. Taken together, regularly interacting with religious peers and participating in religious services mediated by a religious organization are theorised to have a strong conservatizing effect on values.

H4 IV Operational Definition- Religious Practice: A seven point scale of self-reported frequency of attendance at religious services. The attendance at religious services variable is further split into three categories: monthly or more regular attendance (regular practice); less than monthly attendance (irregular practice); and never attend (never practise).

H4 Operational Linkage - Practice-Values: Those who attend religious services regularly will be significantly more conservative or traditional than those who never attend. Those who attend religious services regularly will be significantly more conservative or traditional than those who attend irregularly. Those who attend

irregularly will be significantly more conservative or traditional than those who never attend. A one-way analysis of variance (ANOVA) is carried out to test whether there are global differences in values between attendance groups. Where the assumption of homogeneity of variances between the different practice groups is not met, the modified and Welch ANOVA is conducted. To test whether there are differences between each group, post-hoc analyses are carried out, specifically Tukey's post-hoc tests where the assumption of homogeneity of variance is met, and Games-Howell post-hoc tests where the assumption of homogeneity of variance is not met. Chi-square tests of association are conducted to test the hypothesis in relation to materialism and postmaterialism. Analyses are conducted using IBM SPSS Statistics (Version 22.0).

3.5.5 Hypothesis 5

Socio-demographic characteristics of individuals will affect how religious they are on each dimension.

- a) Older people will be more religious than younger people (or the older a person is the more religious they will be, the younger the less religious). As a birth cohort grows older their level of religiosity will stay the same (i.e. a cohort rather than ‘ageing’ effect).
- b) Females will be more religious than males
- c) Those with lower levels of education will be more religious than those with higher levels of education (or the more highly educated a person is the less religious they will be, the less educated the less religious).
- d) Those who are not in employment will be more religious than those who are in employment.
- e) Those who live in rural areas will be more religious than those who live in urban areas.

H5 Religiosity – Sociodemographic (a-e) Theoretical Linkages: The very general theoretical linkage between these sociodemographic variables and the two dimensions of religiosity is that each of these reflect the degree to which individuals have been exposed or protected from the ‘secularising’ effects of modern society (Hardiman and Whelan 1998). ‘Secularising’ meaning those aspects of modern society that are not conducive, or are hostile, to an individual being socialized in the religious beliefs and practices, and values, of the religious sphere in a society. The details of this general linkage, and any qualifications to it, are specified in relation to each variable below.

(a) Older people will be more religious than younger people (or the older a person is the more religious they will be, the younger the less religious). As a birth cohort grows older their level of religiosity will stay the same (i.e. a cohort rather than ‘ageing’ effect). The relationship between age and religiosity, where the older are more religious and the younger less religious, is one that is universally found in developed societies (De Vaus and McAllister 1987, Voas and McAndrew 2012). The primary theoretical connection linking age and religiosity is one of each

successive generation being less religious than the previous (a cohort effect), with an increasing body of evidence suggesting it is not because of individuals becoming more religious as they grow older (Voas and McAndrew 2012).²⁸ An additional (life-cycle) effect may be that as individuals age they come to occupy different roles in their lives, in relation to the family or work for example, and this alters their values, beliefs and practices (Botvar 2005). The birth of a child might encourage parents to take part in religious services for example (van Meerbeeck 1995). This linkage is tenuous however, as it seems as likely that individuals would come to occupy roles that would push them away from religion as much as those that might pull them towards it. The third linkage between age and religiosity is one of period effects – where the experiences of a certain generation identify them, or those generations that precede or follow them, as markedly different (e.g. post-war generation). As any period effects would have an effect on all cohorts equally in that period (if there are no interactions with other variables, such as only affecting women), any linkages are better theorised in relation to the changing effects of other variables, rather than directly with age.

(b) Females will be more religious than males. The linkage between gender and religiosity, where women tend to be more religious than men, is “one of the most consistent findings in the sociology of religion” (De Vaus and McAllister 1987, p.472). The “gender gap” in religiosity is apparent in “nearly all places and periods”, and is evident in European Christianity in relation to every aspect of religiosity – denominational belonging, belief, and attendance (Voas and McAndrew 2012, p.31). The primary sociological linkage between gender and religiosity is one of the differential socialization and structural location of males and females. The most important aspect of this linkage is the differential participation of men and women in the workforce (De Vaus and McAllister 1987). De Vaus and McAllister (1987) for example, found that women in the workforce were less religious than those who were not, and that women in the workforce had a broadly similar religious orientation to their male colleagues.

(c) The straightforward theoretical linkage between education and religiosity is that the longer individuals are exposed to the education system, the less religious

²⁸ Voas and McAndrew’s findings are on the British case, but it seems safe to assume Britain is not atypical in this regard.

they are (Scheepers *et al.* 2002). Of most importance is the difference between those who pursue higher education and those who do not (Albrecht and Heaton 1984). Several aspects of higher education are theorised to have a negative impact on religiosity. Firstly, higher education usually involves leaving the confines of the family and local community, important sources of religious reinforcement (Caplovitz and Sherrow 1977). The second aspect of higher education that leads to a decline in religiosity is the role of intellectualism and rationalism. This aspect is contested, but it is theorised that the emphasis on technical expertise and scientific reasoning in higher education is incompatible with a religious worldview (Albrecht and Heaton 1984), or at least makes individuals more sceptical and open to other worldviews. Moreover, the exposure to new and different ideas in higher education is also theorised to challenge fundamentalist and orthodox religious positions (Albrecht and Heaton 1984).

Education is however, more complex in its relation to religiosity. Firstly, education appears to have a differential effect on the different dimensions of religiosity. The belief dimension is generally negatively related to level of education, while attendance is generally positively related to level of education (Voas and McAndrew 2012). The belief/attendance contrast stems from the relation between level of education and civic participation – the educated middle class tend to be highly active in community activity, including churchgoing. The same educated middle class are likely to have taken a reflective position on their religious beliefs, and more often than those with lower levels of education (who are more likely to exhibit “unreflective theism”), adopt an atheistic/agnostic/other stance (Voas and McAndrew 2012, p.37). In relation to the organizational dimension, one would also expect this educated group would exhibit a reflective and sceptical view of religious authority, and therefore display a relatively negative orientation towards the church.

Secondly, the effect of education on religiosity varies according to characteristics of the educational system itself. The effect of education differs according to the extent to which the educational system is controlled or influenced by the religious sphere (Jagodzinski and Dobbelaere 1995a); and the extent to which education (higher education particularly) has become massified (Voas and McAndrew 2012). Thus, in societies where the educational system is (or was) controlled by religious denominations, the negative effect of education on religiosity

will not be weakened. And in societies where the religious sphere has long lost its influence over the education system, the negative effect will prevail. In relation to the massification of higher education, as more and more of the general populace reach the upper tier of the education system, the (un)religious distinctiveness of the educated elite begins to fade. That is not to say that high levels of education no longer have an effect on religiosity, but that as more and more of the populace are highly educated, higher education ceases to be a distinguishing marker of a disproportionately unreligious elite (Voas and McAndrew 2012).

(d) Those who live are in employment will be less religious than those who are not. The linkage between religiosity and employment is twofold. First, employment in certain professions is theorised to have a similar effect to the emphasis on technical and scientific reasoning in education. Many jobs in modern industrial and post-industrial societies require technical expertise, the application of scientific knowledge, and economic reasoning. These can all be subsumed under the more general concept of modern forms of employment being pervaded by occidental rationality (Jagodzinski and Dobbelaere 1995a). It is theorised that spending one's daily life in a role pervaded by this occidental rationality will weaken the plausibility of religious beliefs. The second aspect of the linkage between employment and religiosity is that of material security. Simply stated, those who are materially insecure (which it is assumed many unemployed individuals will be) turn to religion for salvation from, and compensation for, insecurity. And those who are materially secure no longer need religion and are more likely to dispense with it (Norris and Inglehart 2004).

(e) Those who live in rural areas will be more religious than those who live in urban areas. Each of the factors concerning the religiosity –urban/rural linkage have been covered to an extent in relation to the previous hypotheses (age, employment). Those who live in rural areas belong to closer knit, more homogenous communities, generally with older inhabitants involved in more traditional forms of work. Those who live in urban areas will live in more heterogeneous areas, with a younger population, and more people involved in modern forms of work. Living in these communities therefore, urban residents are more exposed to secular and dissimilar worldviews, whereas rural residents are more insulated and shielded from these secularising influences.

H5 Religiosity – Sociodemographic (a-e) Operational Linkages:

(a) (i) There will be a strong positive relationship between age and religiosity. (ii) Each successive (elder) birth cohort will have significantly higher levels of religiosity than more recent cohorts. (iii) When controls for birth cohort are introduced, the effect of age on religiosity will become statistically non-significant.

(b) (i) Women will have significantly higher levels of religiosity than men. (ii) Controlling for workforce participation, differences in religiosity between males and females will be diminished but not insignificant.

(c) (i) Those with who completed their education at age 21 or over will have significantly lower levels of religiosity on the belief and organizational dimension than those who completed their education at an earlier age.

(d) (i) Those who are in employment (or retired) will have significantly lower levels of religiosity than other employment categories (particularly in relation to the belief dimension).

(e) Those who live in rural areas will have significantly higher levels of religiosity than those who live in urban areas.

The hypotheses are tested using linear regression analyses, with the belief and organizational dimensions as dependent variables, and sociodemographic variables as independent variables. All analyses are conducted using IBM SPSS Statistics (Version 22.0).

3.5.6 Hypothesis 6

Socio-demographic characteristics of individuals will affect their individual's values in each domain.

- a) Older people will be more conservative than younger people. As a birth cohort grows older their level of conservatism will stay the same (i.e. a cohort rather than 'ageing' effect).
- b) Females will be more conservative than males.
- c) Those with lower levels of education will be more conservative than those with higher levels of education.
- d) Those who are not in employment will be more conservative than those who are in employment.
- e) Those who live in rural areas will be more conservative than those who live in urban areas.

H6 Values (DV1-DV8) – Sociodemographic (a-e) Theoretical Linkage:

(a) Older people will be more conservative or traditional than younger people and as a birth cohort grows older their level of conservatism or traditionalism will stay the same (i.e. a cohort rather than 'ageing' effect). Fahey *et al.* (2005, p.126) describe the relationship where the old are more conservative and the young more liberal "an almost invariant finding of social research on values and attitudes". They maintain that it is difficult to determine whether this is the result of an ageing or life-cycle effect, or that of a cohort effect. The available evidence however shows that it is predominantly a cohort effect that accounts for the relationship between age and values, and that any changes within cohorts is towards more liberal rather than conservative views as cohorts grow older (Danigelis and Cutler 2007).

(b) Females will be more conservative or traditional than males: Owing to different socialization experiences of males and females, and particularly the different roles they tend to occupy (the familial and child-rearing role of women or the predominance of males in the workforce for example), differences in values between men and women are probable across all value domains, with women tending towards conservatism and men towards more liberal values. In much the same way

as religiosity however, it is expected that with increased female participation in the workforce and changing sex roles, this ‘gender gap’ in values might be reduced, particularly more recently, and particularly among the younger generations (Inglehart 2000).

c) Those with lower levels of education will be more conservative or traditional than those with higher levels of education. One of the most consistent findings in relation to values is that well-educated people are more liberal and less educated more conservative (Scheepers *et al.* 2002, Weil 1985). As a form of socialization, education has historically transmitted liberal and egalitarian values, and the longer an individual is exposed to education the more they absorb them (Van Deth 1995) (Kalmijn and Kraaykamp 2007). Furthermore, education encourages a degree of competence in social and political issues, promoting a scepticism of institutions and the status quo (Döring 1992), as well as broadening their perspective, reducing intolerance and supporting “new values” (Kalmijn and Kraaykamp 2007, p.549) .

d) Those who are not in employment will be more conservative than those who are in employment: The linkage between employment and values is interwoven with many of the previous linkages – employed people being generally younger, better educated, and male. Evidence suggests however that the largest difference in values are between different classes within employment, particularly workers in the agricultural sector versus those who are not (Kalmijn and Kraaykamp 2007).

e) Those who live in rural areas will be more conservative than those who live in urban areas: The linkage between rural versus urban location and values is similar to the linkage with religiosity. Those who live in rural areas belong to closer knit, more homogenous communities, generally with older inhabitants involved in more traditional forms of work. Those who live in urban areas will live in more heterogeneous areas. Living in these communities therefore, urban residents are more exposed to dissimilar worldviews, whereas rural residents are more insulated.

H6 Values (DV1-DV8) – Sociodemographic (a-e) Operational Linkage:

(a) (i) There will be a strong positive relationship between age and conservative values (ii) Each successive (elder) birth cohort will be significantly more conservative than more recent cohorts. (iii) When controls for birth cohort are introduced, the effect of age on personal and civic morality will become statistically non-significant.

(b) (i) Females will be significantly more conservative or traditional than males. (ii) Controlling for workforce participation, differences in values between males and females will be diminished but not insignificant.

(c) Those with who completed their education at age 21 or over will be significantly more liberal or progressive than those who completed their education at an earlier age.

(d) Those who are in employment/retired will be significantly more conservative than those not in employment/retired.

(e) Those living in rural areas will be significantly more conservative or traditional than those living in urban areas.

The hypotheses are tested using linear regression analyses, with the personal and civic morality as dependent variables, and sociodemographic variables as independent variables. All analyses are conducted using IBM SPSS Statistics (Version 22.0).

3.5.7 Hypothesis 7

Those who belong to a denomination, have high levels of religiosity on the belief and organizational dimension, and who attend religious services regularly, will hold more conservative or traditional values, and this relationship will hold controlling for the effects of other sociodemographic variables.

H7 Theoretical Linkage: In an analysis that looks at the relationship between values and religiosity in isolation, it is recognised that the relationship will be affected by the degree to which the sociodemographic variables associated with religiosity are actually the reason for the relationship between religion and values. Taking into account the effect that sociodemographic variables of age, gender, education, employment, and urban-rural location have on both religiosity and values, it is theorised these variables will account for some, but not all of the relationship between religion and values. That is, religiosity will have an independent effect on values.

H7 Operational Linkage: When controls for sociodemographic variables are included in regression analyses, there will remain a weaker but still significantly positive relationship between each dimension of religiosity and conservative/traditional values in each domain. The hypotheses are tested using linear regression analyses, with the personal and civic morality as dependent variables, and religious and sociodemographic variables as independent variables. All analyses are conducted using IBM SPSS Statistics (Version 22.0).

3.5.8 Hypothesis 8

(a) The more modernized a society, the weaker the conservatizing effect of religiosity on values. The less modernized a society, the stronger the conservatizing effect of religiosity on values. (b) The more modernized a society, the less conservative the populace in terms of values.

H8 IV Concept Definition: Modernization is defined as the multifaceted process through which the economic, political, social and cultural systems of a society develop from those of traditional society. This entails several interrelated developments, particularly in the economic sphere (such as industrialization and the emergence to the market), which give rise to social structural changes in society. Of these structural change functional differentiation and rationalization are theorised to be of seminal importance. Functional differentiation is defined as the process whereby the institutional spheres of society become dissociated from each other, developing their own autonomous rationalities or logics related to their function (Smelser 1973, Eisenstadt 1964). Rationalization is the concomitant societal level process to functional differentiation, whereby institutions of society, including the religious one, develop their own autonomous rationalities specifically related to their function in society. Rationalization in the broader sense is more firmly rooted in industrialisation and the increasing complexity of society than purely in functional differentiation. It is principally in this sense that rationalization converges on the individual, but the growing pre-eminence of the autonomous spheres of science and economics have a role here too. The rise of bureaucracy, the application of technical and scientific knowledge in the workplace, the emergence of scientization and of sociologization, result in modern society being characterised by a pervasive economic and technical rationality (Dobbelaere 1999, 2002). Theorists such as Turner refer to this process as “hyperrationalization” – where the “rational calculation of costs and benefits comes to dominate a society as profit-oriented markets extend to virtually all spheres of life. Increased levels of impersonality, formality, technical specialization, and cost calculations all become essential features of social relations as bureaucratization prevails in economic and other arenas of social organization” (Turner 1997, p.40)

H8 Theoretical Linkages: (a)(i) Because of the decline in the over-arching authority of the religious sphere due to differentiation, religious outlooks become

compartmentalized from values in other domains. Moving between different spheres or sub-systems guided by their own autonomous values, religiosity becomes increasingly separate from values in other domains. (ii) The principal theoretical linkage between the macro process of rationalization and the individual relationship between religiosity and values lies in the concept of sociologization (Dobbelaere 1999, Tschannen 1991). Sociologization is where rational and scientific interpretations are applied to social life. An example would be looking to scientific expertise rather than the guidance of religious leaders in deciding whether or not abortion should be justified or legalized. With increased rationalization and sociologization, it is therefore expected that one's religiosity will become increasingly divorced from values in other spheres of life.

(b)(i) Because the religious sphere will no longer be able to control other spheres such as education, the media, or policy/law, the values espoused by religious organizations will become less prevalent amongst the populace. (ii) With social life increasingly guided by rational and scientific expertise, more of the population of society will have less conservative views.

H8 IV Operational Definition: Modernization is operationalized using three different variables: GDP, the Human Development Index, and the proportion of the workforce engaged in agriculture (the greater the proportion the lower the modernization, the lower the proportion the greater the modernization).

H8 Operational Linkage: (a) In the multilevel model of personal morality and civic morality there will be a negative interaction effect between high levels of religiosity on the belief and organizational dimensions and high levels of GDP and HDI of societies. There will be a positive interaction effect between high levels of religiosity on the belief and organizational dimensions and the proportion of individuals in a society who are employed in agriculture (AGRI). (b) In the multilevel model GDP and HDI will have a negative main effect on civic and personal morality. The proportion of individuals in a society who are employed in agriculture (AGRI) will have a positive main effect on civic and personal morality. Multilevel analyses are carried out using MLwiN (Rasbash *et al.* 2011).

3.5.9 Hypothesis 9

The less supportive the religious context of a society, the weaker the conservatizing effect of religiosity on values. The more supportive the religious context the stronger the conservatizing effect of religiosity on values.

H9 IV Concept Definition: Supportive religious context is defined as the degree to which a society is composed of highly religious and similarly religious individuals. It has two aspects, the degree of pluralism and national religiosity. It is conceptualised as ‘supportive’ or ‘unsupportive’ to religiosity in that the degree of pluralism reflects the proportion of individuals who will belong to the same religious denomination, and national religiosity reflects the degree to which an individual will have highly religious peers.

H9 Theoretical Linkages: In societies with a supportive religious context, individuals will be surrounded by more highly religious peers, and confronted less by people with different religious beliefs and worldviews. This will have a supportive and insulating effect. In societies with a less supportive religious context, individuals will be confronted more with people who are religiously dissimilar with dissimilar worldviews. This will have a relativizing and undermining effect. While primarily this signifies having similarly religious peers, it may also entail public discourse, public institutions, legal codes, and social norms being permeated by religious beliefs and values (Finke and Adamczyk 2008).

H9 IV Operational Definition: A less supportive religious context is operationalized as the degree to which there is a high level of pluralism in a society, measured by the Herfindahl index, and the degree to which there is a low level of national religiosity, measured by the proportion of individuals who never practise religion.

H9 Operational Linkage: In the multilevel model of personal morality and civic morality there will be a negative interaction effect between high levels of religiosity on the belief and organizational dimensions and a less supportive religious context (high pluralism, high never practise). Multilevel analyses are carried out using MLwiN (Rasbash *et al.* 2011).

3.5.10 Hypothesis 10

(a) The more modernised a society, and (b) the less supportive the religious context of a society, the lower the levels of religiosity on the belief dimension

H10 (a) Theoretical Linkage: The decline of the ability of the religious sphere to control the other spheres (e.g. educational sphere, the polity, the media) will limit and curb its ability to socialize individuals in their beliefs, practices and values. The negative causal chain between modernisation and belief is made up of what Berger refers to as “plausibility structures”, and the compartmentalization and privatisation of religiosity brought about by differentiation. With religious authority relegated to the private sphere, or at least diminished in its once encompassing authority over other spheres, the social base that supports the plausibility structure of a religious worldview becomes much smaller. Limited to voluntary religious associations and the private sphere, the plausibility structure that supports religious beliefs become much more tenuous and more easily abandoned. The accompanying process of rationalization correspondingly and further diminishes the plausibility structures of religious beliefs. As with differentiation, the diminishing social base of the religious sphere involved in each sphere now being rationally related to its function, diminishes the social base of the plausibility structure of religious beliefs. The accompanying processes of scientization and sociologization, where a scientific perspective comes to dominate other spheres of social life, further diminish the plausibility of religious beliefs.

H10 (b) Theoretical Linkage: Pluralism opens up the religious sphere to a variety of different and perhaps opposing religious beliefs, relativizing the implicit certitude of religious beliefs. Increased pluralism may also interact with differentiation, where confronted with a pluralistic populace, societal institutions are no longer justified in legitimating or endorsing any or particular religious beliefs and values. In societies with a supportive religious context, individuals will be surrounded by more similarly religious peers, and confronted less by people with different religious beliefs and worldviews. This will have a supportive and insulating effect.

H10 (a) Operational Linkage: In the multilevel model of the belief dimension, HDI will have a negative main effect on the belief dimension; and the proportion of

the workforce engaged in agriculture will have a positive main effect on the belief dimension.

H10 (b) Operational Linkage: In the multilevel model of the belief dimension, the degree of pluralism, measured via the Herfindahl index, will have a negative main effect on the belief dimension.

All multilevel analyses are carried out using MLwiN (Rasbash *et al.* 2011).

3.5.11 Hypothesis 11

(a) The more modernised a society, (b) the less supportive the religious context of a society, the lower the levels of religiosity on the organizational dimension.

H11 (a) Theoretical Linkage: The ability of the church to influence and socialize individuals will be curbed as a result of the religious sphere ceding control over the other institutional spheres. It is theorised there is more space for beliefs and values that are antithetical to those of the church to proliferate. As a result, more individuals will disagree, disapprove and reject the beliefs and values of the church. This will have the effect of disaffecting individuals from religious organizations. The related processes of socologization and scientization, involving scientific expertise superseding ecclesiastical authority in areas it once influenced, are theorised to also have a negative impact on orientations towards the religious organizations.

H11 (b) Theoretical Linkage: Pluralism entails numerous denominations present in the religious sphere of a society, relativizing the authority of any single church. Pluralism may also interact with differentiation, where confronted with a pluralistic populace, societal institutions can no longer give precedence to a single church. As with differentiation, it is theorised there will be more room for beliefs and values that are antithetical to those of each church to proliferate, and as a result, more individuals will disagree, disapprove and reject the beliefs and values of the church(es). This will have the effect of disaffecting individuals from religious organizations. In societies with a supportive religious context, individuals will be surrounded by more similarly religious peers, and confronted less by people with different religious beliefs and worldviews. This will have a supportive and insulating effect. In societies with a less supportive religious context, individuals will be confronted more with people who are religiously dissimilar with dissimilar worldviews. This will have a relativizing and undermining effect.

H11 (a) Operational Linkage: In the multilevel model of the organizational dimension, HDI will have a negative main effect on the belief dimension; the proportion of the workforce engaged in agriculture will have a positive main effect on the belief dimension.

H11 (b) Operational Linkage: In the multilevel model of the organizational dimension, the degree of pluralism, measured via the Herfindahl index, will have a negative main effect on the belief dimension.

All multilevel analyses are carried out using MLwiN (Rasbash *et al.* 2011).

3.5.12 Hypothesis 12

(a) The greater the separation of religion and state, the weaker the conservatizing effect of religiosity on values (b) The greater the separation of religion and state, the less conservative the populace in terms of values.

H12 IV Concept Definition: The degree of separation between the two institutional spheres of religion and the state/polity in a society, a specific instance of functional differentiation.

H12 Theoretical Linkage: (a) Because of the decline in the over-arching authority of the religious sphere due to differentiation, religious outlooks become compartmentalized from values in other domains. Moving between different spheres or sub-systems guided by their own autonomous values, religiosity becomes increasingly separate from values in other domains. (b) Because the religious sphere will no longer be able to control other spheres such as education, the media, or have an influence on policy/law, the values espoused by religious organizations will become less prevalent amongst the populace.

H12 IV Operational Definition: The Separation of Religion and State (SRAS) Index (SRAS of zero indicates total separation).

H12 Operational Linkage: (a) In the multilevel model of personal morality and civic morality there will be a negative interaction effect between high levels of religiosity on the belief and organizational dimensions and the SRAS of a society; (b) in the multilevel model, SRAS will have a negative main effect on civic and personal morality. Multilevel analyses are carried out using MLwiN (Rasbash et al. 2011).

4 Analysis

A series of statistical tests were conducted to analyse the relationship between each dimension of religiosity and values in a number of domains. These tests were carried out using the pooled data, and in each country and wave separately. The results of these tests are summarised below according to the hypotheses put forward in relation to each dimension of religiosity.

4.1 Hypothesis 1

Those belonging to a religious denomination will be more conservative than those who do not. Those who do not belong to a religious denomination will be more liberal than those who do.

The first hypothesis is that those belonging to a religious denomination will be more conservative than those who do not. To test this hypothesis in relation to seven of the eight values that serve as independent variables, an independent samples t-test is conducted, which compares the means on each of the values scales between those who belong to a denomination and those who do not belong to a denomination. Where the assumption of homogeneity of variances is not met in a particular test, as assessed by Levene's test for equality of variances (where $p < .05$), the results of the modified or Welch's t-test are used (as opposed to the student's t-test where the assumption of homogeneity of variances is met). The test is carried out on the pooled data of all selected countries and waves, and separately for each country and wave. To test the hypothesis in relation to materialism-postmaterialism, a chi-square test of association is conducted. Results of the pooled analysis and the analysis of countries and waves separately are detailed in the appendix.

The results of these tests suggest that those who belong to a religious denomination are significantly more conservative in terms of personal morality, civic morality, state vs. personal responsibility, materialism-postmaterialism, and marriage values of cultural homogeneity, and traditional family pattern values, evidenced by statistically significant differences in the majority of countries and waves. Some notable exceptions to these results are the non-significant differences in values between those

who belong and those who do not in some majority Protestant countries. In Denmark, Iceland, Norway and Sweden, there are no significant differences in marriage values of cultural homogeneity and in traditional family pattern values between those who belong and those who do not. There is little or no evidence to support the hypotheses that those who belong to a religious denomination are more conservative in terms of intrinsic work values, extrinsic work values, and marriage values of material conditions, with statistically significant differences in these values in only a small minority of countries and waves.

4.2 Hypothesis 2

The more religious individuals are on the belief dimension of religiosity the more conservative or traditional they will be on each set of values, the less religious the more liberal.

Pearson product-moment correlations are conducted to test whether the more religious individuals are on the belief dimension the more conservative they are in terms of values. Spearman rank-order correlations, a procedure suited to testing associations with ordinal variables, are also carried out where appropriate, but will be referred to only if there are substantial deviations in terms of direction, strength, or significance of the correlations obtained with the Pearson procedure. The procedures are carried out on the pooled sample of the selected countries in each wave, and on each country and wave separately. Results of the pooled analysis and the analysis of countries and waves separately are detailed in the appendix.

The results of the tests are supportive of the hypothesis that the more religious individuals are on the belief dimension, the more conservative they are, in relation to personal morality, civic morality, materialism-postmaterialism, marriage values of cultural homogeneity, and traditional family pattern values, evidenced by significant correlations in the hypothesised direction in majority of countries and waves. There is little or no evidence to support the hypotheses in relation to intrinsic work values, extrinsic work values, state vs. personal responsibility, and marriage values of material conditions, with statistically significant correlations between the belief dimension and these values in only a small minority of countries and waves. .

4.3 Hypothesis 3

The more religious individuals are on the organizational dimension the more conservative or traditional they will be on each set of values.

Pearson product-moment correlations are conducted to test whether the more religious individuals are on the organizational dimension the more conservative they are in terms of values. Spearman rank-order correlations, a procedure suited to testing associations with ordinal variables, are also carried out where appropriate, but will be referred to only if there are substantial deviations in terms of direction, strength, or significance of the correlations obtained with the Pearson procedure. The procedures are carried out on the pooled sample of the selected countries in each wave, and on each country and wave separately. Results of the pooled analysis and the analysis of countries and waves separately are detailed in the appendix.

The results of the tests are supportive of the hypothesis that the more religious individuals are on the organizational dimension, the more conservative they are, in relation to personal morality, civic morality, materialism-postmaterialism, marriage values of cultural homogeneity, and traditional family pattern values, evidenced by significant correlations in the hypothesised direction in majority of countries and waves. There is little or no evidence to support the hypotheses in relation to state vs. personal responsibility, intrinsic work values, extrinsic work values, and marriage values of material conditions, with statistically significant correlations between the belief dimension and these values in only a small minority of countries and waves.

4.4 Hypothesis 4

The more regularly individuals engage in religious practice, the more conservative or traditional they will be on each set of values, the less the more liberal.

To test whether the more regularly individuals engage in religious practice, the more conservative they are in terms of values, and a one way analysis of variance is carried out. The attendance at religious services variable is split into three categories: monthly or more regular attendance; less than monthly attendance; and never attend. The ANOVA is carried out for the pooled sample for each wave, and in each country and wave separately. Where the assumption of homogeneity of variances between the different practice groups is not met, as assessed by Levene's test for equality of variances (where $p < .05$), the results of the modified or Welch ANOVA are used. Where there are significant overall differences, pairwise comparisons between each group are carried out for the pooled sample. Where the assumption of homogeneity of variances between the practice groups is met, as assessed by Levene's test, Tukey's post-hoc tests are carried out, and where the assumption of homogeneity of variances between the groups is not met, Games-Howell post hoc tests are carried out. Results of the pooled analysis and the analysis of countries and waves separately are detailed in the appendix.

The results of the ANOVA, and Welch's ANOVA where appropriate, show overall differences in personal morality between the different attendance groups are statistically significant in relation to personal morality, civic morality, marriage values of cultural homogeneity, and traditional family values in the majority of countries and waves. In relation to state vs. personal responsibility, materialism-postmaterialism, intrinsic work values, extrinsic work values, and marriage values of material conditions, the results of the ANOVA offer no clear evidence supporting the hypotheses, with mixed results throughout the countries and waves.

4.5 Hypothesis 5:

Socio-demographic characteristics of individuals will affect how religious they are on each dimension.

4.5.1 DV1: Belief Dimension - Age Hypotheses

To test the hypothesis that older people will be more religious on the belief dimension than young people, and that that as a birth cohort grows older their religiosity on the belief dimension will stay the same, a scatterplot of mean levels of religiosity on the belief dimension by age is first presented (figure4-1).²⁹ As there is an extremely large number of cases in the pooled data, mean scores for each age in each wave are presented as points on the plot. The scatterplot shows a positive linear relationship between age and mean levels of religiosity on the belief dimension in all four waves. Next, a line graph shows mean levels on the belief dimension in each birth cohort using the data from all four waves of the Irish survey (figure 4-2).³⁰ Although one can make limited conclusions with the cross-sectional nature of the data, from the line graph it appears that, in Ireland, there are sizeable differences between the cohorts on the belief dimension, and that religiosity on the belief dimension does not appear to increase as cohorts grow older.

To test the hypothesis more thoroughly a linear regression is conducted with the belief dimension as the dependent variable with age, birth cohort, and survey wave as the independent variables (table 4-1). The regression of the belief dimension is first conducted with only age in the model. This is the first aspect of the hypothesis, and tests to what extent and significance does age predict levels of religiosity on the belief dimension. The second part of the model adds dummy variables for each birth cohort, with the most recent birth cohort used as the reference category, and tests to what extent and significance does belonging to a particular birth cohort make one more or less religious on the belief dimension than the most recent cohort, accounting for the effects of one's age. The final part of the model

²⁹ Ages range from 18 to 93, with those outside this range excluded as outliers (with less than 10 cases in each age category, and those aged 17 with 40 cases).

³⁰ The pooled data is not used for these analyses because it is only useful to look at cohort changes within countries.

introduces controls for the wave from which these individuals are drawn, 1981, 1990, or 1999, with the most recent wave as the reference category. The regression is carried using on the pooled sample of all selected countries with all waves included in the analysis.

The results from the first model indicate that age has a highly significant effect on one's religiosity on the belief dimension ($p < .001$). In the second model this effect becomes negligible and statistically non-significant with the introduction of birth cohort variables, each of which have highly statistically significant and progressively larger β -coefficients the earlier the cohort. That is, the birth cohort one belongs to, relative to belonging to the most recent birth cohort, has a statistically significant and positive effect on one's level of religiosity on the belief dimension, and this effect becomes more substantial the earlier the birth cohort. Furthermore, when the effect of one's birth cohort is taken into account, the effect of age on the belief dimension of religiosity ceases to be statistically significant. When controls for the survey wave are added in the third model, the size of the β -coefficients are reduced slightly in all cohorts, as is the level of significance of the effect of birth cohort ($p < .05$) but the general picture remains the same. The effect of each survey wave, relative to the most recent wave, are not statistically significant. In summary, there is strong evidence in the Irish data to support the hypotheses: older people will be more religious than younger people (or the older a person is the more religious they will be, the younger the less religious). As a birth cohort grows older their level of religiosity will stay the same (i.e. a cohort rather than 'ageing' effect).

Figure 4-1: H5 DV1: Mean Belief Dimension, Age, and EVS Wave Scatterplot

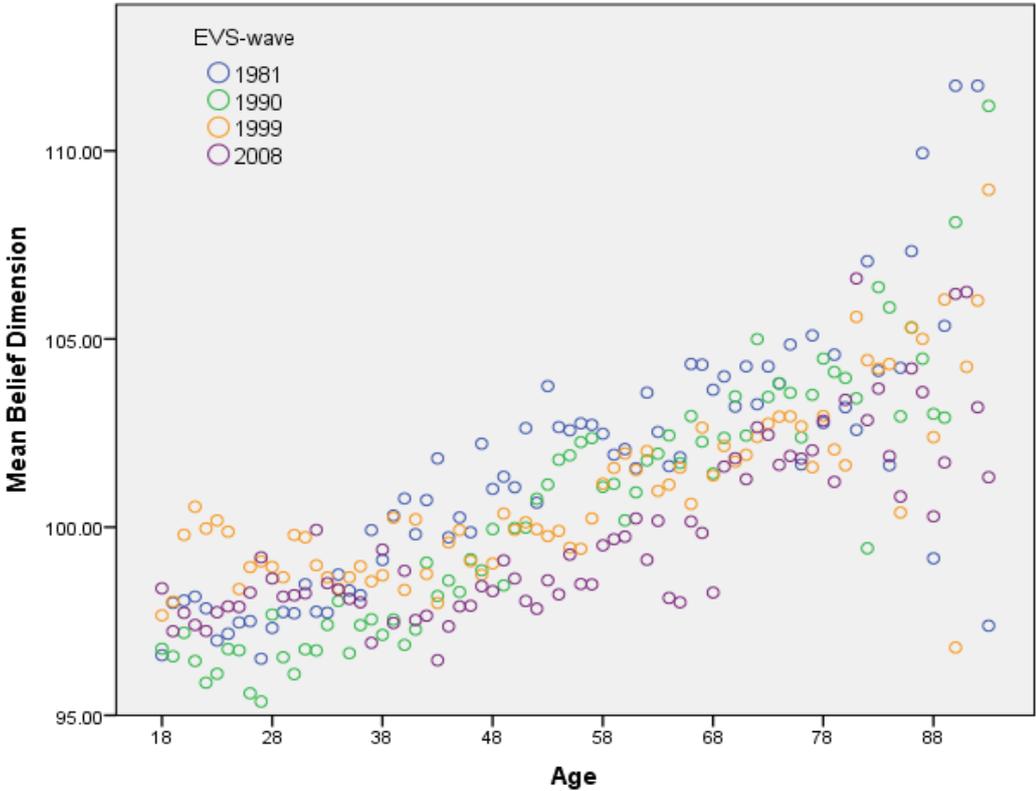


Figure 4-2: H5 DV1: Mean Belief Dimension of Cohort by EVS Wave: Line Graph

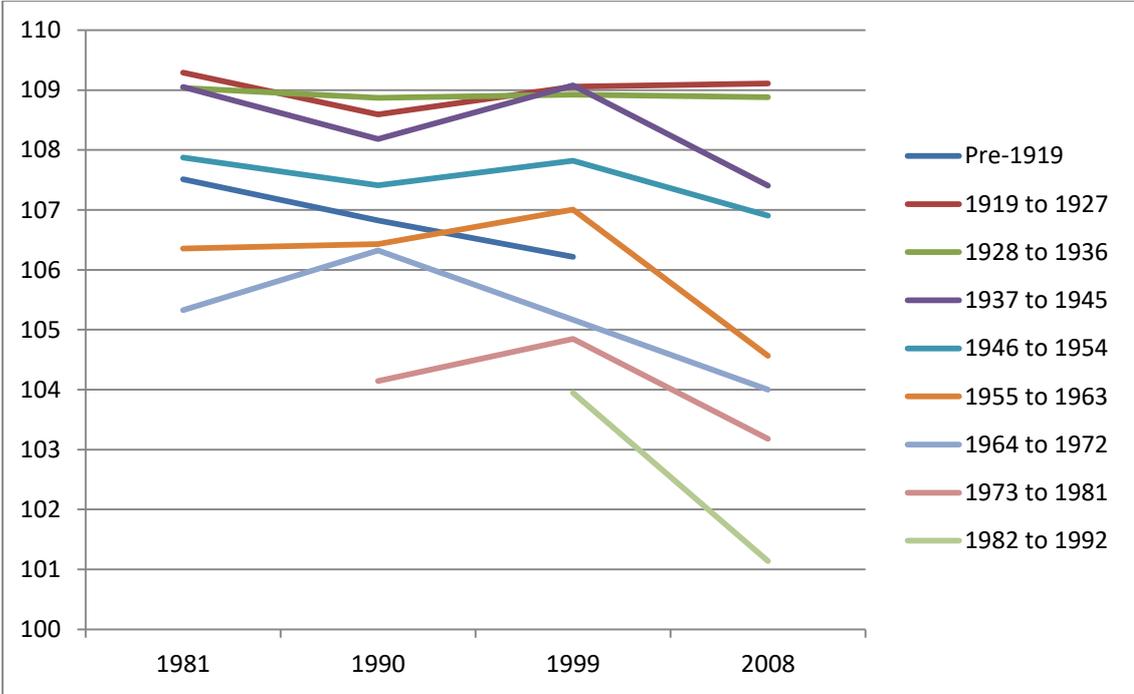


Table 4-1: H5 DV1 Regression Model of Belief Dimension: Ireland (pooled waves)

Irish Pooled Waves: Regression Analysis				
	Model 1 β	Model 2 β	Model 3 β	Model 4 β
Constant	102.102**	101.239**	100.885**	101.140**
Age	.097**	-.005	.012	
Cohort 1973to1981		2.478**	2.035*	2.161*
Cohort 1964to1972		3.254**	2.716*	2.932**
Cohort 1955to1963		4.308**	3.634*	3.935**
Cohort 1946to1954		5.559**	4.742*	5.150**
Cohort 1937to1945		6.636**	5.669*	6.182**
Cohort 1928to1936		7.757**	6.657*	7.273**
Cohort 1919to1927		8.025**	6.757*	7.476**
Cohort Pre1919		8.242**	6.781*	7.521**
Wave 1981			.677	.400
Wave 1990			.430	.237
Wave 1999			.685	.547
R-square	0.068	0.103	0.103	.103

** $p < .001$, * $p < .05$

4.5.2 DV2: Organizational Dimension – Age Hypotheses

To test the hypothesis that older people will be more religious on the organizational dimension than young people, and that as a birth cohort grows older their religiosity on the belief dimension will stay the same, a scatterplot of mean levels of religiosity on the organizational dimension by age is first presented (figure 4-3).³¹ As there is an extremely large number of cases in the pooled data, mean scores for each age in each wave are presented as points on the plot. The scatterplot shows a positive linear relationship between age and mean levels of religiosity on the organizational dimension in all four waves. Next, a line graph shows mean levels on the organizational dimension in each birth cohort using the data from all four waves of the Irish survey (figure 4-4). Although one can make limited conclusions with the cross-sectional nature of the data, from the line graph it appears that, in Ireland, there are sizeable differences between the cohorts on the organizational dimension, and that mean scores do not appear to increase as cohorts grow older. There appears to be a downward trend from 1981 to 1990 and to 1999 that has rebounded in 2008. Growing older seems an implausible explanation for this upturn in mean scores on the organizational dimension however.

To more thoroughly test the hypothesis that older people will be more religious on the organizational dimension than young people, and that that as a birth cohort grows older their religiosity on the organizational dimension will stay the same, a linear regression is conducted with the organizational dimension as the dependent variable and age, birth cohort, and survey wave as the independent variables (table 4-2). The regression of the organizational dimension is first conducted with only age in the model. This is the first aspect of the hypothesis, and tests to what extent and significance does age predict levels of religiosity on the organizational dimension. The second part of the model adds dummy variables for each birth cohort, with the most recent birth cohort used as the reference category, and tests to what extent and significance does belonging to a particular birth cohort make one more or less religious on the organizational dimension than the most recent cohort, controlling for the effects of one's age. The final part of the model

³¹ Ages range from 18 to 93, with those outside this range excluded as outliers (with less than 10 cases in each age category, and those aged 17 with 40 cases).

introduces controls for the wave from which these individuals are drawn, 1981, 1990, or 1999, with the most recent wave as the reference category. The regression is carried using a pooled sample of all selected countries with all waves included in the analysis.

The results from the first model indicate that age has a highly significant effect on one's religiosity on the organizational dimension ($p < .001$). In the second model, age has a much smaller β -coefficient but is now negative effect, and remains statistically significant, albeit to a lesser degree ($p < .05$). With the exception of the two cohorts closest to the reference category, birth cohort has a highly significant and progressively larger β -coefficient the earlier the cohort. That is, the birth cohort one belongs to, relative to belonging to the most recent birth cohort, has a significant positive effect on one's level of religiosity on the organizational dimension, and this effect becomes more substantial the earlier the birth cohort, with the exception of those born after 1964. When controls for the survey wave are added in the third model, the coefficients for age and cohort both lose their statistical significance, with the exception of the two cohorts spanning 1919 to 1936.

In summary, there is moderate evidence in the Irish data to confirm the hypotheses: Older people will be more religious than younger people (or the older a person is the more religious they will be, the younger the less religious). As a birth cohort grows older their level of religiosity will stay the same (i.e. a cohort rather than 'ageing' effect).

Figure 4-3: H5 DV2 Mean Org. Dimension, Age, and EVS Wave Scatterplot

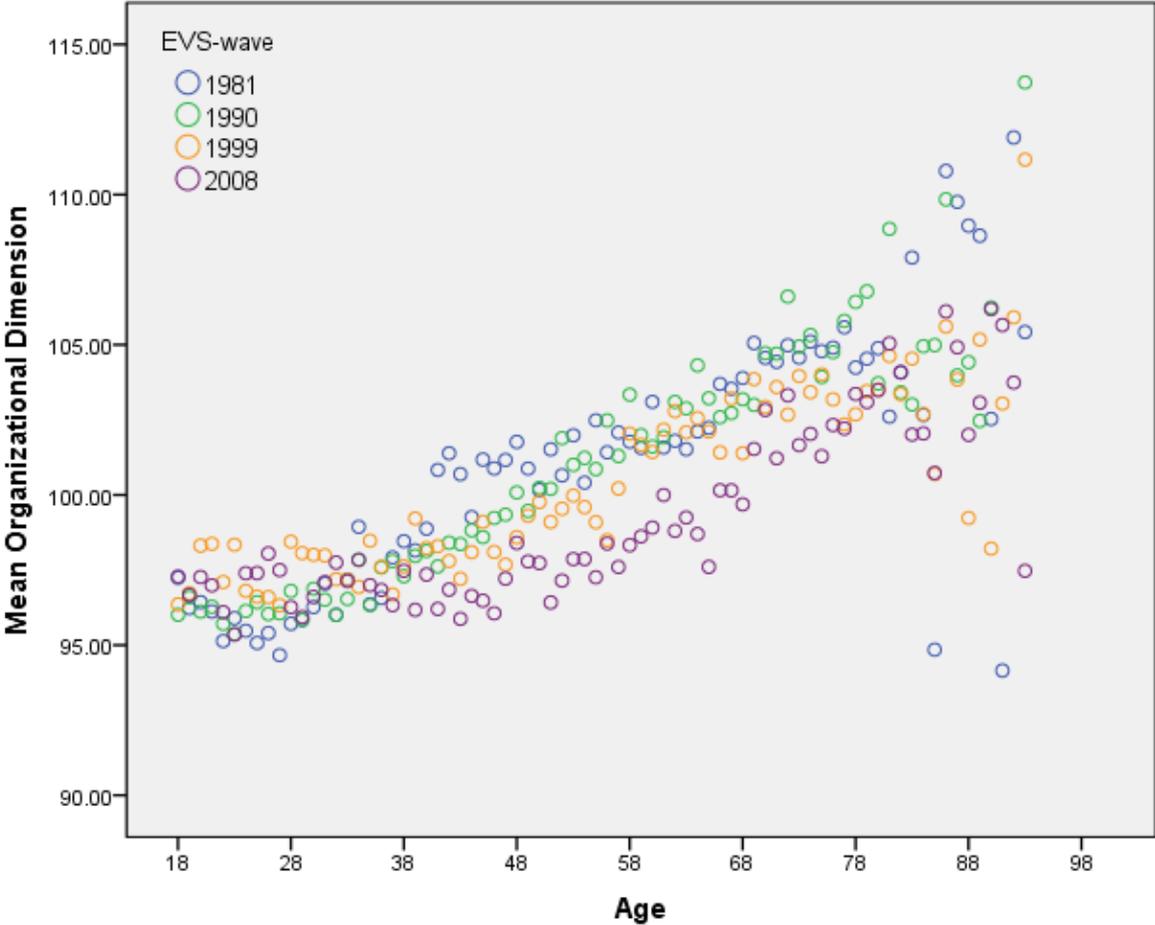


Figure 4-4: H5 DV2: Mean Org. Dimension of Cohort by EVS Wave: Line Graph

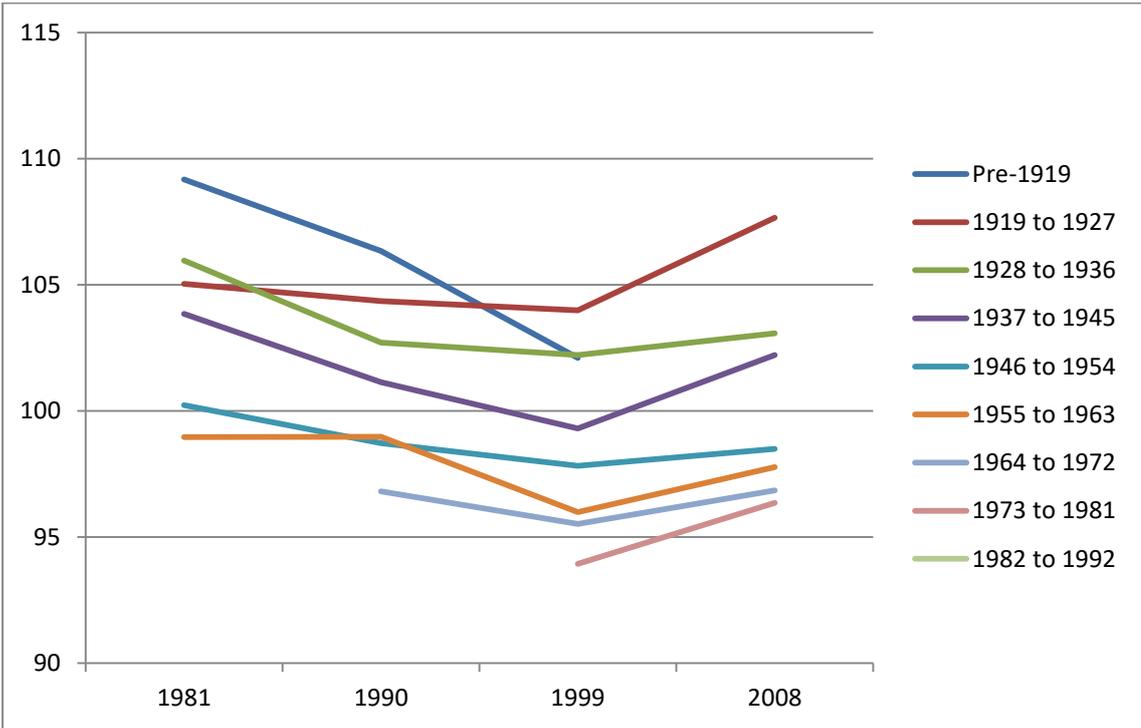


Table 4-2: H5 DV2 Regression Model of Org. Dimension: Ireland (pooled waves)

	Model 1 β	Model 2 β	Model 3 β	Model 4 β
Constant	92.515**	96.730**	94.506**	95.476**
Age	.172**	-.058*	.045	
Cohort 1973to1981		-.018	.105	.617
Cohort 1964to1972		1.371	.796	1.634
Cohort 1955to1963		3.263**	1.375	2.520*
Cohort 1946to1954		4.641**	1.922	3.470**
Cohort 1937to1945		7.831**	4.268	6.230**
Cohort 1928to1936		10.357**	5.830*	8.172**
Cohort 1919to1927		11.871**	6.359*	9.084**
Cohort Pre1919		15.967**	8.868	11.364**
Wave 1981			2.521	1.526*
Wave 1990			.495	-.208
Wave 1999			-1.286	-1.878**
R-square	.102	.162	.170	.163

** $p < .001$, * $p < .05$

4.5.3 DV1: Belief Dimension– Sociodemographic Hypotheses

To test the effects of the other sociodemographic variables, a linear regression is conducted with the belief dimension as the dependant, and the additional sociodemographic variables as independents (table 4-3). In model one, the effect of being female (with male as the reference category) on the belief dimension is modelled. The effect of employment status is added in model two, comprising the categories of housewife, student, unemployed and other, with employed/retired as the reference category. In model three, the effects of level of education are added, consisting of the effect that age completed education has on the belief dimension, with those who left education at 21 years or over as the reference category. In model four the effects of living in a rural area are added to the model, with living in an urban area the reference category. In models five, six and seven, the effects of age, cohort, and wave scrutinised in the previous section are added to the model.

In model 1, the effect of being female on the religious belief dimension is positive and highly significant ($\beta=3.3, p < .001$). In the second model, the effects of employment status are added. Being a housewife has a highly significant positive effect on the belief dimension ($\beta=3.33, p < .001$), while being a student ($\beta=-1.72, p < .05$), unemployed ($\beta=-.51, p < .05$), and other ($\beta=-.73, p < .05$), have less substantial negative effects on the belief dimension, all as compared to being in employment/retired. When employment statuses are added in model 2, the effect of being female is slightly weakened ($\beta=2.47$ in model with employment status, $\beta= 3.3$ without), but remains positive and highly statistically significant ($p < .001$). Furthermore, the effect of being female retains this consistent positive and highly statistically significant effect with the addition of other sociodemographic variables throughout all the models.

In model 3, the effects of education are added. With those having the highest level of education (or longest exposure to the education system) as the reference category, the effects of having lower levels of education (or less exposure to the education system) are positive and highly statistically significant for each category. The largest positive effect on the belief dimension is having the lowest level of education - those who left education at 12 years or less ($\beta=5.32, p < .001$), followed by the next lowest -those who left aged 13-16 ($\beta=2.51, p < .001$), and then those

closest to the reference category - those who left aged 17-18 ($\beta=1.39, p < .001$). Additionally, when education is added in this model, the negative effect of being a student is markedly diminished ($\beta=-.53$ in model with education, $\beta= -1.72$ without).

In model 4, the effect of living in a rural area is added, with living in an urban area as the reference. The effects of rural location are positive and highly statistically significant ($\beta=2.37, p < .001$), and this effect is consistent throughout the remaining models. The addition of rural location to the model also slightly diminishes the effect of each category of education, but they remain highly significant.

In model 5, the effect of age is added, which has a positive and highly statistically significant effect ($\beta=.08, p < .001$). With the addition of age to the model, the effect of education are diminished slightly again, but they remain highly significant. Additionally with the inclusion of age, the effect of being a student changes from a negative effect in the previous model ($\beta= -.47, p < .05$) to a more positive and highly significant effect ($\beta= 1.16, p < .001$).

Model 6 introduces eight birth cohort dummy categories, with the most recent cohort (those born from 1982-1992) as the reference category. The positive effect of four out of the eight cohorts are highly significant ($p < .001$), and one cohort less so ($p < .05$). The three eldest cohorts having the largest β -coefficients. The effect of the three cohorts that span 1946 to 1972 is not significant. With the inclusion of cohorts, the effect of age is diminished ($\beta=.02$ in model with cohorts, $\beta= .08$ without) but still highly statistically significant ($p < .001$). So too are the effects of education diminished slightly but still highly statistically significant ($p < .001$). With the addition of the cohort variables, the effect of being unemployed, and being in the other employment category, now lose their statistical significance, and the effect of being a student is diminished ($\beta= .45, p < .05$ in model with cohorts, $\beta=1.16, p < .001$ without).

Model 7 introduces survey waves to the model, with the most recent 2008 wave as the reference category.³² Finally, model 8 removes age from the model. In

³² Having age, cohort, and wave in the model together is undesirable as the combination of any of the two will approximate the third. This multiple correlation represents the most extreme form of collinearity (that of unity) and the estimates from this model would prove extremely unreliable

this model the 1981 ($\beta= 1.67$) and 1999 waves have a highly significant positive effect on the belief dimension, in reference to the 2008 wave ($p < .001$). The four eldest cohorts have a highly significant effect on the belief dimension, with increasing coefficients the elder the cohort, compared to the reference of the most recent cohort ($p < .001$). The three cohorts that span 1946 to 1972 have a nonsignificant effect on belief, compared to the most recent cohort. And the most cohort closest to the reference category has a significant and weakly positive effect on beliefs, compared to the most recent cohort ($p < .05$).

Finally, the r-squared value of 0.094 with all the variables in the model is quite low. This limits its quality as a predictive model of the religious belief dimension for this subset of European societies. The value of the model is in demonstrating the relative influence of each of these theoretically relevant sociodemographic correlates of the belief dimension. In this regard, it provides strong evidence to support most of the hypotheses. Firstly, there is strong evidence to confirm the hypothesis that females will be more religious than males on the belief dimension. The effect of being female on the belief dimension is highly significant and consistent across all the models. The sub-hypothesis that when one controls for workforce participation, the difference in religiosity between males and females will become minor or unsubstantial, cannot be confirmed: when controls are introduced the effect of being female is reduced slightly but remains positive and highly significant. Secondly, there is strong evidence to support the hypothesis that those with lower levels of education will be more religious than those with higher levels of education. Compared to having high levels of education, each lower level of education has a highly significant positive effect on the belief dimension, particularly so in relation to the lowest category. The effect of education is diminished somewhat when age and cohort are taken into account, but it remains highly significant and positive. Thirdly, there is strong evidence to support the hypothesis that those who live in rural areas will be more religious than those who live in urban areas, with rural location having a consistently positive and highly statistically significant effect on the belief dimension across all the models.

(Glenn 2005, p.6). Model 7 is included for completeness in the table, but the estimates are not referred to. Models 6 and 8, where one the three variables is removed in each, are the estimates used.

Finally, there is mixed and somewhat weak evidence to support the hypothesis that those who are not in employment will be more religious than those who are in employment/retired. In comparison to being employed, being a housewife has a consistent positive and highly significant ($p < .001$) effect on the belief dimension across all models. When age is controlled for, the effect of being a student is significant and positive, but weakly so from models that include cohort variables onward, and it loses its significance when survey wave is added to the model. Neither being unemployed nor other have a statistically significant effect on the belief dimension relative to being in employment/retired, once the effect of age is taken into account (and their significant effect was counter to the hypothesis in the models without age).

Table 4-3: H5 DV1 Regression Model of Belief Dimension: Pooled Sample

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Constant	97.6**	97.8**	96.2**	95.5**	92.3**	94.0**	93.3**	94.7**
Female	3.30**	2.47**	2.46**	2.49**	2.42**	2.44**	2.44**	2.45**
Housewife		3.33**	2.52**	2.53**	2.66**	2.55**	2.50**	2.49**
Student		- 1.72**	-0.53*	-0.47*	1.16**	0.45*	0.38	0.27
Unemployed		-0.51*	-0.64*	-0.62*	0.17	0.15	0.11	0.08
Other		-0.73*	-0.78*	-0.74*	-0.63	-0.39	-0.33	-0.33
Education 12 years			5.32**	4.91**	3.54**	2.97**	2.88**	2.90**
Education 13-16			2.51**	2.19**	1.58**	1.40**	1.34**	1.35**
Education 17-20			1.39**	1.20**	1.26**	1.25**	1.22**	1.21**
Rural				2.33**	2.37**	2.38**	2.39**	2.39**
Age					0.08**	0.02**	0.06**	XXX
Cohort1973to1981						0.99**	0.06**	0.58*
Cohort1964to1972						-0.39	- 1.34**	-0.28
Cohort1955to1963						-0.45	-1.80*	-0.23
Cohort1946to1954						-0.22	-1.87	0.22
Cohort1937to1945						0.95*	-0.99	1.62**
Cohort1928to1936						2.03**	-0.23	2.91**
Cohort1919to1927						2.59**	0.07	3.74**
CohortPre1919						3.56**	0.58	4.95**
Wave1981							1.67**	0.13
Wave1990							0.33	- 0.76**
Wave1999							1.58**	1.04**
R-squared	.027	.040	.057	.069	.083	.090	.094	.094

** $p < .001$, * $p < .05$

4.5.4 DV2: Org. Dimension Sociodemographic Hypotheses

To test the additional effects of the other sociodemographic variables, a linear regression is conducted with the organizational dimension as the dependant, and the additional sociodemographic variables as independents (table 4-4). In model one, the effect of being female (with male as the reference category) on the organizational dimension is modelled. The effect of employment status is added in model two, being in employment as the reference category to being a housewife, a student, an unemployed and being other. In model three, the effects of education are added, consisting of the effect that age completed education has on the organizational dimension, with those who left education at 21 years or over as the reference category. In model four the effects of living in a rural area are added to the model, with living in an urban area the reference category. In models five, six and seven, the effects of age, cohort, and wave scrutinised in the previous section are added to the model.

In model 1, the effect of being female on the religious organization dimension is positive and highly significant ($\beta=2.1, p < .001$). In the second model, the effects of employment status are added. Being a housewife has a highly significant positive effect on the organizational dimension ($\beta=2.65, p < .001$), while being a student ($\beta= -2.65, p < .001$), unemployed ($\beta= -2.24, p < .001$), and other ($\beta= -.66, p < .05$), have negative effects on the organization dimension, all as compared to being in employment/retired. When employment statuses are added in model 2, the effect of being female is slightly weakened ($\beta=1.41$ in model with employment status, $\beta= 2.65$ without), but remains positive and highly statistically significant ($p < .001$). Furthermore, the effect of being female retains this consistent positive and highly statistically significant effect with the addition of other sociodemographic variables throughout all the models.

In model 3, the effects of education are added. With those having the highest level of education (or longest exposure to the education system) as the reference category, the effects of having lower levels of education (or less exposure to the education system) are positive and highly statistically significant for each category ($p < .001$). The largest positive effect on the organization dimension is having the lowest level of education ($\beta=5.55, p < .001$), followed by the next lowest ($\beta=2.35, p$

< .001), and then those with a level of education closest to the reference category ($\beta=1.03, p < .001$). Additionally, when education is added in this model, the negative effect of being a student is diminished ($\beta= -1.50$ in model with education, $\beta= -2.65$ without), as is being a housewife ($\beta= -1.82$ in model with education, $\beta= 2.65$ without). In model 4, the effect of living in a rural area is added, with living in an urban area as the reference. The effects of rural location are positive and highly statistically significant ($\beta=2.06, p < .001$), and this effect continues consistently throughout the remaining models. In model 5, the effect of age is added, which has a strong positive and highly statistically significant effect ($\beta=.11, p < .001$). With the addition of age to the model, the effect of education are diminished slightly, but they remain highly significant. Additionally with the inclusion of age, the size and direction of the effect of employment status changes. The effect of being a student changes from a negative effect in the previous model ($\beta= -1.45, p < .001$) to a positive effect ($\beta= .98, p < .001$). The effect of being an unemployed is weakened ($\beta= -1.55$ in model with education, $\beta= -2.33$ without). And the effect of being in the other employment category loses its statistical significance.

Model 6 introduces eight birth cohort dummy categories, with the most recent cohort (those born from 1982-1992) as the reference category. With the exception of the 1973 to 1981 cohort, whose coefficient is not statistically significant, the three youngest cohorts have highly significant negative effects on the organizational dimension ($p < .001$). The three eldest cohorts have a highly significant positive effect on the organizational dimension ($p < .001$). In between these two groups is the 1937 to 1945 cohort, whose coefficient is not statistically significant. With the inclusion of cohorts, the effect of age is diminished ($\beta=.05$ in model with cohorts, $\beta= .11$ without) but still highly statistically significant ($p < .001$). The effects of education are also diminished slightly but remain highly statistically significant ($p < .001$).

Model 7 introduces survey waves to the model, with the most recent 2008 wave as the reference category.³³ Finally, model 8 removes age from the model. In

³³ Having age, cohort, and wave in the model together is undesirable as the combination of any of the two will approximate the third. This multiple correlation represents the most extreme form of collinearity (that of unity) and the estimates from this model would prove extremely unreliable (Glenn 2005, p.6). Model 7 is included for completeness in the table, but the estimates are not referred to. Models 6 and 8, where one of the three variables is removed in each, are the estimates used.

this model the 1981 ($\beta = 1.67$) and 1999 waves have a highly significant negative effect on the organizational dimension, relative to the 2008 wave ($p < .001$). The 1999 wave has a highly significant positive effect, relative to the 2008 wave ($p < .001$). The four eldest cohorts have a highly significant positive effect on the organizational dimension, with increasing coefficients the elder the cohort, compared to the reference of the most recent cohort ($p < .001$). The two cohorts that span 1955 to 1972 have a significant negative effect on the organizational dimension, compared to the most recent cohort ($p < .05$). The two remaining cohorts (1946 to 1954, 1973 to 1981) are not statistically significant.

Finally, the r-squared value of 0.094 with all the variables in the model is quite low. This limits its quality as a predictive model of the religious organizational dimension for this subset of European societies. The value of the model is in demonstrating the relative influence of each of these theoretically relevant sociodemographic correlates of the organizational dimension. In this regard, it provides strong evidence to support most of the hypotheses. Firstly, there is strong evidence to confirm the hypothesis that females will be more religious than males on the organizational dimension. The effect of being female on the organizational dimension is highly significant and consistent across all the models. The sub-hypothesis that when one controls for workforce participation, the difference in religiosity between males and females will become minor or unsubstantial, cannot be confirmed: when controls are introduced the effect of being female is reduced slightly but remains positive and highly significant. Secondly, there is strong evidence to support the hypothesis that those with lower levels of education will be more religious than those with higher levels of education. Compared to having high levels of education, each lower level of education has a highly significant positive effect on the organizational dimension, particularly so in relation to the lowest category. The effect of education is diminished somewhat when age and cohort are taken into account, but it remains highly significant and positive. Thirdly, there is strong evidence to support the hypothesis that those who live in rural areas will be more religious than those who live in urban areas, with rural location having a consistently positive and highly statistically significant effect on the organizational dimension across all the models.

Finally, there is very weak evidence to support the hypothesis that those who are not in employment will be more religious than those who are in employment. In comparison to being employed/retired, being a housewife has a consistent positive and highly significant effect on the organizational dimension across all models ($p < .001$). Relative to being employed, being unemployed has a significant and negative effect on the organizational dimension across all models ($p < .001$), a result that runs counter to the hypothesis. When age is controlled for, the effect of being a student is significant and positive, but loses its statistical significance when cohort or survey wave are added to the model.

Table 4-4: H5 DV2 Regression Model of Org. Dimension: Pooled Sample

Regression: Org Dimension Pooled Sample	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Constant	97.76* *	98.04* *	96.57* *	96.01* *	91.17* *	94.00* *	92.67* *	95.27* *
Female	2.10**	1.41**	1.42**	1.45**	1.33**	1.37**	1.37**	1.37**
Housewife		2.65**	1.82**	1.83**	2.02**	1.89**	1.88**	1.86**
Student		- 2.65**	- 1.50**	- 1.45**	0.98**	0.06	0.00	-0.21
Unemployed		- 2.24**	- 2.35**	- 2.33**	- 1.15**	- 1.16**	- 1.18**	- 1.22**
Other		-0.66*	-0.70*	-0.69*	-0.46	-0.22	-0.22	-0.22
Education 12 years			5.55**	5.22**	3.26**	2.63**	2.56**	2.60**
Education 13- 16			2.35**	2.09**	1.21**	1.01**	0.92**	0.92**
Education 17- 20			1.03**	0.86**	0.96**	0.95**	0.91**	0.88**
Rural				2.06**	2.11**	2.12**	2.15**	2.15**
Age					0.11**	0.05**	0.11**	XXX
Cohort1973to19 81						-0.31	- 1.42**	-0.42
Cohort1964to19 72						- 1.04**	- 2.71**	-0.69*
Cohort1955to19 63						- 1.36**	- 3.52**	-0.53*
Cohort1946to19 54						- 1.05**	- 3.77**	0.22
Cohort1937to19 45						0.36	- 2.92**	2.10**
Cohort1928to19 36						1.57**	-2.28*	3.74**
Cohort1919to19 27						2.05**	-2.34*	4.68**
CohortPre1919						3.33**	-1.71	6.66**
Wave1981							1.93**	- 1.03**
Wave1990							1.66**	- 0.41**
Wave1999							1.68**	0.64**
R-squared	.011	.025	.042	.052	.081	.089	.091	.090

**p <.001, *p <.05

4.6 Hypothesis 6

Socio-demographic characteristics of individuals will affect their values in each domain.

To test the hypothesis that socio-demographic characteristics of individuals will affect their values in each domain a linear regression is conducted on the personal morality and civic morality scales. In model one, the effect of being female (with male as the reference category) on the each dimension is modelled. The effect of employment status is added in model two, comprising the categories of housewife, student, unemployed and other, with employed/retired as the reference category. In model three, the effects of level of education are added, consisting of the effect that age completed education has on each dimension, with those who left education at 21 years or over as the reference category. In model four the effects of living in a rural area are added to the model, with living in an urban area the reference category. In models five, six and seven, the effects of age, cohort and wave are added to the model.

4.6.1 DV1: Personal Morality

The results of the first model (table 4-5) indicate that being female has a positive ($\beta=.04$) and highly statistically significant effect on personal morality (i.e. more conservative) ($p < .001$). In model 2, where employment status is added, the effect of being female changes to a highly significant and stronger ($\beta= -.23$) negative one ($p < .001$). In relation to the reference category of being employed/retired, being a housewife has a positive and highly statistically significant effect on personal morality ($p < .001$). Being a student or other has a negative (i.e. more liberal) and highly statistically significant effect ($p < .001$). The effect of being unemployed does not have a statistically significant effect on personal morality, in reference to being in employment/retired.

In model 3 the effects of exposure to the education system are modelled. In relation to the reference category of the highest level of education (left education at 21 years or over), each lower level of education has a highly statistically significant positive effect on personal morality ($p < .001$). The magnitude of this effect is largest at the lowest level ($\beta=2.17$) and weakest at the highest level ($\beta=.6$). Adding education to the model slightly weakens the positive effect of being a housewife

($\beta=.73$) and the negative effect of being a student ($\beta= -.31$), but both remain highly statistically significant ($p < .001$). With the addition of education, being unemployed now becomes a negative and highly statistically significant effect ($p < .001$). Model 4 adds the rural location to the model, with urban as the reference category. Living in a rural location has a positive and highly statistically significant positive effect on personal morality, and this remains consistent throughout all the models ($p < .001$). Model 5 introduces age to the model, which has a highly significant and positive effect on personal morality ($p < .001$). With the addition of age, the coefficients for education are diminished slightly, but all remain statistically significant ($p < .001$). The direction of coefficients for being a student and unemployed however are reversed with the addition of age to the model. Being a student now has a highly statistically significant and slight positive effect on personal morality ($\beta= .19, p < .001$), and being unemployed now has a significant and slight positive effect on personal morality ($\beta =.08, p < .05$).

The effects of belonging to a particular birth cohort, with belonging to the most recent cohort (1982-1992) as the reference category, are introduced to the regression in model 6. All eight cohorts have a highly statistically significant and positive effect on personal morality in relation to the most recent cohort ($p < .001$). The earlier the cohort, the larger this positive effect. With the introduction of cohorts, the coefficients for education are diminished slightly, but remain highly statistically significant ($p < .001$). With the introduction of cohorts, the effect of age changes from a positive one ($\beta= .02, p < .001$) to a negative one ($\beta= -.02, p < .001$).

Model 7 adds survey waves to the regression, with the most recent (2008) wave as the reference category. Each survey wave has a highly significant and positive effect on personal morality ($p < .001$). With the addition of waves the coefficients for each of the five youngest cohorts become negative ($p < .001, p < .05$ for 1937 to 1945), and the coefficients of the three eldest cohorts become statistically non-significant. The effect of age now reverts back to being positive ($\beta= .02, p < .001$). Model 8 removes the age variable from the regression. With this removal, the eldest five cohorts have positive and highly statistically significant effects on personal morality, with the eldest wave having the largest coefficient ($p < .001$). Each wave now has a lesser but still highly significant positive effect on personal

morality, as compared to the reference category, with the 1981 wave having the largest coefficient.

Finally, the r-squared value of 0.18 with all the variables in the model is relatively low. This limits its quality as a predictive model of the personal morality for this subset of European societies. The value of the model is in demonstrating relative influence of each of these theoretically relevant sociodemographic correlates of personal morality. In this regard, it provides strong evidence to support many of the hypotheses. Firstly, there is only weak evidence to support the hypothesis that females will be more conservative than males. In the model with female as the only independent variable, the effect on being female is positive (i.e. conservative) and highly significant ($p < .001$), but the size of the coefficient ($\beta = .04$) suggest this effect is minor. Secondly, there is inconclusive evidence to support the sub-hypothesis that when controls for workforce participation are introduced, the difference in personal morality between males and females will become minor or unsubstantial. The addition of controls for employment status do not cause differences between males and become minor or unsubstantial, in fact they increase the differences, and increase them in such a way that runs counter to the main hypothesis. Controlling for employment status, the effect of being female is negative (i.e. more liberal) and statistically significant ($\beta = -0.24$, $p < .001$). Thirdly, there is strong evidence to support the hypothesis that those who have higher levels of education will be more conservative, and those with lower education more liberal, in terms of personal morality. Each lower level of education to the reference category had a consistently positive and statistically significant effect on personal morality. Fourthly, there is weak evidence to support the hypothesis that those in employment will be more liberal and those who are not more conservative. Being a housewife and being unemployed had a statistically significant positive effect on personal morality in the final model, as compared to being employed. Being a student or other, when cohort was introduced in the latter models, did not have a statistically significant effect on personal morality. Fifth, there is strong evidence to support the hypothesis that those who live in rural areas will be more conservative than those who live in urban areas. The effect of rural location is positive and significant throughout the models.

Table 4-5: H6 DV1 Regression Model of Personal Morality: Pooled Sample

Regression: Personal Morality Pooled Sample	Mode 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Constant	6.57* *	6.63**	5.84**	5.69**	4.72**	5.65**	4.72**	5.12**
Female	0.04*	-0.24**	-0.24**	-0.23**	-0.25**	-0.20**	-0.20**	-0.20**
Housewife		1.10**	0.73**	0.73**	0.76**	0.60**	0.59**	0.59**
Student		-0.92**	-0.31**	-0.30**	0.19**	-0.06	-0.03	-0.06
Unemployed		-0.08	-0.15**	-0.14**	0.08*	0.14**	0.15**	0.14**
Other		-0.40**	-0.41**	-0.41**	-0.37**	-0.12	-0.11	-0.11
Education 12 years			2.17**	2.07**	1.67**	1.24**	1.22**	1.23**
Education 13-16			1.34**	1.26**	1.08**	0.88**	0.86**	0.86**
Education 17-20			0.60**	0.55**	0.57**	0.52**	0.52**	0.51**
Rural				0.58**	0.60**	0.60**	0.60**	0.60**
Age					0.02**	-0.02**	0.02**	
Cohort1973to1981						0.20**	-0.24**	-0.08
Cohort1964to1972						0.39**	-0.46**	-0.15*
Cohort1955to1963						0.67**	-0.55**	-0.09
Cohort1946to1954						1.07**	-0.52**	0.10**
Cohort1937to1945						1.67**	-0.28*	0.49**
Cohort1928to1936						2.33**	0.00	0.93**
Cohort1919to1927						2.78**	0.07	1.15**
CohortPre1919						3.44**	0.23	1.52**
Wave1981							1.21**	0.75**
Wave1990							0.93**	0.62**
Wave1999							0.51**	0.35**
R-squared	.000	.033	.098	.112	.135	.178	.182	.181

* $p < .05$, ** $p < .001$

4.6.2 DV2: Civic Morality

The results of model 1 (table 4-6) indicate that being female has a positive (i.e. towards conservative) and highly statistically significant effect on civic morality ($p < .001$). When controls for employment status are added in model 2, the coefficient for female is reduced very slightly and remains highly statistically significant ($p < .001$). Compared to the reference category of being in employment/retired, being a housewife has a small positive and highly statistically significant effect on civic morality ($p < .001$). Being a student and unemployed each have strong negative and highly statistically significant effects on civic morality ($p < .001$). Being other has a negative and highly statistically significant effect ($p < .001$), but with a coefficient of lesser magnitude.

In model 3, the effects of length of exposure to the education system are added, with the highest level of education (left education at 21 years or more) as the reference category. Being at the lowest level of education has a positive effect on personal morality, as does the next level of education but with a lesser coefficient, both of which are highly statistically significant ($p < .001$). The highest level of education after the reference category however, has a negative effect on civic morality relative to the highest level of education, and this effect is highly statistically significant ($p < .001$). When education is added to the model, the coefficients for the employment categories of housewife and other lose their statistical significance.

Rural location is added to the regression in model 4, with urban location as the reference category. Rural location has a positive and highly statistically significant effect on civic morality, and this effect is consistent throughout the models ($p < .001$).

Model 5 introduces the effects of age to the regression. Age has a positive and highly statistically significant effect on civic morality ($p < .001$). A noteworthy consequence of introducing age is that the effect of education on civic morality changes considerably. The coefficient for the lowest category of education now loses its statistical significance. And the remaining categories of education now all have highly statistically significant and negative effects on civic morality ($p < .001$), relative to the reference category. In relation to employment status, adding age to the

model lessens the coefficient for being a student considerably, and to a lesser extent the coefficient of being unemployed.

Model 6 adds the effects of belonging to a particular birth cohort, with belonging to the most recent cohort (1982-1992) as the reference category. All but one of the cohorts has a positive and highly statistically significant positive effect on civic morality. Of note in the introduction of cohorts to the model that the coefficient for age is only very slightly weakened.

Model 7 adds survey waves to the regression, with the most recent (2008) wave as the reference category. Each wave has a highly significant and positive effect on personal morality ($p < .001$). With the addition of waves the coefficients for all of the cohorts become negative. Model 8 removes the age variable from the regression. With this removal, all cohorts have positive and highly statistically significant effects on civic morality, with the eldest wave having the largest coefficient ($p < .001$). Each wave now has a highly significant negative effect on civic morality, compared to the reference category ($p < .001$ for 1981, 1999; $p < .05$ for 1999).

Finally, the r-squared value of 0.07 with all the variables in the model is exceedingly low. This limits its quality as a predictive model of the civic morality for this subset of European societies. The value of the model is in demonstrating relative influence of each of these theoretically relevant sociodemographic correlates of civic morality. In this regard, it provides strong evidence to support only some of the hypotheses. Firstly, there is strong evidence to support the hypothesis that females will be more conservative than males. In the model with female as the only independent variable, the effect on being female is strongly positive ($\beta=.243$) (i.e. towards conservative) and highly significant ($p < .001$). Secondly, there is no evidence to support the sub-hypothesis that when controls for workforce participation are introduced, the difference in civic morality between males and females will become minor or unsubstantial. The addition of controls for employment status do weaken the coefficient for females very slightly (from $\beta=.243$ to $\beta=.216$), but this remains a highly statically significant difference ($p < .001$). Thirdly, there is no evidence to support the hypothesis that those who have higher levels of education will be more conservative, and those with lower education more

liberal, in terms of civic morality. In fact, the results run counter to the hypothesis. When controls for age (and cohort) are introduced, the effect of having lower levels of education relative to the highest levels of education on civic morality is a negative one. That is, the evidence suggests that those who have higher levels of education are more conservative, and those who have lower levels are more liberal in terms of civic morality. Fourth, the majority of the results in relation to employment status run counter to the relation hypothesis that those in employment/retired will be more liberal and those who are not more conservative. Those who are housewives are significantly more conservative than those in employment, but those who are unemployed and students are significantly more liberal than those in employment. And those who are other are not statistically significantly different in terms of civic morality than those in employment. Fifth, there is strong evidence to support the hypothesis that those who live in rural areas will be more conservative than those who live in urban areas in terms of civic morality. The effect of rural location is positive and significant throughout the models.

Table 4-6: H6 DV2 Regression Model of Civic Morality: Pooled Sample

Regression: Civic Morality Pooled Sample	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Constant	8.734* *	8.796* *	8.782* *	8.756* *	8.091* *	8.081* *	7.905* *	8.394* *
Female	.243**	.216**	.220**	.221**	.204**	.208**	.209**	.211**
Housewife		.067**	.023	.023	.049*	.040*	.034*	.031*
Student		- .550**	- .518**	- .516**	- .183**	- .174**	- .171**	- .210**
Unemployed		- .504**	- .501**	- .500**	- .343**	- .338**	- .339**	- .349**
Other		- .069**	-.067	-.066	-.040	-.031	-.022	-.022
Education 12 years			.245**	.229**	-.042	-.051*	-.059*	-.051*
Education 13-16			.081**	.069**	- .049**	- .058**	- .060**	- .060**
Education 17-20			- .088**	- .095**	- .079**	- .080**	- .081**	- .086**
Rural				.097**	.105**	.106**	.105**	.105**
Age					.015**	.013**	.021**	
Cohort1973to19 81						.072*	-.039	.149**
Cohort1964to19 72						.022	-.133*	.247**
Cohort1955to19 63						.069*	-.170*	.392**
Cohort1946to19 54						.110**	-.198*	.553**
Cohort1937to19 45						.173**	-.204*	.737**
Cohort1928to19 36						.121*	- .327**	.803**
Cohort1919to19 27						.127*	- .389**	.930**
CohortPre1919						.150**	- .476**	1.096* *
Wave1981							.293**	- .265**
Wave1990							.105*	- .284**
Wave1999							.153**	-.042*
R-squared	.009	.026	.031	.032	.068	.068	.070	.068

* $p < .05$, ** $p < .001$

4.7 Hypothesis 7

Those who belong to a denomination, have high levels of religiosity on the belief and organizational dimension, and who attend religious services regularly, will have more conservative or traditional values, and this relationship will hold controlling for the effects of other sociodemographic variables.

To test the hypothesis that those who belong to a denomination, have high levels of religiosity on the belief and organizational dimension, and who attend religious services regularly, will hold more conservative or traditional values, and this relationship will hold controlling for the effects of other sociodemographic variables, a linear regression is conducted with personal morality and civic morality as the independent variable in two separate analyses. In model one, the effect of belonging to a denomination (not belonging as the reference category) on personal morality is modelled. The religious belief dimension is added in model two. In model three, the organizational dimension is added. In model four the effect of religious practice is modelled, with dummy variables for those who attend religious services monthly or more and those who attend less than monthly, with never attending as the reference category. Model five adds the effect of being female (with male as the reference category). Model six introduces employment status, with the categories condensed into one category of employed or retired, with all others as the reference category. Educational level is added in model seven, again condensed into binary dummy categories of those with the longest exposure to the education system, and with all those lower as the reference category. Model nine adds the effects of age. And model ten introduces three condensed cohort categories, with those born from 1973 to 1992 as the reference category. Because many of the variables are measured on different scales, the standardized β -coefficient for the final model is presented to broadly illustrate the relative effect each of the variables has on the dependent.

4.7.1 DV1: Personal Morality

In models 1-4 (table 4-7) the four religious dimensions are added to the regression. Each has a strong positive and highly statistically significant effect on personal morality ($p < .001$), with one exception. Attending religious services less than monthly does not have a statistically significant effect on personal morality as compared to never attending, and controlling for the three other dimensions. Tolerance statistics and variance inflation factors (VIF) are calculated for each of the dimensions. Tolerance statistics range between .649 and .342, suggesting that there is no significant collinearity between the religiosity dimensions. The VIF ranges from 1.541 to 2.921, suggesting there is no significant collinearity between the religiosity dimensions.³⁴

In model 5, the effect of being female is added to the model. As with the regression with only sociodemographic variables, being female has a highly statistically significant negative effect (i.e. towards liberal) on personal morality, controlling for the religious variables ($p < .001$). Model 6 introduces the effect of employment status, and being employed/retired has a highly statistically significant negative effect on personal morality relative to other employment categories. In model 7, the effect of having high level of education is added to the model, and has a negative and highly statistically significant effect on personal morality relative to lower levels of education. With the addition of education to the model, attending less than monthly now has a small significant positive effect on personal morality ($p < .05$). Models 8 and 9 add rural location (reference: urban) and age to the model, both of which have positive and highly statistically significant effect on personal morality ($p < .001$). Finally cohort is added to the regression in model 10, and each cohort has a highly statistically significant and increasingly positive effect on personal morality the older the cohort, relative to the most recent cohort. With the addition of cohort to the model, the coefficient for denomination is approximately halved in size from $\beta = 0.229$ without cohorts in the model to $\beta = 0.124$ in the model after. Furthermore, with the addition of cohort and age to the model, the statistical

³⁴ Field's (2013) general guidelines suggest a VIF of over 10 denotes problematic multicollinearity; and tolerance below 0.2, a potential problem, below 0.1, a serious problem.

significance and size of the β -coefficient for attending less than monthly increases ($\beta=.106, p < .001$).

Throughout the addition of the various sociodemographic variables to the model, these changes to the coefficient of denomination and low attendance are the only noteworthy change in the size (or direction) of the β -coefficients of the religious dimension variables. Overall, there is very strong evidence in support of the hypothesis that, controlling for other sociodemographic variables, those who belong to a denomination, have high levels of religiosity on the belief and organizational dimension, and who attend religious services regularly, will hold more conservative or traditional values, and this relationship will hold controlling for the effects of other sociodemographic variables.

Table 4-7: H7 DV1 Regression Model of Personal Morality: Pooled Sample

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Std. β
(Constant)	5.156**	-4.650**	-6.757**	-3.783**	-3.838**	-3.669**	-2.971**	-2.999**	-3.199**	-2.651**	
Belong Denom.	1.937**	0.530**	0.372**	0.296**	0.294**	0.298**	0.251**	0.242**	0.229**	0.124**	.021
Belief Dimension		0.109**	0.080**	0.058**	0.061**	0.060**	0.058**	0.058**	0.057**	0.058**	.243
Org. Dimension			0.052**	0.041**	0.041**	0.041**	0.039**	0.038**	0.034**	0.034**	.143
Attend Monthly				0.985**	1.005**	1.002**	1.013**	0.984**	0.953**	0.912**	.189
Attend Less				0.021	0.032	0.035	0.079*	0.066*	0.081**	0.106**	.020
Female					-0.349**	-0.388**	-0.428**	-0.422**	-0.447**	-0.408**	-.086
Employed/Retired						-0.174**	-0.172**	-0.176**	-0.294**	-0.221**	-.040
Education 21 years							-0.908**	-0.878**	-0.767**	-0.676**	-.123
Rural								0.283**	0.296**	0.303**	.061
Age									0.016**	-0.018**	-.130
Coh 1955 to 1972										0.451**	.089
Coh 1937 to 1954										1.094**	.210
Coh Pre1936										2.032**	.370
R Square	0.110	0.261	0.291	0.314	0.319	0.320	0.346	0.350	0.361	0.387	

* $p < .05$, ** $p < .001$

4.7.2 DV2: Civic Morality

In models 1-4 (table 4-8) the four religious dimensions are added to the regression. Each has a strong positive and highly statistically significant effect on civic morality ($p < .001$). The coefficients however, are of a much smaller magnitude than those in the model of personal morality. Tolerance statistics and variance inflation factors (VIF) are calculated for each of the dimensions. Tolerance statistics range between .654 and .338, suggesting that there is no significant collinearity between the religiosity dimensions. The VIF ranges from 1.528 to 2.961, suggesting there is no significant collinearity between the religiosity dimensions.

In model 5, the effect of being female is added to the model. As with the regression with only sociodemographic variables, being female has a highly statistically positive effect (i.e. towards conservative) on civic morality, controlling for the religious variables ($p < .001$). Model 6 introduces the effect of employment status, and being employed/retired has a highly statistically significant positive effect on civic morality relative to other employment categories. In model 7, the effect of having a high level of education is added to the model, and has a positive and highly statistically significant effect on civic morality relative to lower levels of education. Models 8 and 9 add rural location (reference: urban) and age to the model, both of which have positive and highly statistically significant effect on civic morality ($p < .001$). Adding age to the model somewhat diminished the coefficient for the organizational dimension from $\beta = .010$ to $\beta = .006$. Finally cohort is added to the regression in model 10, and each cohort has a highly statistically significant effect on civic morality.

Throughout the addition of the various sociodemographic variables to the model, there are virtually no changes in the size (or direction) of the β -coefficients of the religious dimension variables. On one level, there is very strong evidence in support of the hypothesis that, controlling for other sociodemographic variables, those who belong to a denomination, have high levels of religiosity on the belief and organizational dimension, and who attend religious services regularly, will hold more conservative in terms of civic morality, and this relationship will hold controlling for the effects of other sociodemographic variables. Compared to the personal morality

regression ($r^2=0.39$) this model has a very low r-squared ($r^2=.08$), and the comparatively much smaller coefficients for each religious variable.

Table 4-8: H7 DV2 Regression Model of Civic Morality: Pooled Sample

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Std. β
(Constant)	8.473**	6.906**	6.421**	6.974**	6.995**	6.787**	6.779**	6.776**	6.598**	6.527**	
Belong Denom.	.506**	.280**	.243**	.210**	.210**	.206**	.206**	.205**	.193**	.184**	.058
Belief Dimension		.018**	.011**	.006**	.006**	.006**	.006**	.006**	.006**	.006**	.049
Org. Dimension			.012**	.010**	.010**	.010**	.010**	.010**	.006**	.006**	.050
Attend Monthly				.211**	.204**	.207**	.207**	.204**	.176**	.172**	.066
Attend Less				.076**	.072**	.069**	.068**	.067**	.080**	.080**	.028
Female					.130**	.177**	.177**	.178**	.156**	.157**	.062
Employed/Retired						.212**	.211**	.211**	.106**	.103**	.035
Education 21 years							.010	.014	.110**	.118**	.040
Rural								.033*	.045**	.044*	.016
Age									.014*	.012**	.168
Coh 1955 to 1972										.072*	.026
Coh 1937 to 1954										.162**	.058
Coh Pre1936										.104**	.035
R Square	.025	.039	.045	.047	.049	.054	.054	.054	.086	.087	

* $p < .05$, ** $p < .001$

4.8 Hypothesis 8

The more modernized a society, the weaker the conservatizing effect of religiosity on values. The less modernized the stronger the conservatizing effect of religiosity on values. (b) The more modernized a society, the less conservative the populace in terms of values.

4.8.1 DV1: Personal Morality

The first step in testing the hypothesis is to calculate how much of the overall variance in personal morality can be attributed to the societal level (between groups) versus how much is explained by the individual level (within groups/societies) (Steele 2008). A variance components model of personal morality is constructed. First the null model, a model that estimates societal effects but with no explanatory variables is calculated.

The null model (model 1 in table 4-9) is as follows:

$$y_{ij} = \beta_0 + u_{0j} + e_{ij}$$

- y_{ij} is the level of personal morality for individual i in society j ;
- β_0 is the overall mean across societies;
- u_{0j} is the effect of society j on personal morality;
- and e_{ij} is an individual level residual.

The mean level of personal morality across societies is estimated $6.528(\beta_0)$. The mean personal morality for society j is estimated as $6.528 + \hat{u}_j$, where \hat{u}_j is the society residual. The between society/group variance (σ_u^2) in personal morality is estimated to be 1.425 and the within group/society variance (σ_e^2) in personal morality is estimated to be 4.325. The total residual variance ($\sigma_e^2 + \sigma_u^2$) is estimated to be 5.75. The variance partition coefficient (ρ) is calculated as follows:

$$\text{Variance Partitioning Coefficient (Rho): } \rho = \frac{\text{Level 2 Variance}}{\text{Total Residual Variance}} = \frac{1.425}{5.75} = 0.24$$

24% of the variance in personal morality therefore, is due to differences between societies.

A likelihood ratio test is conducted to test whether this two-level model with between society variance in personal morality is significantly different to a one-level model with only within society variance (model 0 in table 4-9). To do this, a single level null model is compared to the two-level model. The likelihood ratio test statistic is calculated as follows and compared to a chi-square distribution with 1 degree of freedom (as there is only one parameter difference between the models(σ_u^2)):

$$\begin{aligned} & (-2*\loglikelihood(\text{Single-level model})) - (-2*\loglikelihood(\text{Two-level model})) \\ & = 293759.776 - 278372.637 = 15387.139 (p <.001, df =1). \end{aligned}$$

The difference between the two models proves highly statistically significant ($p <.001$), signifying that a model that takes into account variation in personal morality attributable to differences between societies, is appropriate.

More generally, this is the approach taken throughout the analysis to evaluate the different multilevel models: comparing the changes in the log-likelihood and degrees of freedom between models to decide whether or not the addition or manipulation of independent variables (individual level, society level, or cross-level interactions) significantly improves the model fit (Scheepers *et al.* 2002).³⁵ This is accompanied by testing whether or not the individual parameter estimates are statistically significant, which is tested by dividing the regression coefficient by its standard error, and comparing this Wald Statistic (z) to a chi-square distribution with one degree of freedom (which has the same distribution as a standard normal distribution) (Twisk 2006). A Wald statistic greater than ± 1.96 is therefore significant at the 95% level ($p <.05$) (Bickel 2007), or greater than ± 2.56 to be significant at the 99% level ($p <.001$).

The stepwise addition of variables to the models are outlined in the table (4-9) below.

³⁵ Degrees of freedom is calculated from the number of parameters in the model

Table 4-9: H8 DV1 Personal Morality Multilevel Model Stepwise Procedure

Model	Label	Degrees of freedom ⁷
0	Intercept model	1
1	Intercept model + Variation at national level	2
2	Model 1 +Denomination	3
3	Model 2+Belief	4
4	Model 3+Organizational	5
5	Model 4 +Attendance	7
6	Model 5+ Random Slopes for Denomination	9
7	Model 6+Random Slope for Belief	12
8	Model 7 +Random slope for organizational	16
9	Model 8+Random slope for Attendance (s)	37
10	Model 9 + GDP	39
11	Model 10+ Interaction between Denom. * GDP	
12	Model 11+ Interaction between Belief. * GDP	
13	Model 12+ Interaction between Org. * GDP	
14	Model 13+ Interaction between Attend monthly*GDP	
15	Model 14+ Interaction between Attendless.* GDP	

Table 4-10: H8 DV1 Personal Morality Parameter Estimates, Wald Statistics, and Variances of Model 1-5

Model 1-5						
Fixed Part						
Model:	0	1	2	3	4	5
Constant (β_0)	6.52	6.53	5.50	-2.35	-4.52	-2.88
Std. error	0.01	0.16	0.15	0.16	0.17	0.18
Wald	724.56**	40.05**	36.67**	-14.68**	-26.29**	-15.82**
Denomination (β_1)			1.29	0.39	0.24	0.16
Std. error			0.02	0.03	0.03	0.03
Wald			61.38**	14.92**	8.10**	5.20**
Belief (β_2)				0.09	0.06	0.05
Std. error				0.00	0.00	0.00
Wald				87.00**	60.00**	24.00**
Organizational (β_3)					0.05	0.04
Std. error					0.00	0.00
Wald					51.00**	43.00**
Monthly (β_4)						0.69
Std. error						0.04
Wald						19.69**
Less (β_5)						0.08
Std. error						0.03
Wald						2.68**
Individual Level Random Part						
Within group variance:	5.52	4.33	4.08	3.65	3.47	3.42
Std. error	0.03	0.02	0.02	0.02	0.03	0.03
Society Level Random Part						
Between group variance	0	1.43	1.20	0.73	0.74	0.65
Std. error	0	0.28	0.02	0.15	0.14	0.13
Total variance	5.52	5.75	5.28	4.38	4.21	4.07
VPC (ρ)	0.00	0.25	0.23	0.17	0.18	0.16

* $p < .05$, ** $p < .001$

The next step in the analysis is to add the individual level religious dimension independent variables – denominational belonging, the belief dimension, organizational dimension, and attendance (models 2-5 in table 4-10).

Each of the single level regression coefficients prove to be statistically significant ($p < .05$). With the addition of these independents (i.e. controlling for the distribution of the four religiosity variables across societies), the variance partition coefficient is reduced from 0.25 to 0.16, meaning approximately 16% of the variance is at the society level. Additionally, a test is conducted of whether the addition of these single level independent variables improves the model fit. This is done by comparing the difference in degrees of freedom and log likelihood values of the model without these independents (model 1) and a model with them (model 5), and comparing to a chi-square distribution.³⁶

$$278372 (2 \text{ df}) - 157959 (7 \text{ df}) = 120413 (5 \text{ df}) \quad p < 0.001$$

The next step in the analysis is to move beyond the previous random intercept model and re-estimate the model with random slopes (i.e. allowing their effect on personal morality to vary from society to society) for each of the independent variables. The random intercept model (model 5) serves as the baseline model from which to evaluate the improvement in model fit by allowing the slopes for denominational belonging to vary (model 6)(see table 4-11). The improvement in model fit by allowing the slope of denomination to vary (calculated from the differences in degrees of freedom and log likelihoods between model 5 and model 6, and compared to a chi-square distribution) is statistically significant ($p < 0.001$). The improvement in model fit by allowing the slope of the belief dimension to vary (differences between model 6 and model 7) is statistically significant ($p < 0.001$). The improvement in model fit by allowing the slope of the organizational dimension to vary (differences between model 7 and model 8) is statistically significant ($p < 0.001$). And the improvement in model fit by allowing the slope of the attendance (monthly, less, never reference) to vary (differences between model 8 and model 9) is statistically significant ($p < 0.001$). In summary, there is strong evidence to suggest

³⁶ There is also a significant ($p < .001$) improvement in model fit with the addition of each independent variable (see table 4-128 for log likelihood and degrees of freedom differences)

that religiosity (each dimension) has a differential effect on personal morality in different societies.

Table 4-11: H8 DV1 Personal Morality Model Fit Statistics (Level 1 only)

Model	Label	-2log	Df	±df	X²	p-value	N (1)	N (2)
0	Intercept model	29375 9	1				64629	57
1	Intercept model + Variation at national level	27837 2	2	1	15387	0.00 0	64629	57
2	Model 1 +Denomination	27360 8	3	1	4764	0.00 0	64410	57
3	Model 2+Belief	19902 9	4	1	74579	0.00 0	48090	57
4	Model 3+Organizational	15897 5	5	1	40054	0.00 0	38886	57
5	Model 4 +Attendance	15795 9	7	2	1016	0.00 0	38767	57
6	Model 5+ Random Slopes for Denom.	15761 0	9	2	349	0.00 0	38767	57
7	Model 6+Random Slope for Belief	15737 8	12	3	232	0.00 0	38767	57
8	Model 7 +random slope for org	15727 6	16	4	102	0.00 0	38767	57
9	Model 8+Random slope for Attend	15718 8	37	11	88	0.00 0	38767	57

The next part of the model, adds a level two explanatory variable to the model. GDP (in thousands \$) of a society is added as an independent variable, and the improvement in model fit is again calculated (see table 4-12). Adding GDP to the model (model 10) adds one degree of freedom to the model and the difference in log-likelihoods between the previous models (model 9) is 14. Comparing this to a chi-square distribution gives a p -value of $<.001$. The regression coefficient of -0.020 with a standard error of 0.004 is also statistically significant ($p < .05$). This indicates there is strong evidence that the GDP of a society has a negative effect on personal morality.

The next step is to test whether the effect of the religious variables on personal morality varies according to the level of GDP in a society. To test this, interaction terms are added to the model between each religious variable (with random slopes) and GDP. First an interaction term is added for belonging to a denomination by GDP. The regression coefficient for $\text{Belong} * \text{GDP}$ is 0.000 with a standard error of 0.003 ($p \neq .05$), and there is therefore no evidence that the effect of belonging to a denomination differs according to a society's GDP. The interaction term is removed from the model.

An interaction term is added for the belief dimension and GDP. The regression coefficient for $\text{Belief} * \text{GDP}$ is 0.000 with a standard error of 0.000 ($p \neq .05$), and there is therefore no evidence that the effect of religious belief dimension on personal morality differs according to a society's GDP. The interaction term is removed from the model.

An interaction term is added for the organizational dimension and GDP. The regression coefficient for $\text{Organizational} * \text{GDP}$ is 0.000 with a standard error of 0.000 ($p \neq .05$), and there is therefore no evidence that the effect of organizational dimension on personal morality differs according to a society's GDP. The interaction term is removed from the model.

Finally, an interaction term is added for attendance and GDP. The regression coefficient for $\text{attend less than monthly (ref never)} * \text{GDP}$ is -0.004 with a standard error of 0.002 ($p \neq .05$), and there is therefore no evidence that the effect of attending less than monthly on personal morality differs according to a society's GDP. The regression coefficient for $\text{attend monthly or more (ref. never)} * \text{GDP}$ is 0.007 with a

standard error of 0.003 ($p < .05$). There is therefore some evidence that the effect of attending monthly or more has a differential effect on personal morality according to the GDP of a society. The significance of this result is also tested via the contribution of the interaction term to the model fit. The difference in log likelihood values between the previous model with no interaction terms, and the model with the interaction is $157174 - 157156 = 18$, with 2 df ($p = 0.00012341$), ($p < .001$). There is therefore robust evidence to conclude that the effect of attending monthly or more regularly, in comparison to never attending, has a differential effect on personal morality in societies with different levels of GDP. That is, the lower the level of GDP of a society, the stronger the effect of attending monthly or more, in comparison to never, on personal morality. Or alternatively, the higher the GDP of a society, the stronger the effect of attending monthly or more, or less than monthly, in comparison to never, on personal morality. The final outline of model (continued from previous) are shown in the table below.

Table 4-12: H8 DV1 Personal Morality Model Fit Statistics (Level 2: GDP)

Model	Label	-2log	Df	±df	X ²	p-value	N (1)	N (2)
10 (GDP)	Model 9 + GDP	157174	38	1	14	0.001	38767	57
11 (GDP)	Model 10+ Interaction between Belong* GDP	NS						
12 (GDP)	Model 10+ Interaction between Belief * GDP	NS						
13 (GDP)	Model 10+ Interaction between Org* GDP	NS						
14 (GDP)	Model 10+ Interaction between Attend * GDP	157156	40	2	18	0.000	38767	57

In order to further test the hypothesis, models 10-14 are repeated but with a different operationalization of modernization. GDP is removed from the model, and is replaced by HDI as the level two independent variable (table 4-13).

Adding HDI to the model (model 10 HDI) adds one degree of freedom to the model and the difference in log-likelihoods between the previous models (model 9) is 24. Comparing this to a chi-square distribution gives a p -value of $<.001$. The regression coefficient of -8.721 with a standard error of 1.035 is also statistically significant ($p < .05$). This indicates there is strong evidence that the HDI of a society has a negative effect on personal morality.

The next step is to test whether the effect of the religious variables on personal morality varies according to the level of HDI in a society. To test this, interaction terms are added to the model between each religious variable (with random slopes) and HDI. First an interaction term is added for belonging to a denomination by HDI. The regression coefficient for $\text{Belong}*\text{HDI}$ is -2.657 with a standard error of 1.1 ($p < .05$), and there is therefore strong evidence that the effect of belonging to a denomination differs according to a society's HDI. The significance of the addition of the interaction term is also tested via its contribution to the model fit. The difference in log likelihoods between the model without the interaction term (Model 10 HDI) and the model with the term (Model 11 HDI) is 3 with 1 degree of freedom. Comparing this to a chi-square distribution gives a p -value of 0.083265 ($p \not< .05$). There is therefore evidence to suggest that the effect of belonging to a denomination does not differ according to a society's HDI. Because the significance of the parameter estimates and the improvement to model fit imply conflicting results, the interaction term is retained in the model, with the qualification that it does not significantly contribute to the model as a whole, but is relevant in terms of the relationship between this particular independent variable and personal morality. If the relationship is a statistically significant one, it would signify that the higher the HDI of a society, the weaker the effect of belonging to denomination on personal morality.

Next, an interaction term is added for the belief dimension and HDI. The regression coefficient for $\text{Belief}*\text{HDI}$ is -0.032 with a standard error of 0.049 ($p \not< .05$), and there is therefore no evidence that the effect of the belief dimension on

personal morality differs according to a society's HDI. The interaction term is removed from the model.

An interaction term is added for the organizational dimension and HDI. The regression coefficient for Organizational*HDI is -0.109 with a standard error of 0.035 ($p < .05$), and there is therefore strong evidence that the effect of organizational dimension on personal morality differs according to a society's HDI. The significance of the addition of the interaction term is also tested via the contribution to the model fit. The difference in log likelihoods between the model without the interaction term (Model 11 HDI) and the model with the term (Model 13 HDI) is 4 with 1 degree of freedom. Comparing this to a chi-square distribution gives a p -value of 0.0455 ($p < .05$). There is therefore more robust evidence that the effect of one's score on the organizational dimension differs according to a society's HDI. That is the lower the HDI, the stronger the effect of the organizational dimension on personal morality, or alternatively, the higher the HDI of a society, the weaker the effect of the organizational dimension on personal morality.

Finally, an interaction term is added for attendance and HDI. The regression coefficient for attend less than monthly (ref. never)*HDI is -1.682 with a standard error of 0.661 ($p < .05$), and there is therefore strong evidence that the effect of attending less than monthly (in comparison to never) on personal morality differs according to a society's HDI. The regression coefficient for attend monthly or more (ref. never)*HDI is 2.53 with a standard error of 0.829 ($p < .05$). There is therefore strong evidence that the effect of attending monthly or more has a differential effect on personal morality according to the HDI of a society. The significance of this result is also tested via the contribution of the interaction term to the model fit. The difference in log likelihoods between the model without this interaction term (Model 13 HDI) and the model with this term (Model 14 HDI) is 33 with 2 degrees of freedom. Comparing this to a chi-square distribution gives a p -value of $< .001$. There is therefore robust evidence that the effect of attending less than monthly, or attending monthly or more on personal morality differs according to a society's HDI. That is, the higher the HDI the greater the effect of attending monthly, or less than monthly, in comparison to never, on personal morality. The final outline of model is shown in table 4-13 below.

Table 4-13: H8 DV1 Personal Morality Model Fit Statistics (Level 2: HDI)

Model	Label	-2log	Df	±df	X ²	p-value	N (1)	N (2)
9	Model 8+Random slope for Attend	157188	37	11	88	0.000	38767	57
10 (HDI)	Model 9 + Degree of HDI	157164	38	1	24	0.000	38767	57
11 (HDI)	Model 10+ Interaction between Belong* HDI	157161	39	1	3	0.083	38767	57
12 (HDI)	Model 11+ Interaction between Belief * HDI	Ns						
13 (HDI)	Model 11+ Interaction between Org* HDI	157157	40	1	4	0.046	38767	57
14 (HDI)	Model 12+ Interaction between Attend * HDI	157124	42	2	33	0.000	38767	57

In order to further test the hypothesis, models 10-14 are repeated but with a different operationalization of modernization. HDI is removed from the model, and is replaced by AGRI as the level two independent variable.³⁷

Adding AGRI to the model (model 10 AGRI) adds one degree of freedom to the model and the difference in log-likelihoods with the baseline model (model 9) is 3. Comparing this to a chi-square distribution gives a *p*-value of 0.083 ($p < .05$). The regression coefficient of -0.026 with a standard error of 0.013 is also not statistically significant ($p < .05$). There is therefore no evidence to suggest that the proportion of the workforce in agriculture has an effect on personal morality. The variable is however retained in the model as it is possible for the main effect of AGRI on personal morality to be non-significant, but interaction effects to be statistically significant.

The next part of the model is to test whether the effect of the religious variables on personal morality varies according to the level of AGRI in a society. To

³⁷ The scale on which AGRI is measured is reversed to aid in interpretation – where higher values indicate a higher degree of modernization, and lower values, lower modernization, the same direction as the GDP and HDI scales.

test this, interaction terms are added to the model between each religious variable (with random slopes) and AGRI. First an interaction term is added for belonging to a denomination by AGRI. The regression coefficient for *Belong*AGRI* is -0.024 with a standard error of 0.014 ($p < .05$), and there is therefore no evidence that the effect of belonging to a denomination differs according to a society's AGRI. The interaction term is removed from the model.

An interaction term is then added for the belief dimension and AGRI. The regression coefficient for *Belief*AGRI* is 0.000 with a standard error of 0.001 ($p < .05$), and there is therefore no evidence that the effect of the belief dimension on personal morality differs according to a society's AGRI. The interaction term is removed from the model.

An interaction term is added for the organizational dimension and AGRI. The regression coefficient for *Org*AGRI* is +0.001 with a standard error of 0.000 ($p < .05$), and there is therefore some evidence that the effect of the organizational dimension on personal morality differs according to a society's AGRI. The significance of this result is also tested via the contribution of the interaction term to the model fit. The difference in log likelihood values between the model with only AGRI (model 10) and this model (model 11) is 8, with 1 df, giving a p -value of >0.0001 . There is therefore more robust evidence that the effect of the organizational dimension on personal morality differs according to the proportion of the workforce engaged in agriculture. That is, the more individuals employed in agriculture (or the lower the level of modernization), the weaker the effect of the organizational dimension on personal morality. Or alternatively, the greater the level of modernization, the stronger the effect of the organizational dimension on personal morality.

Finally, an interaction term is added for attendance and AGRI. The regression coefficient for *attend less than monthly (ref. never)*AGRI* is -0.029 with a standard error of 0.009 ($p < .05$), and there is therefore evidence that the effect of attending less than monthly (in comparison to never) on personal morality differs according to a society's AGRI. The regression coefficient for *attend monthly or more (ref. never)*AGRI* is -0.007 with a standard error of 0.010 ($p < .05$). There is therefore no evidence that the effect of attending monthly or more has a differential

effect on personal morality according to the AGRI of a society. The significance of this result is also tested via the contribution of the interaction term to the model fit. The difference in log likelihood values between the model 11 and this model (model 14) is 8, with 2 df, giving a *p*-value of >0.05. There is therefore more robust evidence that the effect of the attending less than monthly, in comparison to never on personal morality differs according to the proportion of the workforce engaged in agriculture. That is, the greater the number of proportion of individuals employed in agriculture in a society (or the lower the level of rationalization), the stronger the effect of attending less than monthly, in comparison to never, on personal morality. The final outline of the model is shown in table 4-21 below.

Table 4-14: H9 DV1 Personal Morality Model Fit Statistics (Level 2:AGRI)

Model	Label	-2log	Df	±df	X ²	<i>p</i> -value	N (1)	N (2)
9	Model 8+Random slope for Attend	157188	37				38767	57
10 (AGRI)	Model 9 + Degree of Rationalization (AGRI)	157185	38	1	3	0.083	38767	57
11 (AGRI)	Model 10+ Interaction between Denom.* Rationalization (AGRI)	Ns					38767	57
12 (AGRI)	Model 10+ Interaction between Belief * Rationalization (AGRI)	Ns					38767	57
13 (AGRI)	Model 10+ Interaction between Org* Rationalization (AGRI)	157177	39	1	8	0.000	38767	57
14 (AGRI)	Model 13+ Interaction between Attend * Rationalization (AGRI)	157166	41	2	11	0.000	38767	57

4.8.2 DV2: Civic Morality

The first step in testing the hypothesis is to calculate how much of the overall variance in civic morality can be attributed to the societal level (between groups) versus how much is explained by the individual level (within groups/societies). A variance components model of civic morality is constructed. First the null model, a model that estimates societal effects but with no explanatory variables is calculated.

The null model (model 1 in table 4-15) is as follows:

$$y_{ij} = \beta_0 + u_{0j} + e_{ij}$$

- y_{ij} is the level of civic morality for individual i in society j ;
- β_0 is the overall mean across societies;
- u_{0j} is the effect of society j on Civic morality;
- and e_{ij} is an individual level residual.

The mean level of civic morality across societies is estimated 8.949(β_0). The mean civic morality for society j is estimated as 8.949 + \hat{u}_j , where \hat{u}_j is the society residual. The between society/group variance (σ_u^2) in civic morality is estimated to be 0.153 and the within group/society variance (σ_e^2) in civic morality is estimated to be 1.444. The total residual variance ($\sigma_e^2 + \sigma_u^2$) is estimated to be 1.597. The variance partition coefficient (ρ) is calculated as follows:

$$\text{Variance Partitioning Coefficient (Rho): } \rho = \frac{\text{Level 2 Variance}}{\text{Total Residual Variance}} = \frac{.153}{1.597} = 0.096$$

Approximately 10% of the variance in civic morality therefore, is due to differences between societies.

A likelihood ratio test is conducted to test whether this two-level model with between society variance in civic morality is significantly different to a one-level model with only within society variance (model 0 in table 4-15). To do this, a single level null model is compared to the two-level model. The likelihood ratio test statistic is calculated as follows and compared to a chi-square distribution with 1 degree of freedom (as there is only one parameter difference between the models).

The difference between the two models (6810, 1 df) proves highly statistically significant ($p < .001$), signifying that a model that takes into account variation in civic morality attributable to differences between societies, is appropriate.

More generally, this is the approach taken throughout the analysis to evaluate the different multilevel models: comparing the changes in the log-likelihood and degrees of freedom between models to decide whether or not the addition or manipulation of independent variables (individual level, society level, or cross-level interactions) significantly improves the model fit (Scheepers *et al.* 2002).³⁸ This is accompanied by testing whether or not the individual parameter estimates are statistically significant, which is tested by dividing the regression coefficient by its standard error, and comparing this Wald Statistic (z) to a chi-square distribution with one degree of freedom (which has the same distribution as a standard normal distribution) (Twisk 2006). A Wald statistic of < 1.96 is therefore significant at the 95% level ($p < .05$) (or Wald < 1.645 for negative values) (Bickel 2007). The stepwise addition of variables to the models are outlined in the table 4-15 below.

Table 4-15: H8 DV2 Civic Morality Multielevel Model Stepwise Procedure

Model	Label	Degrees of freedom
0	Intercept model	1
1	Intercept model + Variation at national level	2
2	Model 1 +Denomination	3
3	Model 2+Belief	4
4	Model 3+Organizational	5
5	Model 4 +Attendance	7
6	Model 5+ Random Slopes for Denomination	9
7	Model 6+Random Slope for Belief	12
8	Model 7 +Random slope for organizational	16
9	Model 8+Random slope for Attendance (s)	37
10	Model 9 + GDP	39
11	Model 10+ Interaction between Denom. * GDP	
12	Model 11+ Interaction between Belief. * GDP	
13	Model 12+ Interaction between Org. * GDP	
14	Model 13+ Interaction between Attendmonthly.*GDP	
15	Model 14+ Interaction between Attendless.* GDP	

³⁸ Degrees of freedom is calculated from the number of parameters in the model

Table 4-16: H8 DV2 Civic Morality Parameter Estimates, Wald Statistics, and Variances of Model 1-5

Model 1-5						
Fixed Part						
Model:	0	1	2	3	4	5
Constant (B0)	8.889	8.949	8.677	8.836	8.874	8.797
Std. error	0.008	0.052	0.05	0.051	0.053	0.054
Wald	1111**	172**	173.5**	173.2**	167.4**	162.9**
Denomination (B1)			0.339	0.144	0.093	0.063
Std. error			0.012	0.015	0.018	0.019
Wald			28.25**	9.6**	5.166**	3.32**
Belief (B2)				0.018	0.011	0.007
Std. error				0.001	0.001	0.001
Wald				18**	11**	7**
Organizational (B3)					0.015	0.012
Std. error					0.001	0.001
Wald					15**	12**
Monthly (B4)						0.246
Std. error						0.021
Wald						11.71**
Less (B5)						0.028
Std. error						0.017
Wald						1.65
Individual Level Random Part						
Within group variance:	1.591	1.444	1.425	1.406	1.415	1.41
Std. error	0.008	0.008	0.007	0.009	0.01	0.01
Society Level Random Part						
Between group variance	0	0.153	0.134	0.138	0.143	0.148
Std. error	0	0.029	0.025	0.026	0.027	0.028
Total variance	1.591	1.597	1.559	1.544	1.558	1.558
VPC (ρ)		0.095805	0.085953	0.089378	0.091784	0.094994

* $p < .05$, ** $p < .001$

The next step in the analysis is to add the individual level religious dimension independent variables – denominational belonging, the belief dimension, organizational dimension, and attendance (models 2-5 in table 4-16).

Each of the single level regression coefficients prove to be statistically significant ($p < .05$). With the addition of these independents (i.e. controlling for the distribution of the four religiosity variables across societies), the variance partition coefficient is reduced from 0.0958 to 0.0949, meaning approximately the same amount of the variance is at the society level. Additionally, a test is conducted of whether the addition of these single level independent variables improves the model fit. This is done by comparing the difference in degrees of freedom and log likelihood values of the model without these independents (model 1) and a model with them (model 5), and comparing to a chi-square distribution.³⁹

$$234920 (2 \text{ df}) - 135729 (7 \text{ df}) = 9919 (5 \text{ df}) \quad p < 0.001$$

The next step in the analysis is to move beyond the previous random intercept model and re-estimate the model with random slopes (i.e. allowing their effect on civic morality to vary from society to society) for each of the independent variables. The random intercept model (model 5) serves as the baseline model from which to evaluate the improvement in model fit by allowing the slopes for denominational belonging to vary (model 6)(table 4-17). The improvement in model fit by allowing the slope of denomination to vary (calculated from the differences in degrees of freedom and log likelihoods between model 5 and model 6, and compared to a chi-square distribution) is statistically significant ($p < 0.001$). The improvement in model fit by allowing the slope of the belief dimension to vary (differences between model 6 and model 7) is statistically significant ($p < 0.001$). The improvement in model fit by allowing the slope of the organizational dimension to vary (differences between model 7 and model 8) is statistically significant ($p < 0.001$). And the improvement in model fit by allowing the slope of the attendance (monthly, less, never reference) to vary (differences between model 8 and model 9) is statistically significant ($p < 0.001$). In summary, there is strong evidence to suggest that religiosity (each dimension) has a differential effect on civic morality in different societies.

³⁹ There is also a significant ($p < .001$) improvement in model fit with the addition of each independent variable (see table for log likelihood and degrees of freedom differences)

Table 4-17: H8 DV2 Civic Morality Model Fit Statistics (Level 1 only)

Mode l	Label	-2log 0	Df	±df	X ²	p- valu e	N (1)	N (2)
0	Intercept model	24173 0	1				73199	57
1	Intercept model + Variation at national level	23492 0	2	1	6810	0.00 0	73199	57
2	Model 1 +Denomination	23308 6	3	1	1834	0.00 0	72941	57
3	Model 2+Belief	17010 5	4	1	62981	0.00 0	53434	57
4	Model 3+Organizational	13633 8	5	1	33767	0.00 0	53434	57
5	Model 4 +Attendance	13572 9	7	2	609	0.00 0	42590	57
6	Model 5+ Random Slopes for Denom.	13548 5	9	2	244	0.00 0	42590	57
7	Model 6+Random Slope for Belief	13540 6	12	3	79	0.00 0	42590	57
8	Model 7 +random slope for org	13534 1	16	4	65	0.00 0	42590	57
9	Model 8+Random slope for Attend	13529 6	37	11	45	0.00 0	42590	57

The next part of the model adds a level two explanatory variable. GDP (in thousands \$) of a society is added as an independent variable, and the improvement in model fit is again calculated (table 4-18). Adding GDP to the model (model 10) adds one degree of freedom to the model and the difference in log-likelihoods between the previous models (model 9) is 63. Comparing this to a chi-square distribution gives a *p*-value of <.001. The regression coefficient for GDP however is 0.05 with a standard error of 0.03 (*p*<.05). There is therefore no evidence that the GDP of a society has any effect on civic morality, but adding GDP to the model does improve model fit. The variable is retained in the model, as it is possible for an

interaction between the religious variables and GDP is significant, despite the overall/main effect of GDP on civic morality being non-significant.

The next step is to test whether the effect of the religious variables on civic morality varies according to the level of GDP in a society. To test this, interaction terms are added to the model between each religious variable (with random slopes) and GDP. First an interaction term is added for belonging to a denomination by GDP. The regression coefficient for $\text{Belong} * \text{GDP}$ is -0.003 with a standard error of 0.002 ($p < .05$), and there is therefore no evidence that the effect of belonging to a denomination differs according to a society's GDP. The interaction term is removed from the model.

An interaction term is added for the belief dimension and GDP. The regression coefficient for $\text{Belief} * \text{GDP}$ is 0.000 with a standard error of 0.000, and there is therefore no evidence that the effect of religious belief dimension on civic morality differs according to a society's GDP. The interaction term is removed from the model.

An interaction term is added for the organizational dimension and GDP. The regression coefficient for $\text{Organizational} * \text{GDP}$ is 0.000 with a standard error of 0.000 ($p < .05$), and there is therefore no evidence that the effect of organizational dimension on Civic morality differs according to a society's GDP. The interaction term is removed from the model.

Finally, an interaction term is added for attendance and GDP. The regression coefficient for attend less than monthly (ref never)*GDP is -0.000 with a standard error of 0.000, and there is therefore no evidence that the effect of attending less than monthly on civic morality differs according to a society's GDP. The regression coefficient for attend monthly or more (ref never)*GDP is 0.00 with a standard error of 0.003 ($p < .05$). And there is therefore no evidence that the effect of attending less than monthly on Civic morality differs according to a society's GDP. The final outline of model (continued from previous) are shown in table 4-18 below.

Table 4-18: H8 DV2 Civic Morality Model Fit Statistics (Level 2: GDP)

Model	Label	-2log	df	±df	X ²	p-value	N (1)	N (2)
10 (GDP)	Model 9 + GDP	135233	38			0.000	42590	57
11 (GDP)	Model 10+ Interaction between Belong* GDP	NS						
12 (GDP)	Model 10+ Interaction between Belief * GDP	NS						
13 (GDP)	Model 10+ Interaction between Org* GDP	NS						
14 (GDP)	Model 10+ Interaction between Attend * GDP	NS						

In order to further test the hypothesis, models 10-14 are repeated but with a different operationalization of modernization. GDP is removed from the model, and is replaced by HDI⁴⁰ as the level two independent variable (see table 4-19).

Adding HDI to the model (model 10 HDI) adds one degree of freedom to the model and the difference in log-likelihoods between the previous models (model 9) is 60. Comparing this to a chi-square distribution gives a *p*-value of <.001. The regression coefficient of 0.495 with a standard error of 0.772 is not statistically significant (*p* >.05). There is therefore no evidence from the parameter estimates that the HDI of a society has any effect on civic morality, but adding HDI to the model does improve model fit. The variable is retained in the model, as it is possible for an interaction between the religious variables and HDI is significant, despite the overall/main effect of HDI on civic morality being non-significant.

The next step is to test whether the effect of the religious variables on civic morality varies according to the level of HDI in a society. To test this, interaction terms are added to the model between each religious variable (with random slopes)

⁴⁰ Not centred like the other continuous variables due to convergence problems with the mean centred version.

and HDI. First an interaction term is added for belonging to a denomination by HDI. The regression coefficient for $\text{Belong}*\text{HDI}$ is -1.978 with a standard error of 0.985 ($p < .05$), and there is therefore strong evidence that the effect of belonging to a denomination differs according to a society's HDI. The significance of the addition of the interaction term is also tested via its contribution to the model fit. The difference in log likelihoods between the model without the interaction term (Model 10 HDI) and the model with the term (Model 11 HDI) is 8 with 1 degree of freedom. Comparing this to a chi-square distribution gives a p -value of $< .001$. There is therefore strong evidence to suggest that the effect of belonging to a denomination differs according to a society's HDI. That is, the higher the level of HDI in a society, the weaker the effect of belonging to a denomination on civic morality, or alternatively, the lower the HDI in a society, the stronger the effect of belonging to a denomination on civic morality.

Next, an interaction term is added for the belief dimension and HDI. The regression coefficient for $\text{Belief}*\text{HDI}$ is -0.033 with a standard error of 0.021 ($p < .05$), and there is therefore no evidence that the effect of the belief dimension on Civic morality differs according to a society's HDI. The interaction term is removed from the model.

An interaction term is added for the organizational dimension and HDI. The regression coefficient for $\text{Organizational}*\text{HDI}$ is -0.073 with a standard error of 0.019 ($p < .05$), and there is therefore strong evidence that the effect of organizational dimension on civic morality differs according to a society's HDI. The significance of the addition of the interaction term is also tested via the contribution to the model fit. The difference in log likelihoods between the model without the interaction term (Model 11 HDI) and the model with the term (Model 13 HDI) is 11 with 1 degree of freedom. Comparing this to a chi-square distribution gives a p -value of $< .001$. There is therefore more robust evidence that the effect of one's score on the organizational dimension differs according to a society's HDI. That is, the lower the HDI of a society, the greater the effect of the organizational dimension on civic morality.

Finally, an interaction term is added for attendance and HDI. The regression coefficient for $\text{attend less than monthly (ref. never)}*\text{HDI}$ is -0.322 with a standard

error of 0.380 ($p \leq .05$), and there is therefore no evidence that the effect of attending less than monthly (in comparison to never) on civic morality differs according to a society's HDI. The regression coefficient for attend monthly or more (ref. never)*HDI is 0.301 with a standard error of 0.595 ($p \leq .05$). There is therefore no evidence that the effect of attending monthly or more has a differential effect on civic morality according to the HDI of a society. The final outline of model is shown in table 4-19 below.

Table 4-19: H8 DV2 Civic Morality Model Fit Statistics (Level 2:HDI)

Model	Label	-2log	df	±df	X ²	p-value	N (1)	N (2)
9	Model 8+Random slope for Attend	135296	37				42590	57
10 (HDI)	Model 9 + HDI	135236	38	1	60	0.000	42590	57
11 (HDI)	Model 10+ Interaction between Belong* HDI	135228	39	1	8	0.000	42590	57
12 (HDI)	Model 11+ Interaction between Belief * HDI	Ns					42590	57
13 (HDI)	Model 11+ Interaction between Org* HDI	135217	40	1	11	0.000	42590	57
14 (HDI)	Model 12+ Interaction between Attend * HDI	157124	42	2	33	0.000	38767	57

In order to further test the hypothesis, models 10-14 are repeated but with a different operationalization of modernization. HDI is removed from the model, and is replaced by AGRI as the level two independent variable.⁴¹

Adding AGRI to the model (model 10 AGRI) adds one degree of freedom to the model and the difference in log-likelihoods with the baseline model (model 9) is

⁴¹ As with the personal morality model, the scale on which AGRI is measured is reversed to aid in interpretation – where higher values indicate a higher degree of modernization, and lower values, lower modernization, the same direction as the GDP and HDI scales.

1. Comparing this to a chi-square distribution gives a p -value of 0.317 ($p \neq .05$). The regression coefficient of -0.007 with a standard error of 0.008 is also not statistically significant ($p \neq .05$). There is therefore no evidence to suggest that the proportion of the workforce in agriculture has an effect on civic morality. The variable is however retained in the model as it is possible for the main effect of AGRI on civic morality to be non-significant, but interaction effects to be statistically significant.

The next part of the model is to test whether the effect of the religious variables on civic morality varies according to the level of AGRI in a society. To test this, interaction terms are added to the model between each religious variable (with random slopes) and AGRI. First an interaction term is added for belonging to a denomination by AGRI. The regression coefficient for $\text{Belong}^* \text{AGRI}$ is -0.022 with a standard error of 0.008 ($p < .05$), and there is therefore some evidence that the effect of belonging to a denomination differs according to a society's AGRI. The significance of this result is also tested via the contribution of the interaction term to the model fit. The difference in log likelihood values between this model (model 11) and the previous model (model 10) is 5 with 1 df, giving a p -value of < 0.001 . There is therefore more robust evidence that the effect of belong to a denomination differs according to the level of AGRI in a society. That is, the greater the proportion of individuals employed in agriculture (or the lower the level of modernization) in a society, the stronger the effect of belonging to a denomination on civic morality. Or alternatively, the lesser the proportion of individuals employed in agriculture (or the higher the level of modernization), the stronger the effect of belonging on civic morality.

Interaction terms were then added for the belief dimension, the organizational and the practice dimension. The models however failed to converge. It was decided to remove the belonging interaction and test the interactions of these terms without the significant interaction in the model.

An interaction term is added for the belief dimension and AGRI. The regression coefficient for $\text{Belief}^* \text{AGRI}$ is -0.000 with a standard error of 0.000 ($p \neq .05$), and there is therefore no evidence that the effect of the belief dimension on civic morality differs according to a society's AGRI. The interaction term is removed from the model.

An interaction term is added for the organizational dimension and AGRI. The regression coefficient for Org*AGRI is -0.001 with a standard error of 0.000 ($p < .05$), and there is therefore some evidence that the effect of the organizational dimension on civic morality differs according to a society's AGRI. The significance of this result is also tested via the contribution of the interaction term to the model fit. The difference in log likelihood values between the model with only AGRI (model 10) and this model (model 13) is 7, with 1 df, giving a p -value of >0.05 . There is therefore more robust evidence that the effect of the organizational dimension on civic morality differs according to the proportion of the workforce engaged in agriculture. That is, the greater the proportion of individuals employed in agriculture (or the lower the level of modernization) in a society, the stronger the effect of the organizational dimension on civic morality. Or alternatively, the greater the level of modernization, the weaker the effect of the organizational dimension on civic morality.

Finally, an interaction term is added for attendance and AGRI. Again however, the model failed to converge. It was decided to remove the interaction between the organization dimension and AGRI and test the interaction between attendance and AGRI separately. The regression coefficient for attend less than monthly (ref. never)*AGRI is +0.001 with a standard error of 0.005 ($p \nless .05$), and therefore there is no evidence that the effect of attending less than monthly (in comparison to never) on civic morality differs according to a society's AGRI. The regression coefficient for attend monthly or more (ref. never)*AGRI is +0.002 with a standard error of 0.006 ($p \nless .05$). There is therefore no evidence that the effect of attending monthly or more has a differential effect on civic morality according to the AGRI of a society. The final outline of the model is presented in table 4-22 below.

Table 4-20: H9 DV2 Civic Morality Model Fit Statistics (Level 2:AGRI)

Model	Label	-2log	Df	±df	X ²	p-value	N (1)	N (2)
9	Model 8+Random slope for Attend	135236	37				42590	57
10 (AGRI)	Model 9 + Degree of Rationalization (AGRI)	135235	38	1	1	0.317	42590	57
11 (AGRI)	Model 10+ Interaction between Denom.* Rationalization (AGRI)	135230	39	1	5	0.000	42590	57
12 (AGRI)	Model 10+ Interaction between Belief * Rationalization (AGRI)						42590	57
13 (AGRI)	Model 10+ Interaction between Org* Rationalization (AGRI)	135228	39	1	7	0.000	42590	57
14 (AGRI)	Model 13+ Interaction between Attend * Rationalization (AGRI)						42590	57

4.9 Hypothesis 9

(a) The less supportive the religious context of a society, the weaker the conservatizing effect of religiosity on values. (b) The more supportive the religious context the stronger the conservatizing effect of religiosity on values.

4.9.1 DV1: Personal Morality

To test the hypothesis that the less supportive a religious context in a society, the weaker the relationship between religiosity and personal morality, the initial part of the multilevel model from hypothesis 8 is used as the baseline model from which to examine the effects of level 2 variables that measure the degree to which there is a supportive religious context in a society. The first level 2 variables is the degree of pluralism in a society (see table 4-23). The second level 2 variables is the proportion of the population who do not attend religious services (national religiosity) (see table 4-24).

Adding pluralism to the model (model 10 PLU) adds one degree of freedom to the model and the difference in log-likelihoods with the baseline model (model 9) is less than 1. Comparing this to a chi-square distribution gives a p -value $\ll .05$). The regression coefficient of -0.086 with a standard error of 0.368 is also not statistically significant ($p \ll .05$). There is therefore no evidence to suggest that the level of pluralism in society has an effect on personal morality. The variable is however retained in the model as it is possible for the main effect of pluralism on personal morality to be non-significant, but interaction effects to be statistically significant.

The next part of the model is to test whether the effect of the religious variables on personal morality varies according to the level of pluralism in a society. To test this, interaction terms are added to the model between each religious variable (with random slopes) and pluralism. First an interaction term is added for belonging to a denomination by pluralism. The regression coefficient for $\text{Belong} * \text{Pluralism}$ is -0.333 with a standard error of 0.308 ($p \ll .05$), and there is therefore no evidence that the effect of belonging to a denomination differs according to a society's pluralism. The interaction term is removed from the model.

An interaction term is added for the belief dimension and pluralism. The regression coefficient for Belief*Pluralism is 0.034 with a standard error of 0.066 ($p < .05$), and there is therefore no evidence that the effect of the organizational dimension on personal morality differs according to a society's pluralism. The interaction term is removed from the model.

An interaction term is added for the organizational dimension and pluralism. The regression coefficient for Org*pluralism is -0.015 with a standard error of 0.010 ($p < .05$), and there is therefore no evidence that the effect of the organizational dimension on personal morality differs according to a society's pluralism.

Finally, an interaction term is added for attendance and pluralism. The regression coefficient for attend less than monthly (ref. never)*Pluralism is -0.645 with a standard error of 0.176 ($p < .05$), and there is therefore evidence that the effect of attending less than monthly (in comparison to never) on personal morality differs according to a society's pluralism. The regression coefficient for attend monthly or more (ref. never)*Pluralism is -0.216 with a standard error of 0.251 ($p < .05$). The significance of this result is also tested via the contribution of the interaction term to the model fit. The difference in log likelihood values between model 10 and this model (model 13) is 12, with 2 df, giving a p -value of >0.001 . There is therefore more robust evidence that the effect of attending less than monthly, in comparison to never, on personal morality differs according to the level of pluralism in a society. That is, the greater the level of pluralism, the lesser the effect of attending less than monthly, in comparison to never, on personal morality.

Table 4-21: H10 DV1 Personal Morality Model Fit Statistics (Level 2:Herf)

Model	Label	-2log	Df	±df	X ²	p-value	N (1)	N (2)
9	Model 8+Random slope for Attend	157188	37				387687	57
10 (Herf)	Model 9 + Degree of Pluralism (Herf)	157188	38			>.05	387687	57
11 (Herf)	Model 10+ Interaction between Denom.* Pluralism (Herf)	NS						
12 (Herf)	Model 10+ Interaction between Belief * Pluralism (Herf)	NS						
13 (Herf)	Model 10+ Interaction between Org* Pluralism (Herf)	NS						
14 (Herf)	Model 10+ Interaction between Attend * Pluralism (Herf)	157176	40	2	12	.000	387687	57

The second level 2 variables is the proportion of the population who do not attend religious services (national religiosity) (see table 4-24). Pluralism is removed from the model. It should be noted that high values in national religiosity indicate larger proportions of individuals who never attend religious services.

Adding national religiosity (the proportion of the population who never attend religious services) to the model (model 10 REL) adds one degree of freedom to the model and the difference in log-likelihoods between the previous models (model 9) is 5. Comparing this to a chi-square distribution gives a *p*-value of 0.025 (*p*< .05). The regression coefficient of -1.096 with a standard error of 0.433 is also statistically significant (*p*< .05). There is strong evidence that the national religiosity of a society has a negative effect on personal morality.

The next step is to test whether the effect of the religious variables on personal morality varies according to the level of national religiosity in a society. To test this, interaction terms are added to the model between each religious variable (with random slopes) and national religiosity. First an interaction term is added for

belonging to a denomination by national religiosity. The regression coefficient for $\text{Belong} * \text{NatRel}$ is 0.043 with a standard error of 0.43 ($p < .05$), therefore there is no evidence that the effect of belonging to a denomination differs according to a society's national religiosity.

Next, an interaction term is added for the belief dimension and national religiosity. The regression coefficient for $\text{Belief} * \text{NatRel}$ is 0.017 with a standard error of 0.017 ($p < .05$), and there is therefore no evidence that the effect of the belief dimension on personal morality differs according to a society's national religiosity. The interaction term is removed from the model.

An interaction term is added for the organizational dimension and national religiosity. The regression coefficient for $\text{Organizational} * \text{NatRel}$ is -0.38 with a standard error of 0.012 ($p < .05$), and there is therefore strong evidence that the effect of organizational dimension on personal morality differs according to a society's national religiosity. The significance of the addition of the interaction term is also tested via the contribution to the model fit. The difference in log likelihoods between the model without the interaction term (Model 10 Natrel) and the model with the term (Model 13 Natrel) is 8 with 1 degree of freedom. Comparing this to a chi-square distribution gives a p -value of 0.004 ($p < .05$). There is therefore more robust evidence that the effect of the organizational dimension on personal morality differs according to a society's national religiosity. That is, in societies with a less supportive religious context in terms of national religiosity, the weaker the effect of the organizational dimension on personal morality.

Finally, an interaction term is added for attendance and national religiosity. The regression coefficient for attend less than monthly (ref. never) * Natrel is -0.502 with a standard error of 0.264 ($p < .05$), and there is therefore no evidence that the effect of attending less than monthly (in comparison to never) on personal morality differs according to a society's national religiosity. The regression coefficient for attend monthly or more (ref. never) * NatRel is -0.248 with a standard error of 0.329 ($p < .05$). There is therefore no evidence that the effect of attending monthly or more has a differential effect on personal morality according to the national religiosity of a society.

Table 4-22: H10 DV1 Personal Morality Model Fit Statistics (Level 2: Natrel)

Model	Label	-2log	Df	±df	X ²	p-value	N (1)	N (2)
9	Model 8+Random slope for Attend	157188	37				387687	57
10 (REL)	Model 9 + Degree of National Rel. (REL)	157183	38	1	5	0.025	387687	57
11 (REL)	Model 10+ Interaction between Denom.* National Rel.(REL)	NS					387687	57
12 (REL)	Model 10+ Interaction between Belief * National Rel. (REL)	NS					387687	57
13 (REL)	Model 10+ Interaction between Org* National Rel. (REL)	157175	39	1	8	0.004	387687	57
14 (REL)	Model 13+ Interaction between Attend * National Rel. (REL)	NS					387687	57

4.9.2 DV2: Civic Morality

To test the hypothesis that the less supportive the religious context in a society, the weaker the relationship between religiosity and civic morality, the initial part of the multilevel model from hypothesis 8 is used as the baseline model from which to examine the effects of level 2 variables that measure the degree to which there is a supportive religious context in a society. The first level 2 variables is the degree of pluralism in a society. The second level 2 variables is the proportion of the population who do not attend religious services (national religiosity). On adding pluralism to the model however, the model failed to converge.

The second level 2 variables is the proportion of the population who do not attend religious services (national religiosity) (see table 4-25). Pluralism is removed from the model.

Adding national religiosity (the proportion of the population who never attend religious services) to the model (model 10 REL) adds one degree of freedom to the model and the difference in log-likelihoods between the previous models (model 9) is 3. Comparing this to a chi-square distribution gives a p -value of 0.025 ($p < .05$). The regression coefficient however of -0.489 with a standard error of 0.272 is not statistically significant ($p \not< .05$). National religiosity is however retained in the model as it is possible to have a non-significant main effect and still have significant interactions.

The next step is to test whether the effect of the religious variables on civic morality varies according to the level of national in a society. To test this, interaction terms are added to the model between each religious variable (with random slopes) and national religiosity. First an interaction term is added for belonging to a denomination by national religiosity. The regression coefficient for $\text{Belong} * \text{Natrel}$ is 0.092 with a standard error of 0.233 ($p \not< .05$), and there is therefore no evidence that the effect of belonging to a denomination differs according to a society's national religiosity. The interaction term is removed from the model.

Next, an interaction term is added for the belief dimension and national religiosity. The regression coefficient for $\text{Belief} * \text{Natrel}$ is 0.001 with a standard error of 0.008 ($p \not< .05$), and there is therefore no evidence that the effect of the belief dimension on civic morality differs according to a society's national religiosity. The interaction term is removed from the model.

An interaction term is added for the organizational dimension and national religiosity. The model however, failed to converge. The interaction is removed from the model.

Finally, an interaction term is added for attendance and national religiosity. The regression coefficient for attend less than monthly (ref. never)*natrel is +0.275 with a standard error of 0.141 ($p \not< .05$), and there is therefore no evidence that the effect of attending less than monthly (in comparison to never) on civic morality differs according to a society's national. The regression coefficient for attend monthly or more (ref. never)*Natrel is +0.567 with a standard error of 0.189 ($p < .05$). There is therefore strong evidence that the effect of attending monthly or more has a differential effect on civic morality according to the national religiosity of a

society. The significance of this result is also tested via the contribution of the interaction term to the model fit. The difference in log likelihoods between the model without this interaction term (Model 10 REL) and the model with this term (Model 14 REL) is 7 with 2 degrees of freedom. Comparing this to a chi-square distribution gives a *p*-value of 0.302 (*p* < .05). There is therefore robust evidence that the effect of attending monthly or more on civic morality differs according to a society's national religiosity. That is, the less supportive the religious context, the stronger the effect of regular attendance, in comparison to never, on civic morality. The final outline of model is shown in table 4-25 below.

Table 4-23: H10 DV2 Civic Morality Model Fit Statistics (Level 2: Natrel)

Model	Label	-2log	Df	±df	X ²	<i>p</i> -value	N (1)	N (2)
9	Model 8+Random slope for Attend	135236	37				42590	57
10 (REL)	Model 9 + Degree of National religiosity (NATREL)	135233	38	1	3		42590	57
11 (REL)	Model 10+ Interaction between Denom.* NatRel	NS					42590	57
12 (REL)	Model 10+ Interaction between Belief * Natrel	NS					42590	57
13 (REL)	Model 10+ Interaction between Org* NatRel	NS					42590	57
14 (REL)	Model 10+ Interaction between Attend * Natrel	135226	40	2	7	0.302	42590	57

4.10 Hypothesis 10

(a) The more modernised a society, and (b) the less supportive the religious context of a society, the lower the levels of religiosity on the belief dimension

The first step in testing the hypothesis is to calculate how much of the overall variance in the belief dimension of religiosity is attributable to the societal level (between groups) the individual level (within groups/societies). A variance components model of the belief dimension is constructed. First the null model, a model that estimates societal effects but with no explanatory variables is calculated.

The null model (model 1 in table 4-132) is as follows:

$$y_{ij} = \beta_0 + u_{0j} + e_{ij}$$

y_{ij} is the level of belief dimension for individual i in society j ;

β_0 is the overall mean across societies;

u_{0j} is the effect of society j on the belief dimension;

and e_{ij} is an individual level residual.

The mean level of the belief dimension across societies is estimated at 99.868(β_0). The mean of the belief dimension for society j is estimated as $99.87 + \hat{u}_j$, where \hat{u}_j is the society residual. The between society/group variance (σ_u^2) of the belief dimension is estimated to be 28.96; and the within group/society variance (σ_e^2) in the belief dimension is estimated to be 76.61. The total residual variance ($\sigma_e^2 + \sigma_u^2$) is estimated to be 105.57. The variance partition coefficient (ρ) is calculated as follows:

$$\text{Variance Partitioning Coefficient (Rho): } \rho = \frac{\text{Level 2 Variance}}{\text{Total Residual Variance}} = \frac{28.96}{105.57} = 0.274$$

27.432% of the variance in belief dimension therefore, is due to differences between societies.

A likelihood ratio test is conducted to test whether this two-level model with between society variance in the belief dimension is significantly different to a one-level model with only within society variance (model 0 in table 4-26). To do this, a single level null model is compared to the two-level model. The likelihood ratio test statistic is calculated as follows and compared to a chi-square distribution with 1 degree of freedom (as there is only one parameter difference between the models(σ_u^2)):

$$\begin{aligned} & (-2*\text{loglikelihood (Single-level model)}) - (-2*\text{loglikelihood (Two-level model)}) \\ & = 423988 - 407955 = 16033 \text{ (} p < .001, \text{ df}=1\text{)}. \end{aligned}$$

The difference between the two models proves highly statistically significant ($p < .001$), signifying that a model that takes into account variation in belief dimension attributable to differences between societies, is appropriate.

The next step in the model (model 2) is to add the sociodemographic control variables. With the addition of these independents (i.e. controlling for the distribution of the sociodemographic variables within societies), the variance partition coefficient remains at 0.27379, meaning 27.379% of the variance in the belief dimension remains at the societal level. The addition of these sociodemographic variables also improves the model fit. A likelihood ratio test shows the differences in log likelihood values between model 1 and model 2 to be statistically significant ($p < 0.001$) (see table 4-26). Each of the sociodemographic variables have a statistically significant effect on the belief dimension.

In model 3, the level-2 variable measuring modernization, HDI, is added to the model. HDI has a statistically significant negative effect on the belief dimension ($p < 0.001$). The addition of HDI also improves the model fit, with the difference in log-likelihood values between model 2 and 3 statistically significant ($p < 0.001$). With the addition of HDI to the model, the variance partition coefficient is reduced from 0.274 to 0.233. That is, accounting for the HDI of a society, approximately 23% of the variation in the belief dimension remains at the societal level.

In model 4, the second level-2 variable measuring modernization, AGRI, is added to the model.⁴² AGRI has a statistically significant negative effect on the belief dimension ($p < 0.05$). The addition of AGRI also improves the model fit, with the difference in log-likelihood values between model 3 and 4 statistically significant ($p < 0.05$). With the addition of AGRI to the model, variance partition coefficient is reduced from 0.233 to 0.219. That is, accounting for the HDI and AGRI of a society, approximately 22% of the variation in the belief dimension remains at the societal level.

In model 5, the level-2 variable measuring pluralism, the Herfindahl index, is added to the model. The Herfindahl index does not have a statistically significant effect on the belief dimension, but marginally so ($p < .05$). The addition of the index does improve the model fit, with the difference in log-likelihood values between model 4 and 5 statistically significant ($p < 0.05$). With the addition of the Herfindahl index to the model, the variance partition coefficient is reduced from 0.219 to 0.208. That is, accounting for all three characteristics, approximately 21% of the variation in the belief dimension remains at the societal level.

There is therefore robust evidence to support hypothesis (a), that the greater the level of modernization in a society the lower the belief dimension. There is also evidence to support hypothesis. There is very weak evidence to support hypothesis (b), that the less supportive the religious context of a society, or the greater the pluralism, the lower the belief dimension.

⁴² As in hypothesis 8, the scale on which AGRI is measured is reversed to aid in interpretation – where higher values indicate a higher degree of modernization, and lower values, lower modernization, the same direction as the GDP and HDI scales.

Table 4-24: H11 Belief Dimension Multilevel Parameter Estimates, Wald Statistics, Variances of Model and Model Fit Statistics

	Null single	Null multi	Add socio	Add HDI	Add AGRI	Add Herf
Model	0	1	2	3	4	5
Constant (β_0)	99.258	99.868	95.561	94.983	94.997	94.959
Std. error	0.042	0.690	0.723	0.681	0.659	0.640
Wald	2363.2**	144.7**	132.2* *	139.5**	144.2**	148.3**
Female (β_1)			2.862	2.885	2.885	2.885
Std. error			0.075	0.077	0.077	0.077
Wald			38.2**	37.4**	37.47**	37.4**
Edu 12 years (β_2)			1.079	1.056	1.057	1.057
Std. error			0.197	0.199	0.199	0.199
Wald			5.4**	5.3**	5.3**	5.3**
Edu 13-16 (β_3)			0.632	0.622	0.623	0.625
Std. error			0.110	0.111	0.111	0.111
Wald			5.7**	5.6**	5.6**	5.63**
Edu 17-20 (β_4)			0.677	0.684	0.684	0.684
Std. error			0.104	0.105	0.105	0.105
Wald			6.5**	6.5**	6.5**	6.5**
Rural (β_5)			1.043	1.065	1.065	1.064
Std. error			0.083	0.085	0.085	0.084
Wald			12.5**	12.5**	12.5**	12.6**
Cohort 1973-81 (β_6)			0.754	0.751	0.751	0.751
Std. error			0.255	0.259	0.259	0.259
Wald			2.95**	2.9**	2.9**	2.9**
Cohort 1964-72 (β_7)			0.683	0.645	0.645	0.645
Std. error			0.240	0.244	0.244	0.244
Wald			2.8**	2.6**	2.6**	2.6**
Cohort 1955-63 (β_8)			0.576	0.548	0.547	0.548
Std. error			0.237	0.241	0.241	0.241
Wald			2.4*	2.23*	2.27*	2.27*
Cohort 1946-54 (β_9)			1.250	1.210	1.210	1.210

	Null single	Null multi	Add socio	Add HDI	Add AGRI	Add Herf
Std. error			0.240	0.243	0.243	0.243
Wald			5.2**	4.9**	4.9**	4.9**
Cohort 1937-45 (β_{10})						
			2.737	2.699	2.698	2.698
Std. error			0.245	0.249	0.249	0.249
Wald			11.1**	10.8**	10.8**	10.8**
Cohort 1928-36 (β_{11})						
			4.064	4.046	4.046	4.046
Std. error			0.253	0.257	0.257	0.257
Wald			16.1**	15.7**	15.7**	15.7**
Cohort 1919-27 (β_{12})						
			4.911	4.910	4.910	4.910
Std. error			0.266	0.270	0.270	0.270
Wald			18.4**	18.2**	18.2**	18.2**
Cohort Pre-1919(β_{13})						
			6.199	6.236	6.236	6.236
Std. error			0.291	0.297	0.297	0.297
Wald			21.3**	20.9**	20.9**	20.9**
HDI (β_{14})						
				-27.933	-13.848	-11.205
Std. error				10.584	12.250	11.917
Wald				-2.639**	-1.130	-0.940
AGRI (β_{15})						
					0.274	0.204
Std. error					0.132	0.133
Wald					2.076*	1.534
Herf Index (β_{16})						
						-6.141
Std. error						3.144
Wald						-1.953
Individual Level Random Part						
Within group variance:	102.231	76.611	72.159	72.920	72.920	72.920
Std. error	0.607	0.455	0.451	0.460	0.460	0.460
Society Level Random Part						
Between group variance	0	28.958	27.205	22.120	20.478	19.120
Std. error	0	5.260	5.065	4.270	3.951	3.869
Total variance		105.569	99.364	95.040	93.398	92.040

	Null single	Null multi	Add socio	Add HDI	Add AGRI	Add Herf
VPC (ρ)		0.274	0.274	0.233	0.219	0.208
-2 log likelihood	423988	407955	365754	358158	358154	358150
Df	1	2	15	16	17	18
\pmdf		1	13	1	1	1
X		16033	42201	7596	4	4
<i>p</i>-value		0.00	0.00	0.00	0.045	0.045
N (1)	56796	56796	51347	50210	50210	50210
N (2)	57	57	57	57	57	57

** $p < .001$, * $p < .05$

4.11 Hypothesis 11

(a) The more modernised a society, (b) the less supportive the religious context of a society, the lower the levels of religiosity on the organizational dimension.

The first step in testing the hypothesis is to calculate how much of the overall variance in the organizational dimension of religiosity is attributable to the societal level (between groups) and how much is attributable to the individual level (within groups/societies). A variance components model of the organizational dimension is constructed. First the null model, a model that estimates societal effects but with no explanatory variables is calculated.

The null model (model 1 in table 4-27) is as follows:

$$y_{ij} = \beta_0 + u_{0j} + e_{ij}$$

y_{ij} is the level of organizational dimension for individual i in society j ;

β_0 is the overall mean across societies;

u_{0j} is the effect of society j on the organizational dimension;

and e_{ij} is an individual level residual.

The mean level of the organizational dimension across societies is estimated 99.01 (β_0). The mean organizational dimension for society j is estimated as 99.01 + \hat{u}_j , where \hat{u}_j is the society residual. The between society/group variance (σ_u^2) of the organizational dimension is estimated to be 14.92; and the within group/society variance (σ_e^2) in organizational dimension is estimated to be 90.21. The total residual variance ($\sigma_e^2 + \sigma_u^2$) is estimated to be 101.46. The variance partition coefficient (ρ) is calculated as follows:

$$\text{Variance Partitioning Coefficient (Rho): } \rho = \frac{\text{Level 2 Variance}}{\text{Total Residual Variance}} = \frac{14.92}{101.21} = 0.142$$

14.2% of the variance in organizational dimension therefore, is due to differences between societies.

A likelihood ratio test is conducted to test whether this two-level model with between society variance in the organizational dimension is significantly different to a one-level model with only within society variance (model 0 in table 4-27). To do this, a single level null model is compared to the two-level model. The likelihood ratio test statistic is calculated as follows and compared to a chi-square distribution with 1 degree of freedom (as there is only one parameter difference between the models(σ_u^2)):

$$\begin{aligned} & (-2*\text{loglikelihood (Single-level model)}) \quad - \quad (-2*\text{loglikelihood (Two-level model)}) \\ & = 431994 - 425375 = 6619 \quad (p <.001, df=1). \end{aligned}$$

The difference between the two models proves highly statistically significant ($p <.001$), signifying that a model that takes into account variation in organizational dimension attributable to differences between societies, is appropriate.

The next step in the model (model 2) is to add the sociodemographic variables. With the addition of these independents (i.e. controlling for the distribution of the sociodemographic variables within societies), the variance partition coefficient is reduced from 0.142 to 0.139, meaning 13.9% of the variance is at the societal level. The addition of these sociodemographic variables also improves the model fit, with the differences in log likelihood values between model 1 and model 2 statistically significant ($p < 0.001$) (see table 4-27). One noteworthy differences between this model and the single level regression model conducted to test hypothesis 5, is that some of the variables that are statistically significant in the single level model are not statistically significant in this model. Those in second highest tier of education are not significantly more religious on the organizational dimension that the reference category, and the three cohorts closest to the reference category of the youngest cohort are not significantly more religious on the organizational dimension. Other than these differences however, the results are broadly similar. The difference between the two models might be explained by the fact that there is a significant amount of variation in the organizational dimension at the societal level, and the single level model in not accounting for this, underestimates some of the standard errors of the individual level parameters (Heck and Thomas 2000, p.6).

In model 3, the level-2 variable measuring modernization, HDI, is added to the model. HDI has a statistically significant negative effect on the organizational dimension ($p < 0.001$). The addition of HDI also improves the model fit, with the difference in log-likelihood values between model 2 and 3 statistically significant ($p < 0.001$). With the addition of HDI to the model, the variance partition coefficient is reduced from 0.139 to 0.120. That is, accounting for the HDI of a society, approximately 12% of the variation in the organizational dimension remains at the societal level.

In model 4, the level-2 variable measuring rationalization, AGRI, is added to the model. AGRI does not have a statistically significant effect on the organizational dimension, neither does the addition of AGRI improve the model fit, with the difference in log-likelihood values between model 3 and 4 statistically non-significant ($p \geq .05$). With the addition of AGRI to the model, variance partition coefficient is reduced from 0.120 to 0.116. That is, accounting for the HDI and ECI of a society, approximately 11.5% of the variation in the organizational dimension remains at the societal level.

In model 5, the level-2 variable measuring pluralism, the Herfindahl index, is added to the model. The Herfindahl index does not have a statistically significant effect on the organizational dimension ($p \geq .05$). The addition of the index does not improve the model fit, with the difference in log-likelihood values between model 4 and 5 not statistically significant ($p \geq .05$). With the addition of the Herfindahl index to the model, the variance partition coefficient is reduced from 0.116 to 0.011.

There is therefore mixed evidence to support hypothesis (a), that the greater the level of modernization in a society the lower the organizational dimension. There is no evidence to support hypothesis (b) that the less supportive the religious context of a society, or the greater the pluralism, the lower the organizational dimension.

Table 4-25: H12 Organizational Dimension Multilevel Parameter Estimates, Wald Statistics, Variances of Model and Model Fit Statistics

Org dimension	Null single	Null multi	Add sociodemo	Add HDI	Add AGRI	Add Herf
Model	0	1	2	3	4	5
Constant (β_0)	98.724	99.015	95.497	95.244	95.251	95.224
Std. error	0.042	0.497	0.543	0.523	0.516	0.505
Wald	2350.5**	199.2* *	175.9* *	182.1**	184.5	188.6
Female (β_1)			1.768	1.774	1.774	1.774
Std. error			0.080	0.081	0.081	0.081
Wald			22.1**	21.9**	21.9**	21.9**
Edu 12 years (β_2)			1.954	1.940	1.940	1.940
Std. error			0.208	0.208	0.208	0.208
Wald			9.39**	9.3**	9.3**	9.3**
Edu 13-16 (β_3)			0.556	0.542	0.542	0.542
Std. error			0.117	0.118	0.118	0.118
Wald			4.7**	4.6**	4.6**	4.6**
Edu 17-20 (β_4)			0.169	0.167	0.167	0.167
Std. error			0.111	0.112	0.112	0.112
Wald			1.5	1.49	1.49	1.49
Rural (β_5)			1.165	1.183	1.183	1.183
Std. error			0.089	0.090	0.090	0.090
Wald			13.1**	13.1**	13.1**	13.1**
Cohort 1973-81 (β_6)			-0.213	-0.313	-0.313	-0.313
Std. error			0.276	0.278	0.278	0.278
Wald			-0.772	-1.126	-1.126	-1.126
Cohort 1964-72 (β_7)			0.071	0.017	0.017	0.017
Std. error			0.259	0.261	0.261	0.261
Wald			0.274	0.065	0.065	0.065
Cohort 1955-63 (β_8)			0.087	0.055	0.055	0.055
Std. error			0.256	0.258	0.258	0.258
Wald			0.340	0.213	0.213	0.213
Cohort 1946-54 (β_9)			0.974	0.904	0.904	0.904

Org dimension	Null single	Null multi	Add sociodemo	Add HDI	Add AGRI	Add Herf
Std. error			0.258	0.260	0.260	0.260
Wald			3.77**	3.47**	3.47**	3.47**
Cohort 1937-45 (β10)						
			2.908	2.876	2.876	2.876
Std. error			0.264	0.266	0.266	0.266
Wald			11.0**	10.8**	10.8**	10.8**
Cohort 1928-36 (β11)						
			4.463	4.398	4.398	4.398
Std. error			0.272	0.266	0.266	0.266
Wald			16.4**	16.5**	16.5**	16.5**
Cohort 1919-27 (β12)						
			5.503	5.432	5.432	5.432
Std. error			0.286	0.289	0.289	0.289
Wald			19.2**	18.8**	18.8**	18.8**
Cohort Pre-1919 (β13)						
			7.467	7.394	7.394	7.394
Std. error			0.313	0.317	0.317	0.317
Wald			23.8**	23.3**	23.3**	23.3**
HDI (β14)						
				-23.048	-15.978	-14.197
Std. error				7.623	9.004	8.808
Wald				-3.02**	-1.77	-1.61
AGRI (β15)						
					0.137	.090
Std. error					.097	.098
Wald					1.41	0.91
Herf Index (β16)						
						-4.136
Std. error						2.322
Wald						1.78
Individual Level Random Part						
Within group variance:	101.658	90.207	83.778	83.757	83.757	83.757
Std. error	0.597	0.530	0.517	0.523	0.523	0.523
Society Level Random Part						
Between group variance	0.000	14.919	13.490	11.404	10.985	10.371
Std. error	0.000	2.713	2.512	2.204	2.122	2.005

Org dimension	Null single	Null multi	Add sociodemo	Add HDI	Add AGRI	Add Herf
Total variance		105.12	97.268	95.161	94.742	94.128
VPC (ρ)		0.142	0.139	0.120	0.116	0.110
-2 log likelihood	431994	425375	382512	373785	373783	373780
Df	1	2	15	16	17	18
\pmdf		1	13	1	1	1
X		6619	42863	8727	2	3
<i>p</i>-value		0.00	0.00	0.00	0.16	0.08
N (1)	57912	57912	52605	51409	51409	51409
N (2)	57	57	57	57	57	57

** $p < .001$, * $p < .05$

4.12 Hypothesis 12

(a) The greater the separation of religion and state, the weaker the conservatizing effect of religiosity on values (b) The greater the separation of religion and state, the less conservative the populace in terms of values.

To test the hypothesis that the greater the SRAS of a society, the weaker the relationship between religiosity and personal morality, the initial part of the multilevel model from hypothesis 8 is used as the baseline model. HDI is removed from the model, and is replaced by SRAS as the level two independent variable (table 4-26).

Adding SRAS to the model (model 10 SRAS) adds one degree of freedom to the model and the difference in log-likelihoods between the previous model (model 9) is 26180. This large difference is due to the SRAS variable being only available in the 1990, 1999, and 2008 waves, and therefore a much smaller number of cases in the analysis with SRAS as the level two variable. Comparing the log likelihood with the previous model therefore, does not represent a reliable estimate of the statistical significance of adding SRAS to the model. The regression coefficient for SRAS is -0.007 with a standard error of 0.010 ($p < .05$). There is therefore no evidence that the SRAS of a society has any effect on personal morality. The variable is however retained in the model, as it is possible for an interaction between the religious variables and SRAS is statistically significant, despite the main effect of SRAS on personal morality being non-significant.

The next step is to test whether the effect of the religious variables on personal morality varies according to the level of SRAS in a society. To test this, interaction terms are added to the model between each religious variable (with random slopes) and SRAS. First an interaction term is added for belonging to a denomination by SRAS. The regression coefficient for Belonging*SRAS is -0.016 with a standard error of 0.006 ($p < .05$), and there is therefore evidence that the effect of belonging to a denomination differs according to a society's SRAS. The significance of the addition of the interaction term is also tested via its contribution to the model fit. The difference in log likelihoods between the model without the interaction term (Model 10 SRAS) and the model with the term (Model 11 SRAS) is 5 with 1 degree of freedom. Comparing this to a chi-square distribution gives a p -

value of 0.025347 ($p < .05$). There is therefore evidence to suggest that the effect of belonging to a denomination differs according to a society's SRAS. That is, the higher the SRAS (Low SRAS, indicates religion and state are separate, high SRAS indicates they are not) of a society, the weaker the effect of belonging to a denomination on personal morality.

Next, an interaction term is added for the belief dimension and SRAS. The regression coefficient for Belief*SRAS is -0.001 with a standard error of 0.000 ($p < .05$), and there is therefore some evidence that the effect of the belief dimension on personal morality differs according to a society's SRAS. The difference in log likelihoods between the model without the interaction term (Model 11 SRAS) and the model with the term (Model 12 SRAS) is 6 with 1 degree of freedom. Comparing this to a chi-square distribution gives a p -value of 0.014 ($p < .05$). There is therefore evidence to suggest that the effect of the belief dimension differs according to a society's SRAS. That is, the higher the SRAS of a society, the weaker the effect of the belief dimension on personal morality.

An interaction term is added for the organizational dimension and SRAS. The regression coefficient for Organizational*SRAS is -0.001 with a standard error of 0.000 ($p < .05$), and there is therefore evidence that the effect of organizational dimension on personal morality differs according to a society's SRAS. The significance of the addition of the interaction term is also tested via the contribution to the model fit. The difference in log likelihoods between the model without the interaction term (Model 12 SRAS) and the model with the term (Model 13 SRAS) is 4 with 1 degree of freedom. Comparing this to a chi-square distribution gives a p -value of .045 ($p < .05$). There is therefore evidence to suggest that the effect of the belief dimension differs according to a society's SRAS. That is, the higher the SRAS of a society, the weaker the effect of the organizational dimension on personal morality.

Finally, an interaction term is added for attendance and SRAS. The regression coefficient for attend less than monthly (ref. never) *SRAS is -0.008 with a standard error of 0.006 ($p \nless .05$), and there is therefore no evidence that the effect of attending less than monthly (in comparison to never) on personal morality differs according to a society's SRAS. The regression coefficient for attend monthly or

more (ref. never)*SRAS is (+).006 with a standard error of 0.006 ($p < .05$). There is therefore no evidence that the effect of attending monthly or more has a differential effect on personal morality according to the SRAS of a society. The interaction term is removed from the model. The final outline of model is shown in the table 4-26.

Table 4-26: Personal Morality Model Fit Statistics (Level 2: SRAS)

Model	Label	-2log	Df	±df	X ²	p-value	N (1)	N (2)
9	Model 8+Random slope for Attend	157188	37	11	88	0.000	38767	57
10 (SRAS)	Model 9 + SRAS	130378	38	1	26810	0.000	32076	44
11 (SRAS)	Model 10+ Interaction between Denom.* SRAS	130373	39	1	5	0.025	32076	44
12 (SRAS)	Model 11+ Interaction between Belief * SRAS	130367	40	1	6	0.014	32076	44
13 (SRAS)	Model 12+ Interaction between Org* SRAS	130364	41	1	3	0.083	32076	44
14 (SRAS)	Model 13+ Interaction between Attend * SRAS	NS					32076	44

To test the hypothesis that the greater the SRAS of a society, the weaker the relationship between religiosity and civic morality, the initial part of the multilevel model from hypothesis 8 is used as the baseline model. HDI is removed from the model, and is replaced by SRAS as the level two independent variable (table 4-27).

Adding SRAS to the model (model 10 SRAS) adds one degree of freedom to the model and the difference in log-likelihoods between the previous model (model 9) is 26180. This large difference is due to the SRAS variable being only available in the 1990, 1999, and 2008 waves, and therefore a much smaller number of cases in the analysis with SRAS as the level two variable. Comparing the log likelihood with

the previous model is therefore of little use. The regression coefficient for SRAS is -0.015 with a standard error of 0.006 ($p < .05$). There is therefore strong evidence that the SRAS of a society has a positive effect on civic morality.

The next step is to test whether the effect of the religious variables on civic morality varies according to the level of SRAS in a society. To test this, interaction terms are added to the model between each religious variable (with random slopes) and SRAS. First an interaction term is added for belonging to a denomination by SRAS. The regression coefficient for Belonging*SRAS is -0.006 with a standard error of 0.002 ($p < .05$), and there is therefore some evidence that the effect of belonging to a denomination differs according to a society's SRAS. The significance of the addition of the interaction term is also tested via its contribution to the model fit. The difference in log likelihoods between the model without the interaction term (Model 10 SRAS) and the model with the term (Model 11 SRAS) is 4 with 1 degree of freedom. Comparing this to a chi-square distribution gives a p -value of 0.045 ($p < .05$). There is therefore more robust evidence that the effect of belonging to a denomination differs according to a society's SRAS. That is, the higher the SRAS of a society, the stronger the effect of belonging to a denomination on civic morality.

Next, an interaction term is added for the belief dimension and SRAS. The regression coefficient for Belief*SRAS is -0.000 with a standard error of 0.000 ($p < .05$), and there is therefore no evidence that the effect of the belief dimension on civic morality differs according to a society's SRAS. The interaction term is removed from the model.

An interaction term is added for the organizational dimension and SRAS. The regression coefficient for Organizational*SRAS is -0.000 with a standard error of 0.000 ($p < .05$), and there is therefore no evidence that the effect of organizational dimension on civic morality differs according to a society's SRAS. The interaction term is removed from the model.

Finally, an interaction term is added for attendance and SRAS. The regression coefficient for attend less than monthly (ref. never)*SRAS is 0.002 with a standard error of 0.003 ($p < .05$), and there is therefore no evidence that the effect of attending less than monthly (in comparison to never) on civic morality differs according to a society's SRAS. The regression coefficient for attend monthly or

more (ref. never)*SRAS is .006 with a standard error of 0.004 ($p < .05$). There is therefore no evidence that the effect of attending monthly or more has a differential effect on civic morality according to the SRAS of a society. The interaction term is removed from the model. The final outline of model is shown in table 4-27 below.

Table 4-27: H8 DV2 Civic Morality Model Fit Statistics (Level 2:SRAS)

Model	Label	-2log	Df	±df	X²	p-value	N (1)	N (2)
9	Model 8+Random slope for Attend	135296	37				42590	57
10 (SRAS)	Model 9 + SRAS	112370	38	1	22926	0.000	35358	44
11 (SRAS)	Model 10+ Interaction between Denom.* SRAS	112366	39	1	4	0.045	35358	44
12 (SRAS)	Model 11+ Interaction between Belief * SRAS	Ns					35358	44
13 (SRAS)	Model 11+ Interaction between Org* SRAS	Ns					35358	44
14 (SRAS)	Model 11+ Interaction between Attend * SRAS	Ns					35358	44

5 Findings and Discussion

This chapter will present a summary of the findings of the previous chapter, summarizing the evidence that supports and does not support the hypotheses, discussing the relevance of these findings in relation to the relevant literature. The chapter is organised broadly according to the order of the hypotheses, offering a summary of findings followed by a discussion of their relevance. The content of the chapter is structured in three parts: the dimensions of religiosity and their relationship with different values, with findings from the analysis of pooled data and each country and wave separately (hypotheses 1-4); the relationship between religiosity, values, and other sociodemographic variables (hypotheses 5-7); the relationship between religiosity, values, and societal characteristics (hypotheses 8-12). The chapter concludes with a discussion of the findings in relation to the relevant literature discussed in the literature review and methodology.

5.1 The dimensions of religiosity and their relationship with values

5.1.1 Personal Morality

There is considerable evidence to support the hypotheses linking each dimension of religiosity with personal morality. Those who belong to a religious denomination are significantly more conservative in terms of personal morality than those who do not, and this is the case in virtually every country and wave of the EVS. There is also strong evidence to support the hypothesis that the more religious individuals are on the belief dimension the more conservative they are, the less religious the more liberal. There is a strong and consistent positive association between the belief dimension of religiosity and personal morality in the pooled data. This association is moderate to strong in virtually every country and wave of the EVS. There is also strong evidence to support the hypothesis that the more religious individuals are on the organizational dimension (or the more positive attitudes towards the church) the more conservative they are in personal morality. There is a strong and consistently positive association between the organizational dimension of religiosity and personal morality in the pooled data. This positive association is present in virtually every country and wave of the EVS, weakly so in some countries and waves but moderate to strong in most. There is also evidence to support the hypothesis that the more regularly individuals engage in religious practice, the more conservative they are in personal morality, the less the more liberal. The pooled analyses and analyses of each country and wave separately show statistically significant overall differences between attendance groups in virtually every country and wave.

5.1.2 Civic Morality

There is considerable evidence to support the hypotheses linking each dimension of religiosity with civic morality, but to a lesser degree than in relation to personal morality. Those who belong to a denomination are significantly more conservative in terms of civic morality than those who do not, and this is the case in the pooled data and in the majority of country and waves of the EVS. There are however a number of exceptions, more than in relation to personal morality. In

Northern Ireland and Denmark for example, there are no statistically significant differences between those who belong and those who do not in three out of the four waves. In relation to the belief dimension of religiosity, there is a consistent positive association between the belief dimension and civic morality. That is, the more religious individuals are on the belief dimension the more conservative they are, the less religious the more liberal. This association is moderate to weak in virtually every country and wave of the EVS. In relation to the organizational dimension, there is a moderate to weak positive association between the organizational dimension of religiosity and civic morality. That is, the more religious individuals are on the organizational dimension (or the more positive attitudes towards the church) the more conservative they are in personal civic. This positive association is present in virtually every country and wave of the EVS, but the strength of the association is of a lesser magnitude than in relation to personal morality. Finally, the relationship between civic morality and religious practice is one where there are significant overall differences between each attendance group in the pooled analysis, and in the majority of countries and waves.

5.1.3 State vs. Personal Responsibility

There is mixed and overall quite poor evidence to support the hypothesis in relation to State versus Personal Responsibility (SVP) and belonging to a religious denomination. In the pooled analysis those who belong to a denomination are significantly more conservative than those who do not. In the majority of countries and waves, there are no statistically significant differences in SVP between those who belong and who don't belong with some exceptions. There is little evidence to support the hypothesis regarding SVP and the belief dimension. The pooled analysis returned mostly non-significant correlations, and the one wave that presents statistically significant correlations is weakly counter to the direction hypothesised. These findings are replicated in the analysis of Irish data. Only in the 1999 wave is there a significant positive correlation (in the hypothesised direction) between the belief dimension and SVP. The general pattern in the analysis of all countries and waves is one of non-significant correlations in the majority. Only in Spain is there a

consistent pattern of statistically significant and weakly positive correlations in each of the two waves in which the item is present.

There is mixed to poor evidence to support the hypothesis in relation to the organizational dimension. In the pooled analysis, there are significant positive. In the analysis of all countries and waves separately, the majority of correlations are not statistically significant, with the exception of weakly positive significant correlations in a handful of countries (Spain, Germany, France). In relation to the religious practice dimension there is little evidence to support the hypothesis that the more regularly individuals engage in religious practice, the more conservative or traditional they will be in terms of SVP. The pooled analysis shows significant differences in SVP between the attendance groups, but more in-depth post-hoc analyses between each attendance group revealed these differences not to be in the order hypothesised. The general pattern in the analysis of all countries and waves is one of nonsignificant differences in SVP between attendance groups, with a few notable exceptions where differences were significant in all waves (Germany, France, Spain).

5.1.4 Materialism Postmaterialism

There is strong evidence to support the hypothesis regarding materialism-postmaterialism and each dimension of religiosity. Chi-square tests show a statistically significant association between belonging to a denomination and materialism-postmaterialism in all four waves of the pooled analysis, with those who belong to a denomination more likely to be materialists, and those not belonging more likely to be postmaterialists. This is also the case in the vast majority of countries and waves. There is also strong evidence to support the hypothesis that the more religious individuals are on the belief dimension the more materialist than postmaterialist they will be. Spearman rank order correlations are statistically significant and negative correlation (in the hypothesised direction) in all waves of the pooled analysis. The pattern in the analysis of all countries and waves is one of significant negative correlations in the majority, with a few exceptions.

There is also strong evidence to support the hypothesis that that the more religious individuals are on the organizational dimension of religiosity the more materialist than postmaterialist they will be. Spearman rank order correlations are statistically significant and negative (in the hypothesised direction) in all waves of the pooled analysis. In the analysis of all countries and waves, the majority have statistically significant and negative correlations, supporting the hypothesis. Lastly, there is strong, but mixed evidence to support the hypothesis that those who regularly practise will be more materialist than those who do not. Chi-square tests show a statistically significant association between frequency of attendance (three groups) and materialism-postmaterialism in all four waves of the pooled analysis, with those who attend regularly more likely to be materialist, and those who never attend more likely to be postmaterialist. Mixed results emerge from the separate analysis of each country and wave, where approximately half the countries and waves show a statistically significant association between attendance and materialism-postmaterialism. Ireland, Italy, the Netherlands, and Spain are the minority who display significant correlations in every wave.

5.1.5 Intrinsic Work Values

There is little evidence to support the hypothesis relating each dimension of religiosity to intrinsic work values. In the pooled analysis, there are significant differences in intrinsic work values between those who belong to a denomination and those who do not in three of the four waves. In the analysis of countries and waves separately, almost every country and wave display non-significant differences in intrinsic work values between those who belong and those who do not (and some countries run directly counter to the hypothesis). There is also very little evidence to support the hypothesis that those who are highly religious on the belief dimension will be more positively oriented towards intrinsic work values. Statistically significant positive correlations in the pooled analysis are only present in two out of the four waves. Non-significant correlations are the majority finding in the analysis of all countries and waves separately (and some run directly counter to the hypothesis).

There is also very little evidence to support the hypothesis that those who are highly religious on the organizational dimension will be more positively oriented towards intrinsic work values. The evidence from the pooled analysis is mixed, where there are significant positive correlations in the 1999 and 2008 waves, but non-significant correlations in the 1981 and 1990 waves. The majority finding from the separate analysis of each country and wave is of non-significant correlations, and of the waves that are significant the direction of the correlations are quite mixed. There is mixed evidence to support the hypothesis that those who attend religious services more regularly will be more positively oriented towards intrinsic work values. Only in 1999 and 2008 waves of the pooled analysis are there significant overall differences in intrinsic work values between the attendance groupings. Post-hoc analyses also show that these differences are significant and in the hypothesised direction between the groups. The results of the analyses of each country and wave separately are very mixed, with approximately half of all countries and waves showing statistically significant overall differences between attendance groups. On closer inspection however, many of these do not conform to the direction of the hypothesis.

5.1.6 Extrinsic Work Values

There is little evidence to support the hypotheses relating each dimension of religiosity with extrinsic work values. Only in the 1990 wave of the pooled analysis are those who belong to a religious denomination significantly more negatively oriented towards extrinsic values than those who do not belong. In fact, in the 1999 and 2008 waves, the results run counter to the hypothesis, where those who belong to a denomination are significantly more positively oriented towards extrinsic values than those who do not belong. In the analysis of all countries and waves separately, the vast majority display non-significant differences in extrinsic work values between those who belong and those who do not. There is also very little evidence to support the hypothesis that there is a negative correlation between the belief dimension and extrinsic work values. In the pooled analysis, there is a significant and weakly negative correlation in the 1990 wave, but significant positive correlations that run counter to the hypothesis in the remaining three waves. In the

separate analysis of each country and wave the majority finding is one of non-significant correlations.

There is very little evidence to support the hypothesis that there is a negative association between the organizational dimension and extrinsic work values. In the pooled analysis, only the 1990 wave returns a statistically significant correlation in the hypothesised direction (two of the waves have significant correlations in the opposite direction). In the analysis of countries and waves separately, the main finding is non-significant correlations between the organizational dimension and extrinsic work values, and where significant, the direction of the associations are mixed. There is little evidence to support the hypothesis that those who practise more regularly will be less positively oriented towards extrinsic work values than those who practise less regularly or not at all. The pooled analysis shows statistically significant overall differences between the attendance groups in three out of the four waves. Post-hoc contrasts however, reveal statistically significant differences between the groups to be in the opposite direction of the hypothesis. The analysis of countries and waves separately, the majority of countries and waves show non-significant overall differences in extrinsic work values between attendance groups.

5.1.7 Marriage Values Cultural Homogeneity

There is strong evidence to support the hypotheses relating each dimension of religiosity with marriage values of cultural homogeneity (CHM). There is strong evidence (with some notable exceptions) to support the hypothesis that those who belong to a denomination are more traditional in CHM values than those who do not belong. In the pooled analysis those who belong to a denomination are significantly more conservative in CHM than those who do not belong in all four waves. There is however a pattern whereby the differences between the two groups in CHM is becoming smaller with each successive wave from 1999 to 2008. In the analysis of all countries and waves separately, the overall pattern is one of statistically significant differences in almost all countries and waves, with some notable exceptions. In Denmark, Iceland, Norway and Sweden, the differences in CHM between those who belong to a denomination and those who do not are not statistically significant in virtually every wave. There is also strong evidence to

support the hypothesis that those who are highly religious on the belief dimension will be more traditional in CHM. In the pooled analysis, there is a statistically significant and moderately positive correlation between the belief dimension and CHM in all four waves. The analysis of countries and waves separately shows weak to moderate positive and statistically significant correlations between the belief dimension and CHM in every country and wave.

There is also strong evidence to support the hypothesis that those who are highly religious on the organizational dimension are more traditional in CHM values. The pooled analysis shows statistically significant and moderately positive correlations between CHM and the organizational dimension in all four waves. In the analysis of countries and waves separately there are positive and statistically significant positive correlations, ranging from weak to strong, between CHM and the organizational dimension in every country and wave. There is also strong evidence to support the hypothesis that the more regularly individuals engage in religious practice the more traditional they are in CHM values. The pooled analysis shows statistically significant overall differences in CHM between attendance groups in all waves. Post-hoc analyses also reveal statistically significant differences between each attendance group in the hypothesised direction in all four waves. In the analysis of all countries separately there is only one country-wave (Malta-1981) that does not show statistically significant overall differences in CHM between the attendance groups.

5.1.8 Marriage Values Material Conditions

There is little evidence to support the hypothesis relating each dimension of religiosity with material conditions in marriage values (MCM). There is mixed evidence to support the hypothesis that those who belong to a denomination are more traditional in MCM values than those who do not belong. In the pooled analysis, those who belong to a denomination are significantly more traditional than those who do not belong in three out of the four waves, the most recent wave showing no significant differences. In the analysis of all countries and waves separately the majority of countries display no statistically significant differences in MCM between those who belong to a denomination and those who do not. Ireland, along with

Belgium and the Netherlands are the only countries to exhibit statistically significant differences between the two groups in the majority of their survey waves. There is also mixed evidence to support the hypothesis that the more religious individuals are on the belief dimension the more traditional they are in MCM values. In the pooled analysis there is a statistically significant and weakly positive correlation between the belief dimensions and MCM in all four waves. The results of the separate analysis of all countries and waves are however quite mixed. Ireland, Iceland and Norway are the only countries to show significant correlations in all of their waves, whereas Italy, Sweden and Northern Ireland show no statistically significant differences in any of their waves.

There is also relatively mixed evidence to support the hypothesis that the more religious individuals are on the organizational dimension the more traditional they are in MCM values. In the pooled analysis there is a statistically significant and weakly positive correlation between the organizational dimensions and MCM in all four waves. In the analysis of countries and waves separately, the majority of countries' waves exhibit statistically non-significant correlations between MCM and the organizational dimension. Iceland, Ireland, Italy, Norway and Spain however exhibit statistically significant positive correlations in all or the majority of their waves. There is also mixed evidence to support the hypothesis that the more regularly individuals engage in religious practice, the more traditional they are in MCM. The pooled analysis shows statistically significant overall differences in MCM between the different attendance groups in all waves. More in-depth post-hoc analyses however show that, in each wave, there are no significant differences in MCM between those who never attend and those who attend less than monthly. In the analysis of all countries separately, the majority of countries and waves display non-significant overall differences in MCM between attendance groups.

5.1.9 Traditional Family Pattern

There is strong evidence to support the hypotheses relating each dimension of religiosity with traditional family pattern values (TFP). There is strong evidence (with some exceptions) to support the hypothesis that those who belong to a denomination are more traditional in TFP than those who do not belong. In the

pooled analysis, those who belonging to a denomination are significantly more traditional in TFP in both waves. In the analysis of countries and waves separately, there are statistically significant differences between those who belong and those who do not in the majority. Denmark, Norway, Iceland and Sweden however show no significant differences between those who belong and those who do not in any wave. There is strong evidence to support the hypothesis that the more religious individuals are on the belief dimension the more traditional they are in TFP. In the pooled analysis there is a weakly positive and statistically significant correlation between the belief dimension and TFP in each wave. In the analysis of countries and waves separately, virtually every country and wave displays weakly positive and statistically significant correlations between the belief dimension and TFP.

There is also strong evidence to support the hypothesis that the more religious individuals are on the organizational dimension the more traditional they are in TFP. In the pooled analysis there is a weak to moderately positive and statistically significant correlation between the organizational dimension and TFP in each wave. In the analysis of countries and waves separately, virtually every country and wave displays weakly positive and statistically significant correlations between the organizational dimension and TFP. There is moderate evidence to support the hypothesis that those who practise more regularly are more conservative in TFP. The pooled analysis shows statistically significant overall differences in TFP between the different attendance groups in all waves, and more in-depth analyses reveal these differences to be statistically significant and in the direction hypothesised between each attendance group. In the analysis of all countries separately, the majority of countries and waves display statistically significant overall differences in TFP between attendance groups.

5.1.10 Summary and Discussion

There is very strong evidence to support the hypothesis that the more religious individuals are on each dimension of religiosity, the more conservative they are in personal morality. There is similarly strong evidence in support of the hypotheses relating each dimension of religiosity with conservatism in civic morality, albeit somewhat weaker than in relation to personal morality. Where in

relation to personal morality and denomination, virtually every country and wave displays significant differences, in relation to civic morality there are more exceptions, Northern Ireland and Denmark for example. The association between civic morality and the belief and organizational dimensions is also slightly weaker than in relation to personal morality, but still almost universally positive and significant in all countries and waves.

There is also strong evidence in support of the hypotheses relating each dimension of religiosity to materialism-postmaterialism. As with civic morality, the findings in support of the hypotheses are not as universal as with personal morality, but they are strong and significant in the majority of countries and waves. In relation to practice however, the findings are considerably more mixed. The association, whereby those who practise regularly will be more materialist, and those who never attend more postmaterialist, is present only in approximately half the countries and waves. Ireland, Italy, the Netherlands and Spain are in the minority who support the hypothesis in the majority of their waves.

The findings in relation to marriage values of cultural homogeneity also strongly support the hypotheses relating to each dimension of religiosity. In relation to denomination, only a well-defined group of Scandinavian countries do not support the hypothesis, with virtually every other country and wave supporting it. Furthermore, this exceptionality of the Scandinavian countries is not found in relation to the other dimensions of religiosity, only in relation to denomination.

While the findings in relation to marriage values of cultural homogeneity conform to the hypotheses, marriage values of material conditions do not. In the majority of countries and waves there are no significant differences in MCM according to degree of religiosity. Ireland is the only consistent exception to this finding, where there are significant differences in MCM according to denomination, the belief dimension and the organizational dimension. On balance, there appears to be no significant differences in MCM between those who practise irregularly and those who never practise.

There is strong evidence to support the hypothesis that the more religious individuals are on each dimension the more traditional they are in terms of traditional family pattern values. Similar to CHM in relation to denomination, a well-defined

group of Scandinavian countries do not support the TFP hypothesis, with the majority of other countries and waves supporting it (Ireland in 2008 being one that does not support the hypothesis). Again this well-defined group is not particularly exceptional in relation to the other dimensions. The most likely explanation for this deviation amongst this particular group of countries is that they are all countries with Protestant state-churches. It is likely that a large proportion of individuals declare themselves belonging to a denomination but do not substantiate this through any other beliefs, practices or deference to religious teachings. Hence the lack of any significant differences in CHM and traditional family pattern values between those who belong and those who do not in Scandinavia.

There is generally poor evidence to support the hypotheses that those who are highly religious on each dimension are more conservative in State vs. Personal Responsibility (SVP). Only in the pooled analysis and a select few countries is there a degree of support for the hypothesis. The evidence in support of the hypotheses regarding intrinsic and extrinsic work values is also very poor. Statistically significant differences and correlations are present in parts of the pooled analysis and in some countries and waves, but the majority finding is of no significant differences in orientations towards extrinsic or intrinsic work values according to an individual's degree of religiosity.

Overall, the findings show that some values have a very strong relationship with each dimension of religiosity, and some have a very weak or non-existent relationship. There is however, a reasonably distinct pattern to these relationships that accords with the theoretical argument put forward regarding values in the public and private domain. Values related to the public domain, intrinsic and extrinsic work values and state versus personal responsibility, have a very weak to non-existent relationship with each dimension of religiosity. Those in the private domain, personal morality, marriage values, and family pattern values, all have a strong relationship with each dimension of religiosity. Civic morality, a value that straddles both private and public concerns, also has a strong relationship with religiosity. Materialism-Postmaterialism however, was shown to have a relatively strong relationship, and this is as much in the public domain as work or SVP values. The linkages between materialism-postmaterialism and religiosity have been well documented by Inglehart and Norris (2004), through two related theoretical linkages:

deference to authority and existential insecurity. Briefly, their thesis is that individuals value what is in short supply, and materialist values thrive amongst those who have experience of material or existential security. This insecurity is alleviated by religiosity, both in terms of the rigid rules set out by religious authority, and in terms of the comfort provided by beliefs. Self-expression, and not deference to authority, become the dominant values when people are economically secure, and deference to religious authority and the need for security provided by religious beliefs, diminishes. In this way, religiosity and materialism-postmaterialism are linked by one underlying common denominator, that of economic security. There is also an exception to this theory in relation to material conditions in marriage values (MCM) (part of the private sphere, although this is debateable), where there is very weak evidence of a relationship between religiosity and MCM cross-nationally.

To conclude this section, the findings here offer a very broad overview of the relationship between each dimension of religiosity and each set of values across Europe and over time. They are however limited in that they do not take account of other variables that might be contributing to the relationship between values and religiosity. Nor do the findings offer any insight into the relative effect of each dimension of religiosity. These limitations are addressed in the next section by reviewing the findings of analyses of the religiosity-values relationship net of the effects of key sociodemographic variables.

5.2 Sociodemographic correlates of religiosity and values

In summarizing the findings regarding the linkage between each dimension of religiosity and each set of values, it is plausible that many of the significant relationships may be the consequence of other variables to which both religiosity and values are related. The effects of five key socio-demographic variables which have strong theoretical linkages with both values and religiosity were therefore explored to give an understanding of their significance to the relationship. Separate regression analyses were conducted on two key values, personal and civic morality, and on two dimensions of religiosity, the belief dimension and the organizational dimension, with independent variables age, gender, education, employment, and urbanism as independent variables.

After delineating the key findings in relation to each of the sociodemographic variables, the findings of further regression analyses, those with personal morality and civic morality as dependents, and each dimension of religiosity and each sociodemographic variable as independents, are described and commented on. The findings of these regression analyses give an insight into the relative and comparative effect of each of the religious dimensions on each of the values, as well as describing how the relationship between religiosity and values remains strong, net of the effect of these sociodemographic variables.

5.2.1 Age

There is strong evidence to support the hypothesis that older people are more religious on the belief dimension than young people (or the older a person is the more religious they are, the younger the less religious), evidenced by the statistically significant positive effect of age on the belief dimension in the regression analysis. There is also strong evidence to support the sub-hypothesis that as a birth cohort grows older, their level of religiosity on the belief dimension stays the same, indicating a cohort rather than an ageing effect. This is evidenced by the statistically significant positive effect of belonging to a particular birth cohort on the belief dimension in the regression analysis (which becomes a progressively larger effect the

‘older’ the cohort), the addition of which reduces the positive effect of age to statistically non-significant one.

There is also moderate evidence to support this hypothesis in relation to the organizational dimension: older people are more religious on the organizational dimension than young people (or the older a person is the more religious they are, the younger the less religious), evidenced by the statistically significant positive effect of age on the organizational dimension in the regression analysis. There is also strong evidence to partially support the sub-hypothesis that as a birth cohort grows older, their level of religiosity on the organizational dimension stays the same, indicating a cohort rather than an ageing effect. This is evidenced by the statistically significant positive effect of belonging to a particular birth cohort (with the exception of the two cohorts closest to the reference category) on the organizational dimension in the regression analysis (which becomes a progressively larger effect the ‘older’ the cohort), the addition of which reduces the positive effect of age to statistically significant negative effect.

A noteworthy difference in the models is the statistically non-significant effect of the two cohorts closest to the most recent cohort in the organizational dimension model. Because of the way the reference category is operationalized, it actually signifies that those born between 1964 and 1981 are no different in their opinion of the church than those who were belong to the most recent cohort (born after 1981). But the fact that these same cohorts are significantly more religious on the belief dimension suggest there is a comparatively negative view of the church among this cohort that is quite different to the pattern in relation to religious belief.

There is strong evidence to support the hypothesis that older people are more conservative than young people (or the older a person is the more conservative they are, the younger the more liberal), evidenced by the statistically significant positive effect of age on personal morality in the regression analysis. There is also strong evidence to support the sub-hypothesis that as a birth cohort grows older, their level of conservatism/liberalism in personal morality stays the same, indicating a cohort rather than an ageing effect. This is evidenced by the statistically significant positive effect of belonging to a particular birth cohort on personal morality in the regression analysis (which becomes a progressively larger effect the ‘older’ the cohort), the

addition of which reduces the positive effect of age to statistically significant negative one. An interesting finding is that it appears that controlling for one's birth cohort, the older one gets the more liberal one becomes in personal morality. This finding is not without precedent however. As mentioned when stating the theoretical linkages, Danigelis and Cutler (2007) argue that it is a cohort effect that accounts for the relationship between age and values, and that changes within cohorts are generally towards more liberal rather than conservative views as cohorts grow older.

There is also strong evidence to support this hypothesis in relation to civic morality: older people are more conservative than young people (or the older a person is the more conservative they are, the younger the more liberal), evidenced by the statistically significant positive effect of age on civic morality in the regression analysis. There is also some evidence to support the sub-hypothesis that as a birth cohort grows older, their level of conservatism/liberalism in civic morality stays the same, indicating a cohort rather than an ageing effect. This is evidenced by the statistically significant positive effect of belonging to a particular birth cohort (except the cohort closest to the reference category which is not statistically significant) on civic morality in the regression analysis (which becomes a progressively larger effect the 'older' the cohort). One noteworthy difference between the civic morality model and the personal morality model, is that the addition of cohort does not change the effect of age on civic morality. With the addition of cohorts to the model, age retains its highly statistically significant and positive effect on civic morality. In fact, the results indicate that both age and cohort positively contribute to conservatism in civic morality. That is, the earlier the birth cohort an individual belongs to, and the older an individual gets, the more conservative they are in civic morality.

5.2.2 Gender

There is strong evidence to support the hypothesis that females are more religious than males on the belief dimension. This is evidenced by the positive and statistically significant effect of being female in the regression analysis.

Furthermore, being female retains this consistent positive and highly statistically significant effect with the addition of other sociodemographic variables throughout all the models. There is however, no evidence to support the sub-hypothesis that when one controls for workforce participation, the difference in religiosity between males and females becomes minor or unsubstantial. When controls for workforce participation are introduced to the model, the effect of being female is reduced slightly, but remains positive and highly significant

There is strong evidence to support the hypothesis that females are more religious than males on the organizational dimension. This is evidenced by the positive and statistically significant effect of being female in the regression analysis, and the effect of being female on the organizational dimension remains consistently positive and highly statistically significant with the addition of other sociodemographic variables throughout all the models. There is however, no evidence to support the sub-hypothesis that when one controls for workforce participation, the difference in religiosity between males and females will become minor or unsubstantial. When controls are introduced for workforce participation, the effect of being female is reduced slightly but remains positive and highly significant.

To explain these findings that did not support the hypothesis, it is likely that the differential place of males and females in the workforce is an inadequate way to capture all the differences between males and females that affect their different orientations to religiosity. It appears to capture some of these differences, evidenced by the slight reduction in the effect size of gender in each model, but gender differences remain substantial. Other distinctions between men and women beyond the scope of this analysis, such as the different risk preferences between males and females (Miller and Hoffmann 1995), or the various differential socialization experiences of males and females that predispose females to be more religious (Walter and Davie 1998) might capture these differences more completely.

There is weak evidence to support the hypothesis that females are more conservative than males in personal morality. In the model with female as the only independent variable, the effect on being female is positive (i.e. conservative) and highly significant, but the small size of the coefficient suggests this effect is minor. Secondly, there is no evidence to support the sub-hypothesis that when controls for workforce participation are introduced, the difference in personal morality between males and females will become minor or unsubstantial. The addition of controls for employment status do not cause differences between males and become minor or unsubstantial. In fact they increase the differences, and increase them in such a way that runs counter to the main hypothesis. Controlling for employment status, the effect of being female is negative (i.e. more liberal) and statistically significant.

There is strong evidence to support the hypothesis that females are more conservative in civic morality than males. In the model with female as the only independent variable, the effect on being female is strongly positive (i.e. towards conservative) and highly significant. Secondly, there is no evidence to support the sub-hypothesis that when controls for workforce participation are introduced, the difference in civic morality between males and females will become minor or unsubstantial. The addition of controls for employment status do weaken the coefficient for females very slightly, but it remains a highly statically significant difference.

As with the findings between religiosity, gender and employment, while the addition of employment in the model does seem to account for some of the differences in values between males and females, it appears that workforce participation inadequately captures male-female differences in relation to the values of personal and civic morality.

5.2.3 Education

There is strong evidence to support the hypothesis that those with lower levels of education are more religious on the belief dimension than those with higher levels of education. Compared to having high levels of education, each lower level of education has a highly significant positive effect on the belief dimension, particularly so in relation to the lowest category. The effect of education is diminished somewhat when age and cohort are taken into account, but it remains highly significant and positive.

There is strong evidence to support the hypothesis that those with lower levels of education are more religious on the organizational dimension than those with higher levels of education. Compared to having high levels of education, each lower level of education has a highly significant positive effect on the organizational dimension, particularly so in relation to the lowest category. The effect of education is diminished somewhat when age and cohort are taken into account, but it remains highly significant and positive.

There is strong evidence to support the hypothesis that those who have higher levels of education are more liberal in personal morality, and those with lower education more conservative. Each lower level of education to the reference category has a consistently positive and statistically significant effect on personal morality.

There is no evidence to support the hypothesis that those who have higher levels of education will be more liberal, and those with lower education more conservative, in terms of civic morality. In fact, the results run counter to the hypothesis. When controls for age (and cohort) are introduced, the effect of having lower levels of education relative to the highest levels of education on civic morality is a negative one. That is, the evidence suggests that those who have higher levels of education are more conservative, and those who have lower levels are more liberal in terms of civic morality.

One of the interesting findings in relation to education is the divergent findings in relation to civic and personal morality, where education has a liberalizing effect on personal morality and a conservatizing effect on civic morality. A very

plausible explanation, and one that draws from the literature regarding the effect of education on church attendance, where educated middle classes are more sceptical of religious beliefs, but are active churchgoers (Voas and McAndrew 2012). On the one hand therefore, education broadens perspectives and promotes a scepticism of the status quo (Döring 1992). This is likely to have a liberalizing effect on personal morality. On the other hand, the educated middle classes tend to be more active members of the community (Voas and McAndrew 2012), and this is likely to have a conservatizing effect on civic morality.

5.2.4 Employment

There is mixed and somewhat weak evidence to support the hypothesis that those who are not in employment are more religious on the belief dimension than those who are in employment (employment/retired). In comparison to being employed, being a housewife has a consistent positive and highly significant effect on the belief dimension across all models. When age is controlled for, the effect of being a student is significant and positive, but weakly so from models that include cohort variables onward, and it loses its significance when survey wave is added to the model. Neither being unemployed nor 'other' have a statistically significant effect on the belief dimension relative to being in employment/retired, once the effect of age is taken into account (and their significant effect was counter to the hypothesis in the models without age).

There is mixed and somewhat weak evidence to support the hypothesis that those who are not in employment are more religious on the organizational dimension than those who are in employment (employment/retired). In comparison to being employed/retired, being a housewife has a consistent positive and highly significant effect on the organizational dimension across all models. Relative to being employed, being unemployed has a significant and negative effect on the organizational dimension across all models, a result that runs counter to the hypothesis. When age is controlled for, the effect of being a student is significant and positive, but loses its statistical significance when cohort or survey wave are added to the model.

On one hand, the consistent positive effect of being a housewife versus being employed/retired is evidence in favour of the hypothesis. Housewives, a group who are dissociated from the technical, rational world of work are significantly more religious than those who are, or have been, closely associated with it. The lack of evidence showing this occurring with other groups also detached from work, students and unemployed, suggests that the actual linkage is different to the hypothesised one. Rather it seems that, like gender, the relationship between religiosity and being a housewife may be more to do with socialization and life experiences such as child-bearing and rearing (see Walter and Davie 1998), than being insulated from the rationalizing effects of being part of the industrial or post-industrial workforce. The

rationalizing effects of work may play a part, but like workforce participation explaining gender differences in religiosity, it appears to be a deficient explanation. This same logic applies to the material insecurity hypothesis. While one might also expect housewives to be more deprived than those other groups, materially, socially and physically (see Walter and Davie 1998, p.644-650), one would also expect this to apply to the unemployed. Again, the findings taken as a whole suggest that insecurity is an inadequate explanation for the differences in religiosity between these different groups. An alternative explanation for these differences is one of a selection effect. It is very plausible that women who choose to stay in the home and rear children are those who already have a more conservative, traditional, and religious outlook. Lesthaeghe and Moors (2002) for example, in their study of life-course transitions, theorise a strong selection effect for home leavers who move directly into marriage (as opposed to living alone/cohabitation without children) in favour of higher religiosity and conservative/traditional values. Moreover, they theorise that there is a mutually reinforcing selection/adaptation effect, where marriage and parenthood itself further reinforces these conservative orientations.

There is good evidence to support the hypothesis that those in employment are more liberal, and those who are not more conservative in terms of personal morality. In comparison to being employed, being a housewife and being unemployed have a statistically significant positive effect on personal morality in the final model. Being a student or 'other', when cohort is introduced in the latter models, does not have a statistically significant effect on personal morality.

There is weak evidence to support the hypothesis that those in employment are more liberal and those who are not more conservative in terms of civic morality. The majority of the results in relation to employment status run counter to the hypothesis. Those who are housewives are significantly more conservative than those in employment, but those who are unemployed and students are significantly more liberal than those in employment. And those who are 'other' are not statistically significantly different in terms of civic morality than those in employment. The findings that run counter to the hypothesis in relation to civic morality might be explained by the same logic that applied between education and civic morality. It was posited that well-educated middle class people are highly active in the community, and therefore have more conservative views in civic

morality than other. This might also be the case between those in employment and those who are, to an extent, excluded or distant from community participation, such as the unemployed or students. The positive findings in relation to being a housewife may however negate this argument, as it could be argued that housewives may be part of this peripheral grouping too.

5.2.5 Rural-Urban

There is strong evidence to support the hypothesis that those who live in rural areas are more religious on the belief dimension than those who live in urban areas, with rural location having a consistently positive and highly statistically significant effect on the belief dimension across all the models.

There is also strong evidence to support the hypothesis that those who live in rural areas are more religious on the organizational dimension than those who live in urban areas, with rural location having a consistently positive and highly statistically significant effect on the organizational dimension across all the models.

There is strong evidence to support the hypothesis that those who live in rural areas are more conservative in personal morality than those who live in urban areas. The effect of rural location is positive and statistically significant throughout the models.

There is also strong evidence to support the hypothesis that those who live in rural areas are more conservative than those who live in urban areas in terms of civic morality. The effect of rural location is positive and statistically significant throughout the models.

5.2.6 Combined Model

The findings from the final two regression models, where all the religious dimensions and all the key socio demographic variables are added to the regression models, show very strong evidence in support of the hypothesis that, controlling for key sociodemographic variables, those who belong to a denomination, have high levels of religiosity on the belief and organizational dimension, and who attend religious services regularly, are more conservative in terms of personal and civic morality, and this relationship holds controlling for the effects of other key sociodemographic variables. Throughout the addition of the various sociodemographic variables to the model, there are minimal changes in the size, and no changes in the direction, of the β -coefficients for each of the religious dimension predictors.

In terms of the relative effect of each of the religious dimension variables on civic morality, the stepwise addition of each dimension to the regression model understandably weakens the effect of the other dimensions. For example, in model one, the β -coefficient for denomination is 0.5, and with the addition of the belief dimension (model 2) this weakens to 0.28, and further additions of the organizational dimension (model 3) and the practice dimension (model 4) lower it further to 0.24 and 0.21 (the model constant also changes considerably from model 1 to model 4). There is a similar pattern in relation to the belief dimension. In model 2, where the effects of denomination are also taken into account, the belief dimension has a β -coefficient of 0.18. When the organizational dimension is added (model 3), this weakens to 0.11, and when the practice dimension is accounted for (model 4), it is reduced to .006. So too is the effect of the organizational dimension weakened slightly through the addition of the practice dimension, from a β -coefficient of 0.12 to 0.10. The final model, where all sociodemographic variables are taken into account, gives a fairly clear representation of the relative effects of each of the religious dimensions, through the β -coefficients and the standardized β -coefficients. While it is difficult to compare the dimensions because the operationalization of denominational belonging and practice are categorical and that of belief and organizational are ordinal/interval, their relative effects can be interpreted to a degree. The standardized β -coefficients are one way to understand the relative effect of each dimension, and with the exception of attending irregularly (.28), belonging to

a religious denomination (.58), frequently practicing (.66), the organizational (.50) and the belief dimension (.49) all have approximately equivalent effect sizes on civic morality. Using the unstandardized β -coefficients requires comparing the dimensions that are operationalized on similar scales. Belonging to a denomination (in comparison to not belonging) (.184) has a very similar effect to attending monthly (in comparison to never) (.172). And the belief dimension (.006) has an almost identical effect (.006) to the organizational dimension (both of which are operationalized on very similar scales). Relative to the effects of other sociodemographic variables, belonging to a religious denomination or practicing regularly has a similarly sized effect on civic morality to being female, or a marginally stronger effect than having a high level of education (in comparison to all lower categories). On the other hand, age has a much stronger effect on civic morality than any of the religious dimensions, and is arguably the strongest predictor of civic morality in the model.

The final model in relation to personal morality, where all sociodemographic variables are taken into account, gives a fairly clear representation of the relative effects of each of the religious dimensions, through the β -coefficients and the standardized β -coefficients. The standardized β -coefficients show the belief dimension having the strongest effect on personal morality. Attending monthly (in comparison to never) has the next strongest standardized β -coefficient, followed by the organizational dimension. Belonging to a denomination (in comparison to not belonging) and attending less than monthly (in comparison to never) have much smaller effects, and are roughly equal in size.

Some contrasts and parallels between the two models for civic and personal morality are noteworthy. One is the contrasting effects of denomination in the models. In the civic morality model, belonging to a denomination (versus not belonging) has marginally the strongest effect of each of the religious dimensions. In the personal morality model, it is the weakest of the dimensions (along with infrequent attendance). The second is the effect of the belief dimension in both models. In the personal morality model, the belief dimension has the strongest effect of each of the religious dimensions, and in the civic morality model it is on a par with the organizational dimension and only marginally weaker than denominational belonging and frequent practice. What is noteworthy is that one

would not expect this dimension to have such a strong and consistent effect. While it was theorised that the belief dimension would reflect the degree to which an individual concurs with the teachings of religious specialists, it was expected that the organizational or practice dimension would better, or wholly, capture this, reducing the effect of belief on values considerably. On the contrary, it appears that how strongly one believes has a strong and distinct effect on personal and civic morality that is not entirely captured by one's opinion on the church, nor by how regularly one practises (and controlling for other key sociodemographic variables).

There are other contrasts in the two models related to the sociodemographic variables. In the final personal morality model (with all variables added), the effects of age, being female, being in employment/retired all have a negative effect (towards liberalism) on personal morality, whereas in the final civic morality model, these same variables have a positive effect (towards conservatism) on civic morality.

Compared to the personal morality regression ($r^2=0.39$) the civic morality model has a very low r-squared ($r^2=.08$). This may be due in part to the lower variance in the civic morality itself, in that there is less variation in civic morality to be explained. One useful way of comparing the two models is by comparing the effects of the religious dimensions relative to the key sociodemographic variables in each model. In the civic morality model, the effect sizes of both the religious and key sociodemographic variables are relatively similar, with the exception of age which has by far the largest effect size, and rural a very small effect. In the personal morality model, the effect sizes of the belief and organizational dimension are comparatively very large, and only belonging to either of the two oldest cohort has a more substantial effect. Belonging to a denomination however, has a relatively small effect in the personal morality model.

5.2.7 Summary and Discussion

In assessing the relative weight religiosity and other sociodemographic variables have on values, a number of substantial findings warrant discussion. Firstly, every religious dimension, and at least some aspect of every sociodemographic variable, has a significant effect on personal and civic morality. The idea that values and attitudes are increasingly chosen, the thesis of individualisation theories, and no longer ascribed by the established social cleavages such as gender, education, or religion, is not supported by these findings. While there is no longitudinal analysis of whether the effect of these cleavages has changed across time, the evidence here suggests that these cleavages are important in differentiating between individuals in terms of personal and civic morality. Moreover, these findings accord with other thorough analyses of the individualisation thesis in relation to attitudes, social cleavages and modernization (e.g. Kalmijn and Kraaykamp 2007). There is also evidence contrary to this conclusion. First, the increasing emphasis on personal choice in the values under study does suggest that traditional controls are becoming less constraining on individuals - evidence in favour of individualisation. Furthermore, that social cleavages continue to distinguish between individuals in terms of values does not mean that personal choice and individualisation are not increasing. Third, the low amount of variance explained by sociodemographic variables suggests they are actually relatively poor at explaining differences in values. It is unclear whether this is the result of values being difficult to predict or that it is in fact evidence these social cleavages are constraining values less. Longitudinal analyses in particular, would be useful in discerning the plausibility of these interpretations.

Second, is the consistently significant and relatively substantial effects of each dimension of religiosity on both civic and personal morality when controlling for the effects of sociodemographic variables. While it is only in the next section that hypotheses relating to the effects of secularization at the societal level are addressed, some important deductions can be made from the findings here. One noteworthy finding is the relative strength (similar to the effect sizes of regular practice and the organizational dimension) of the effects of belonging to a denomination on civic morality, and the effect of the belief dimension on both civic and personal morality, even when other dimensions of religiosity are taken into

account. On the one hand, these findings stand in opposition to descriptions of nominal membership and religious beliefs unsubstantiated by practice being symptomatic of the modern forms of “residual religiosity” (e.g. Inglis 2007a, Voas and Crockett 2005, p.14). In fact, the findings here suggest that denominational belonging is not nominal, and beliefs that do in fact have a substantial bearing on one’s values. On the other hand, the weak effects of belonging in relation to personal morality, and the weak effects of irregular practice on both personal and civic morality, present good evidence in favour of the claims that these “residual” forms of religiosity have little personal or social significance (Voas and Crockett 2005, p.14).

As other studies have theorised, these key sociodemographic variables can serve as “proxies for the length and type of exposure to”, or insulation from, the secularizing aspects of modern society (Hardiman and Whelan 1998, p.71). The findings in relation to age, cohort, education, employment, and urban living, all suggest that those who have been somewhat insulated or less exposed to the archetypal characteristics modern society, are those who will have the highest level of religiosity and the most conservative of values. Those less exposed because of their belonging to an older generation, those who have lower levels of education, those who work in the home, or those who live in rural communities. All these groups, to a certain degree, stand on the periphery of the archetypal modern society, one where education is expanded to the masses, traditional forms of employment are supplanted by industrial and post-industrial forms of work, and rural life is increasingly displaced to large urban centres.

Yet the limited r-square value of both the combined models, particularly the civic morality model, suggest that the religiosity and these sociodemographic variables may actually not be exceptional predictors of values. The relationship between gender, employment, religiosity and values is one area in particular where the findings appear somewhat contradictory, and warrant more detailed investigation, perhaps with class or income as an additional parameters, or with interaction effects between these variables.

5.3 Societal effects on religiosity and values

The variation and consensus in the relationship between values and religiosity across Europe, and across time, suggest that societal, as well as individual, factors have a key role in this relationship. The findings of the multilevel analyses, in which these societal level effects are evaluated, are summarised in this section. This is followed by a discussion of these findings in relation to the literature.

5.3.1 Personal Morality

The first finding of the multilevel analysis is that variation in personal morality is attributable to between-society differences as well as within-society differences. The model that estimates variation in personal morality attributable to between society differences is an appropriate one. The difference between the model that takes into account variation in personal morality that is attributable to between society differences and a model that takes into account only within society differences represents a statistically significant improvement in model fit. It was determined that approximately 24% of the variation in personal morality is attributable to differences between societies.

The second aspect of the multilevel analysis is to account for individual level variation in personal morality due to individual religiosity, and then to estimate what variation remains at the level of societies. Each of the individual level parameter estimates for each of the religious dimension variables has a statistically significant effect on personal morality, and adding these variables to the model results in a statistically significant improvement in model fit. It was determined that when individual level variation in religiosity is accounted for, approximately 16% of the variation in personal morality is attributable to between society differences.

The third finding of the multilevel analysis is that the effect of each of the religious dimensions variables varies according from society to society. It was shown that a random slope model represents a statistically significant improvement in model fit to the random intercept model. That is, allowing the effect of each of the

religious variables on personal morality to vary from society to society, improves the model.

5.3.1.1 Modernization

Societal level explanatory variables that measure the degree of modernization of a society were added to the model to assess the effect they had on personal morality. Operationalized in terms of GDP, modernization was shown to have a negative and statistically significant main effect on personal morality, and adding it to the model produced a statistically significant improvement in model fit. That is, the higher the level of modernization in a society, operationalized using the level of GDP of a society, the more negative (towards liberalism) the effect on personal morality.

Whether the effect of each of the religious variables varied according to the level of modernization of society was assessed by adding interaction terms between the religious variables and GDP. There is no evidence to suggest that belonging to a religious denomination, one's degree of religiosity on the belief dimension, one's degree of religiosity on the organizational dimension, or attending religious services less than monthly (in comparison to never) has a differential effect on personal morality according to the degree to which a society is modernized (operationalized in terms of GDP). There is however, evidence to suggest that regular practice has a differential effect on personal morality according to the modernization of a society (operationalized in terms of GDP), evidenced by the statistically significant positive interaction term between GDP and monthly or more regular attendance, and the statistically significant improvement in model fit when the term was added to the model. That is, the greater the level of modernization in a society (which has a negative/towards liberalism main effect), the more positive (towards conservatism) the effect of regular practice on personal morality, in comparison to never practicing.

In order to test this further, a second operationalization of modernization, HDI of a society, was used in the model. Operationalized in terms of HDI, modernization was shown to have a negative and statistically significant main effect on personal morality, and including it in the model significantly improves the model fit. That is, the more modernized a society, the more negative (towards liberalism) the effect on personal morality.

Interaction terms between the religious variables and the HDI operationalization of modernization were added to the model. There is no evidence to suggest that the effect of one's level of religiosity on the belief dimension on personal morality differs according to the modernization of a society (operationalized in terms of HDI). There is mixed evidence that the effect of belonging to a religious denomination differs according to the modernization of a society (operationalized in terms of HDI), in that the addition of the interaction term did not improve the model fit, but exhibited a statistically significant negative regression coefficient. That is, the higher the level of modernization in a society, the less positive the effect of belonging to a religious denomination on personal morality. Equally, the lower the level of modernization in a society, the more positive the effect of belonging to a denomination on personal morality.

There is strong evidence that one's degree of religiosity on the organizational dimension has a differential effect on personal morality according to the level of modernization of a society (operationalized in terms of HDI), evidenced by the statistically significant negative interaction term between the organizational dimension and HDI, and by the statistically significant contribution of the interaction term to the model fit. That is, the higher the level of modernization in a society, the less the positive effect of being highly religious on the organizational dimension on personal morality. Equally, the lower the level of HDI in a society, the more positive the effect of being highly religious on the organizational dimension on personal morality.

There is strong evidence to suggest that irregular practice (in comparison to never) has a differential effect on personal morality according to the level of modernization of a society (operationalized in terms of HDI), evidenced by the statistically significant negative interaction term, and the improvement to the model fit. That is, the higher the level of modernization in a society, the less the positive effect of attending less than monthly (in comparison to never) on personal morality. Equally, the lower the level of HDI in a society, the more positive the effect of attending less than monthly (in comparison to never) on personal morality.

There is strong evidence to suggest that regular religious practice (in comparison to never) has a differential effect on personal morality according to the

level of modernization of a society (operationalized in terms of HDI), evidenced by the statistically significant positive interaction term, and the improvement to the model fit. That is, the higher the level of modernization in a society, the more positive the effect of regular practice (in comparison to never) on personal morality. Equally, the lower the level of modernization in a society, the less positive the effect of regular practice (in comparison to never) on personal morality.

There is no evidence to suggest that the modernization of a society (operationalized in terms of the proportion of the workforce engaged in agriculture) has a main effect on personal morality, having a non-statistically significant negative effect on personal morality, and not improving the model fit. There is no evidence that belonging to a religious denomination, the belief dimension, or attending monthly or more (in comparison to never) has a differential effect on personal morality according to the rationalization of a society (operationalized in terms of AGRI).

There is some evidence to suggest that the organizational dimension has a differential effect on personal morality according to the modernization of a society, evidenced by the statistically significant positive interaction term (+0.001) and the statistically significant contribution to model fit. That is, the greater the level of modernization (the lower the proportion engaged in agriculture), the more positive the effect of the organizational dimension on personal morality; the lower the level of modernization the less positive the effect of the organizational dimension on personal morality. There is also evidence that the effect of attending less than monthly, in comparison to never, has a differential effect on personal morality according to the modernization of a society (operationalized in terms of AGRI), evidenced by the statistically significant negative interaction term and statistically significant contribution to the model fit. That is, the greater the level of modernization, the less positive the effect of attending less than monthly (in comparison to never) on personal morality.

5.3.1.2 Religious Context

There is no evidence to suggest that a supportive religious context (operationalized as the level of pluralism of a society) has a main effect on personal morality, pluralism having a non-statistically significant negative effect on personal morality, and a statistically non-significant contribution to the model fit.

There is no evidence to suggest that the effect of belonging to a denomination, the belief dimension, the organizational dimension, or attending monthly or more (in comparison to never) has a differential effect on personal morality according to the degree of a supportive religious context in a society (operationalized as the level of pluralism). There was evidence that the effect of attending less than monthly (in comparison to never) has a differential effect on personal morality according to the degree of a supportive religious context in a society (operationalized as the level of pluralism), evidenced by a statistically significant negative interaction term, and a statistically significant contribution to the model fit. That is, the more supportive the religious context (low Herfindahl index), the more positive the effect of attending less than monthly (in comparison to never) on personal morality. The less supportive the religious context, the less positive the effect of attending less than monthly (in comparison to never) on personal morality.

There is evidence to suggest that the level of supportive religious context in a society (national (ir) religiosity) has a main effect on personal morality, evidenced by the statistically significant negative regression coefficient and a statistically significant contribution to the model fit. That is, the less supportive the religious context (higher level of national (ir) religiosity), the more negative (towards liberal) the effect on personal morality. Or the more supportive the religious context (the lower the level of national (ir) religiosity), the more positive (towards conservatism) the effect on personal morality.

There is no evidence to suggest that belonging to a religious denomination or the belief dimension, or attending less than monthly or monthly or more (in comparison to never) has a differential effect on personal morality according to the level of national religiosity of a society.

There is evidence that the organizational dimension has a differential effect on personal morality according to the level of a supportive religious context in a society (national (ir) religiosity), evidenced by a statistically significant negative interaction term, and a statistically significant contribution to the model fit. That is, the less supportive the religious context (the greater the level of national (ir) religiosity) the less positive the effect of the organizational dimension on personal morality.

5.3.1.3 Church-State Separation

There is no evidence to suggest that the level of SRAS has any main effect on personal morality. There is strong evidence that belonging to a religious denomination has a differential effect on personal morality according to the SRAS of a society, evidenced by the statistically significant negative interaction term between belonging to a denomination and SRAS, and by the statistically significant contribution of the interaction term to the model fit. That is, the lesser the degree of separation between religion and state in a society, the less positive the effect of belonging to a denomination on personal morality. Equally, the higher the degree of separation between religion and state, the more positive the effect of belonging to a denomination on personal morality. These findings run counter to the hypothesis.

There is evidence to suggest that the belief dimension has a differential effect on personal morality according to the SRAS of society, evidenced by the statistically significant negative interaction term between the belief dimension and SRAS, and by the statistically significant contribution of the interaction term to the model fit. That is, the lesser the degree of separation between church and state, the less positive the effect of being highly religious on the belief dimension on personal morality. Equally, the higher the degree of separation between church and state in a society, the more positive the effect of being highly religious on the belief dimension to a denomination on personal morality. Again, these findings run counter to the hypothesis.

There is also strong evidence to suggest that the organizational dimension has a differential effect on personal morality according to the SRAS of a society, evidenced by the statistically significant negative interaction term between the

organizational dimension and SRAS, and by the statistically significant contribution of the interaction term to the model fit. That is, the lesser the degree of separation between church and state in a society, the less positive the effect of being highly religious on the organizational dimension on personal morality. Equally, the greater the degree of separation between religion and the state, the more positive the effect of being high on the organizational dimension on personal morality. Again these findings run counter to the hypothesis.

There is no evidence to suggest that attending religious services less than monthly (in comparison to never) has a differential effect on personal morality according to the SRAS of a society. There is strong evidence to suggest that attending religious services monthly or more frequently (in comparison to never) has a differential effect on personal morality according to the SRAS of a society, evidenced by the statistically significant positive interaction term between the monthly or more attendance and SRAS, and by the statistically significant contribution of the interaction term to the model fit. That is, the lesser the degree of separation between religion and state in a society, the more positive the effect of regular practice on personal morality. Equally, the greater the degree of separation between religion and state in a society, the less positive the effect of regular practice on personal morality.

5.3.2 Civic Morality

Firstly, a model that estimates differences in civic morality attributable to between society differences was shown to be appropriate. The model that takes into account differences in personal morality that are attributable to between society differences represents a statistically significant improvement in model fit to a model that takes into account only within society differences. It was determined that approximately 10% of the variance in personal morality is attributable to differences between societies.

Secondly, each of the individual level parameter estimates for each of the religious variables were shown to have a statistically significant effect on civic morality, and adding these variables to the model resulted in a statistically significant improvement in model fit. It was determined that when individual level variation in religiosity was accounted for, approximately 10% of the variation in personal morality remains attributable to between society differences.

Thirdly, a random slope model represents a statistically significant improvement in model fit to the random intercept model. That is, allowing the effect of each of the religious variables on civic morality to vary from society to society was shown to improve the model.

5.3.2.1 Modernization

Societal level explanatory variables that measured the degree of modernization of a society were added to the model to assess the effect they had on civic morality. Operationalized in terms of GDP, modernization was shown to have a positive yet not statistically significant main effect on civic morality. Adding it to the model did however produce a statistically significant improvement in model fit.

Whether the effect of each of the religious variables on civic morality varied according to the level of modernization of society was assessed by adding interaction terms between the religious variables and GDP. There is no evidence to suggest that belonging to a religious denomination, one's degree of religiosity on the belief dimension, one's degree of religiosity on the organizational dimension, or attending

religious services less than monthly or monthly or more (in comparison to never) has a differential effect on civic morality according to the degree to which a society is modernized (operationalized in terms of GDP).

In order to test this further, a second operationalization of modernization, HDI of a society, was used in the model. Operationalized in terms of HDI, modernization was shown to have a statistically non-significant main effect on civic morality, despite improving the model fit. Interaction terms between the religious variables and modernization (operationalized in terms of HDI) were added to the model. There is strong evidence to suggest that belonging to a denomination has a differential effect on civic morality according to the degree of modernization in a society (operationalized as HDI), evidenced by a statistically significant negative interaction term and a statistically significant improvement in model fit. That is, the greater the level of modernization in a society, the less positive the effect of belonging to a denomination on civic morality. Equally, the lower the level of modernization in a society, the more positive the effect of belonging to a denomination on civic morality.

There is strong evidence to suggest that the organizational dimension has a differential effect on civic morality according to the degree of modernization in a society (operationalized as HDI), evidenced by a statistically significant negative interaction term and a statistically significant improvement in model fit. That is, the greater the level of modernization in a society, the less positive the effect of being high on the organizational dimension on civic morality. Equally, the lower the level of modernization in a society, the more positive the effect of being high on the organizational dimension on civic morality.

There is no evidence to suggest that that the effect of attending less than monthly or monthly or more (in comparison to never), or the effect of one's level of religiosity on the belief dimension, on civic morality differs according to the modernization of a society (operationalized in terms of HDI).

In order to test this further, a third operationalization of modernization, the proportion of the workforce engaged in agriculture, was used in the model. There is no evidence to suggest that the modernization of a society has a main effect on civic

morality, the proportion of the workforce engaged in agriculture (AGRI) having a non-statistically significant negative effect on civic morality. There is no evidence to suggest that the belief dimension, attending monthly or more or attending less (in comparison to never) has a differential effect on civic morality according to the modernization of a society (operationalized in terms of AGRI).

There is evidence that belonging to a denomination has a differential effect on civic morality according to the modernization of a society (operationalized in terms of AGRI), evidenced by the statistically significant negative interaction term, and the statistically significant contribution to model fit. That is, the more modernized a society, the less positive the effect of belonging to a religious denomination on civic morality.

There is evidence that the organizational dimension has a differential effect on civic morality according to the modernization of a society, evidenced by the statistically significant negative interaction term, and the statistically significant contribution to model fit. That is, the more modernized a society, the less positive the effect of being high on the organizational dimension on civic morality.

5.3.2.2 *Religious Context*

There is no evidence to suggest that the level of pluralism of a society has a main effect on civic morality. There was no evidence to suggest that any of the religious variables have a differential effect on civic morality according to the level of pluralism in society.

There is no evidence to suggest that the level of national religiosity of a society has an effect on civic morality. Despite representing a statistically significant contribution to the model fit, the negative regression coefficient was not statistically significant. There was no evidence to suggest that the effect of belonging to a denomination, the belief dimension, the organizational dimension, or attending less than monthly (in comparison to never) on civic morality differs according to the national religiosity of a society.

There is evidence to suggest that the effect of attending monthly or more (in comparison to never) has a differential effect on civic morality according to the national (ir) religiosity of a society, evidence by the statistically significant positive interaction term, and the statistically significant improvement to the model fit. That is, the higher the level of national (ir) religiosity, the more positive the effect of attending monthly or more (in comparison to never) on civic morality.

5.3.2.3 *Church-State Separation*

There is strong evidence to suggest that the SRAS of a society has a positive main effect on civic morality, evidenced by the statistically significant positive regression coefficient and the statistically significant improvement to the model fit. That is, the lesser the separation between religion and state in a society, the more positive civic morality (more conservative).

There is strong evidence to suggest that belonging to a religious denomination has a differential effect on civic morality according to the SRAS of a society, evidenced by the statistically significant negative interaction term between belonging to a denomination and SRAS, and by the statistically significant contribution of the interaction term to the model fit. That is, the lower the degree of separation between religion and state, the less positive the effect of belonging to a

denomination on civic morality. Equally, the higher the degree of separation between religion and state in a society, the more positive the effect of belonging to a denomination on civic morality. These findings however, run counter to the hypothesis. Furthermore, when the interaction between denomination and SRAS was added to the model, the positive regression coefficient for the main effect of SRAS on personal morality was no longer statistically significant.

There is no evidence to suggest that the belief dimension or attending religious services less than monthly or monthly or more (in comparison to never) has a differential effect on civic morality according to the SRAS of a society.

5.3.3 The Organizational Dimension of Religiosity

The first finding of the analysis is that a multilevel analysis of the organizational dimension is an appropriate one, evidenced by the statistically significant difference between the single level null model and the multilevel null model. That is, variation in the organizational dimension of religiosity is attributable to between society differences as well as within society differences. 14.2% of the variation in the organizational dimension was estimated to be at the societal level.

The second aspect of the multilevel analysis is to account for individual level variation in the organizational dimension due to individual-level sociodemographic variables, and then to estimate what variation remains at the level of societies. Adding these variables to the model results in a statistically significant improvement in model fit. It was determined that when individual level sociodemographic variables are taken into account, 13.9% of the variation in the organizational dimension is attributable to between society differences.

The third aspect of the multilevel analysis assesses the hypothesis that the greater the degree of modernization and the greater the degree of pluralism in societies, the lesser the organizational dimension. The degree of modernization of a society was shown to have a statistically significant negative effect on the organizational dimension (operationalised as HDI). That is, the greater the level of modernization of a society, the lower the organizational dimension. When the degree of modernization of societies is accounted for, approximately 12% of the variance remains at the societal level.

There is no evidence to support the hypotheses that the degree of modernization, operationalised in terms of the proportion of the workforce engaged in agriculture, or the degree of pluralism in a society has an effect on the organizational dimension.

5.3.4 The Belief dimension of Religiosity

The first finding of the analysis is that a multilevel analysis of the belief dimension is an appropriate one, evidenced by the statistically significant difference between the single level null model and the multilevel null model. That is, variation in the belief dimension of religiosity is attributable to between society differences as well as within society differences. 27.432% of the variation in the organizational dimension was estimated to be at the societal level.

The second aspect of the multilevel analysis is to account for individual level variation in the belief dimension due to individual-level sociodemographic variables, and then to estimate what variation remains at the level of societies. Adding these variables to the model results in a statistically significant improvement in model fit. It was determined that when individual level sociodemographic variables are taken into account, 27.379% of the variation in the organizational dimension remains attributable to between society differences.

The third aspect of the multilevel analysis assesses the hypothesis that the greater the degree of modernization and the greater the degree of pluralism in societies, the lesser the belief dimension. The degree of modernization of a society, operationalised as HDI, was shown to have a statistically significant negative effect on the belief dimension. That is, the greater the level of modernization of a society, the lower the belief dimension. Accounting for the degree of modernization of societies reduced the amount of variance remaining at the societal level to 23%.

The second operationalisation of the degree of modernization, the proportion of the workforce engaged in agriculture) was shown to have a statistically significant negative effect on the belief dimension. That is, the greater the level of modernization of a society, the lower the belief dimension. When each operationalisation of modernization are accounted for, approximately 21% of the variance remains at the societal level. There is however no evidence that the degree of pluralism in a society has an effect on the belief dimension.

5.3.5 Summary and Discussion

The most fundamental finding of the multilevel analysis is that the society to which an individual belongs has a significant bearing on what values they hold and how religious they are. Certainly this finding was anticipated: individuals in the same society share history and social experiences, and interact with the same societal institutions. Measuring and quantifying the variation in values and religiosity due to shared membership of a society provides a unique social scientific insight into what might be termed the culture of societies. One of the criticisms raised in the literature review was of the failing of research on religiosity and values to distinguish between and examine both macro and micro levels of analysis. Establishing that a multilevel model is appropriate, that accounting for variation in values and religiosity between societies as well as within, is a vindication of this argument.

The second important finding is that of the dimensions of religiosity having a differential effect on values according to the society to which an individual belongs. This builds on the finding of the importance of the macro-level, and establishes a micro-micro linkage that is dependant on the macro level. That is, the individual level relationship between religiosity and values is to a degree contingent on the society to which an individual belongs.

The major theoretical argument of this thesis is that the macro-level characteristics of modern societies, the degree of modernization and the national religious context, all have an effect on the micro level character of religiosity and values, and the micro-level relationship between religiosity and values. In other words, the process of secularization, a macro-level phenomenon characterised by increasing differentiation, increasing rationalization, and increasing pluralism, has a negative effect on religiosity, has a liberalizing effect on values, and weakens the relationship between religiosity and values. A summary of the specifics of these findings are outlined below, first in relation to the main effects of each societal-level variable, and then the interactions between the societal level variables and the relationship between values and each dimension of religiosity.

The main effects of each societal level variable are presented in the first column of the table below. These are the effects of the macro level on the micro level of values. In relation to personal morality, two out of the three operationalisations of modernization (GDP and HDI) have a negative main effect. In relation to civic morality, none of the operationalisations of modernization have a significant main effect. The weight of the evidence in relation to personal morality suggests that the more modernized the society, the more liberal individuals are, the less modernized a society, the more conservative. There is no evidence to support this conclusion in relation to civic morality and modernization. There is also no evidence to support the hypothesis that societal pluralism has any main effect on civic or personal morality. The evidence in relation to the other aspect of national religious context, national religiosity, is mixed. There is no evidence to suggest that national religiosity (the proportion of a society who do not practise their religion) has any main effect on civic morality. There is evidence that national religiosity has the hypothesised negative main effect on personal morality. Overall, the only reasonably robust evidence in relation to main effects is the negative relationship between modernization and personal morality.

In relation to the main effect of each societal variable on religiosity, there is evidence that the degree of modernization has a negative main effect on both the belief and organizational dimensions. There is however no evidence to support the hypothesis that the degree of pluralism has a negative main effect on religiosity. That is, the more modernized a society, the lower the level of religiosity on both the belief and organizational dimensions.

The findings in relation to the interactions are also presented in the table below. These are the micro-micro linkages between religiosity and values that are contingent on macro level characteristics. In relation to personal morality only one of the operationalizations of modernization (HDI) has a negative interaction with denomination. That is, the greater the level of modernization in a society, the less conservatizing the effect of belonging to a religious denomination on personal morality. In relation to civic morality, two of the operationalisations of modernization have a negative interaction with denomination. That is, the greater the level of modernization in a society, the less conservatizing the effect of belonging to a religious denomination on civic morality.

Only one of the operationalisations of modernization (HDI) has a negative interaction with the organizational dimension in relation to personal morality. There is also a positive interaction with one of the operationalisations (AGRI), contrary to the hypothesis. The size and statistical significance of the coefficient however suggest this result may not be very reliable. In relation to civic morality, two of the three operationalisations of modernization have a negative interaction with the organizational dimension. Overall, there is good evidence to suggest that the greater the level of modernization in a society, the less conservatizing the effect of the organizational dimension on civic morality, and to a lesser extent personal morality.

In relation to irregular practice (relative to never), two of the three operationalisations of modernization have a negative interaction with personal morality, but there are no significant interactions in the civic morality model. Overall, there is good evidence to suggest that the greater the level of modernization in a society, the less conservatizing the effect of the irregular practice on personal morality, but no evidence in favour of this hypothesis in relation to civic morality.

These findings are generally supportive of secularization theory, where modernization and the sub-process of functional differentiation increasingly dilutes the over-arching authority of religion at the societal level (a macro-macro phenomenon), and this has an effect on the relationship between individual religiosity and values (a micro-micro effect). That is, the less authority religion has at the societal level, the weaker the effect of religiosity on values at the individual level. These findings, coupled with the findings regarding the main effects of religiosity, support the conclusion that modernization has a liberalizing effect on values in general, and weakens the conservatizing relationship between religiosity and values. The findings however, only support this combined conclusion in relation to one operationalization of modernization (HDI) and the denominational belonging and the organizational dimensions of religiosity.

There is no evidence to support the hypotheses in relation to the belief dimension. It is notable that there are no significant interaction effects in either the personal or civic morality models. A tentative explanation of these findings is that, as opposed to the organizational and belonging dimensions, the belief dimension is relatively distant from the declining authority of the religious sphere. Any changes

in the relative position of religious authority brought about by modernization therefore will have a limited impact on the relationship between religious belief and values.

Finally, the findings in relation to regular practice (relative to never) run counter to the hypotheses. In the personal morality model, the two main operationalisations of modernization (HDI and GDP) have a positive interaction with regular practice. In the civic morality model, there are no significant interactions. The findings suggest that the more modernized a society, the stronger the conservatizing effect of regular practice (in comparison to never). This runs counter to the direction that was hypothesised, and warrant further interpretation and explanation.

Firstly, because of the way the model is specified, the findings indicate that the more modern the society, the more conservative regular churchgoers are relative to those who never practice. Because of this relative relationship, there are several possible permutations that could underlie these findings. Regular churchgoers may become more conservative the more modern the society, while those who never practice become more liberal or stay the same; regular churchgoers may be remaining at the same level of conservatism while those who never practice grow more liberal; or regular churchgoers may be becoming more liberal more slowly in more modern societies compared to those who never attend. Cognizant of the main effect towards liberalism in both the GDP and HDI models, and of the previous findings regarding personal morality and sociodemographic variables, particularly age and cohort (see page 394-395), the most plausible situation is one of regular churchgoers becoming more liberal at a much slower rate as societies become more modern. A counter-argument to this interpretation is that as society becomes more liberal and secular, a small embattled minority become even more polarized from the liberal secular majority (see for example Achterberg *et al.* 2009). Similar seemingly paradoxical interactions are found in relation to the model testing the relationship between national religiosity and civic morality, where regular churchgoers are more conservative the less supportive the religious context (i.e. a large proportion who never attend). Again, this seems to be the case where regular churchgoing has an insulating effect on the minority population who are regular churchgoers. These findings are significant in their own right in highlighting the non-uniform effects of

modernisation and secularization on all sections of society. As with the findings in relation to the social correlates of religiosity and values, this does not constitute evidence that secularization is not occurring, but rather that the effects of secularization are not uniformly distributed throughout modern society.

The findings in relation to the separation of religion and state index are quite noteworthy, if initially perplexing. Not only are results generally unsupportive of the hypotheses, but those that are statistically significant run directly opposite to the findings in relation to the main operationalisations of modernization. Inspection of the index itself, and the work of its author, Jonathan Fox, suggest why these findings are so inconsistent with the others. Two features of the index are noteworthy: firstly, the low scores on the index (indicating separateness of religion and state) in countries such as Malta, Ireland, Italy and the Netherlands; and secondly, the tendency in almost every country to show an increase (albeit minor) in the index from 1990 to 2008. That is, according to the SRAS index, Malta, Ireland, and Italy are among the most secular states in Europe, and the trend since 1990 has been one of decreasing state secularization in almost every country. Indeed this second point is one of the major conclusions of Fox's (2015) study, that there has been worldwide increases in state involvement in religion (SRAS index increasing), and this is a direct contradiction of theories of secularization. With the benefit of hindsight however, it appears that the concept Fox and the SRAS measure is something quite different to that of functional differentiation and secularization. In simple terms, the index is more a measure of the degree to which the state controls religion, not the degree to which religion influences the state. As such, it seems quite credible that the findings in relation to SRAS are exactly opposite to those of the other operationalizations of functional differentiation. Such a conclusion is supported by Casanova's (1994, p.21) theorisation of secularization, whereby "the religious sphere [becomes] just another sphere, structured around its own autonomous internal axis but falling under the gravitational force of the two main axes", that of the economy and the state. That is not to say Fox's index is without merit: his index represents a comprehensive analysis of government involvement in religion, and the uniquely cross-national and cross-time comparability of the index motivated its use in this analysis. To categorise societies in terms of the degree to which religion influences the state however, a more refined and theoretically-oriented index is required. Some of the

items in the SRAS do in fact measure something conceptually similar to this, particularly the religious legislation aspect. Treating the index as a single continuous variable does appear to have been a mistake in the analysis here. More in-depth analysis of particular religion policies may prove more worthwhile (see Fox 2015, pp.168-200). And rather than treating all religion policy as equivalent, refining the composite index to measure distinct aspects of the religion and state linkage would prove more useful (e.g. the government favouritism and government regulation indices of Grim and Finke (2006)).⁴³

The findings in relation to national religious context only weakly support the theory that high levels of pluralism and a low proportion of religious peers weakens the individual relationship between religiosity and values.

Only in relation to personal morality does one aspect of national religious context have a negative main effect. This one finding however is not without consequence. It accords with previous findings by Finke and Adacyzk (2008) and Storm (2016) that the proportion of religious peers does have a significant effect on the values of a society. That this main effect is not present in relation to civic morality is also reflective of Storm's (2016) conclusions that religiosity is most relevant to those values that might be openly contested in a society, and ones where religion has a strong public voice. The same conclusions can be drawn with regard to the interactions between civic morality and religious context, where there is only one significant interaction.⁴⁴

In relation to personal morality, there is some evidence that the religious context of a society mediates the relationship between religiosity and values. The proportion of religious peers in a society strengthens the relationship between personal morality and the belonging and organizational dimensions. The degree of pluralism in a society also mediates the relationship between personal morality and the organizational dimension (where high pluralism weakens the relationship, low pluralism strengthens it). Taken together, the findings suggest that the degree to

⁴³ Interestingly, a brief examination of Grim and Finke's (2006) data reveals Ireland, Malta, Poland and the Netherlands as having some of the lowest scores of the government regulation index (i.e. there is no govt. regulation), but these countries vary widely in terms of the government favouritism index.

⁴⁴ This finding runs counter to the hypothesis, but a plausible explanation might be the same insulating effect described above in relation to practice and modernization.

which one's relationship with the church influences one's personal morality is contingent on the degree to which the church itself is prominent in a society. In societies with a low degree of pluralism and a high amount of churchgoing / religiously active peers, one would expect personal morality to be mediated strongly by religiosity. Correspondingly, in societies with a high degree of pluralism and low churchgoing / religiously active peers, one would expect personal morality to be only weakly related to religiosity.

Table 5-1: Main and Interaction effects on personal morality

Personal Morality	Main Effect	Belong Interaction	Belief Interaction	Organizational Interaction	Irregular Practice Interaction	Regular Practice Interaction
Modernization						
GDP	Negative	None	None	None	None	Positive
HDI	Negative	Negative	None	Negative	Negative	Positive
AGRI (low agri, high modern)	None	None	None	Positive	Negative	None
Religious Context						
HERF (high pluralism)	None	None	None	Negative	None	None
Nat religiosity (high never)	Negative	None	None	Negative	None	None
SRAS (0=Separated)						
	None	Negative	Negative	Negative	None	Positive

Table 5-2: Main and Interaction effects on civic morality

Civic Morality	Main Effect	Belong Interaction	Belief Interaction	Organizational Interaction	Irregular Practice Interaction	Regular Practice Interaction
Modernization						
GDP	None	None	None	None	None	None
HDI	None	Negative	None	Negative	None	None
AGRI	None	Negative	None	Negative	None	None
Religious Context						
HERF (high pluralism)	None	None	None	None	None	None
Nat Religiosity (high never)	None	None	None	None	None	Positive
SRAS (0=Separate)	Positive*	Negative	None	None	None	None

5.4 Conclusion

The hypotheses put forward in this analysis theorised strong linkages between religiosity and values, but ones that would vary along several lines. The analysis has found evidence that the relationship between religiosity and values is one that is relatively consistent across Europe and over time. The relationship is one that is strong and reliable net of other key sociodemographic variables, with each dimension of religiosity having a significant effect net of the others.

The relationship between religiosity also varies according to which values one is examining, approximating a public-private sphere distinction. The relationship differs in strength and size according to dimension of religiosity and which values one is relating each dimension to. Despite relative consistency in statistical significance and direction, there is a strong relationship in some societies and a relatively weak relationship in others. The individual-level relationship between religiosity and values varies according to macro-characteristics of societies, with modernization inflecting the conservatizing effects of religiosity, on personal morality in particular.

These findings will now be considered in light of some of the key aspects of modernization and secularization theory, assessing to what degree they are supportive, indifferent, or unsupportive of the key theoretical literature.

One of the central themes of the findings is that being on the periphery of modern society has a strong positive effect on religiosity, and a strong conservatizing effect on values. Those belonging to older cohorts, those who work in the home, those with lower levels of education, and those who live in rural areas, all represent the more religious and conservative sections of society. These findings mirror the conclusions of secularization theorists such as Berger (1967) in his discussion of marginal classes, Luckmann's (1967) ideas about religion being on the periphery of European society, and Wilson's (1976) theory of societalization, whereby religiosity is still strong amongst the marginal groups, those distant from the secularizing core of modern society. This is not a demonstration that secularization is not occurring, but rather that secularization is not uniformly distributed throughout modern society (Berger 1967).

However reflective these findings are of the predictions of secularization theorists, these same findings also offer evidence that is unresponsive of theories of individualisation. That is, the theory that modern society is characterised by individuals increasingly choosing their values and beliefs instead of being ascribed by traditional social cleavages such as age, gender, or education. The findings indicate that these social categories do have an important effect in defining ones religiosity and values. That social categories continue to distinguish between individuals in terms of values however, does not mean that personal choice is not increasing. The findings regarding increased emphasis on personal choice in the values under study is in fact supportive of theories of individualisation.

The findings also deliver evidence that is both supportive and unresponsive of the counterpart of this theory in the religious sphere - the various theories and accounts that can be subsumed under the concept of religious individualisation. Very briefly, these theories and accounts describe a religious orientation that is increasingly chosen, one that is characterised by nominal denominational membership, and one in which religious beliefs are rarely substantiated through practice or in deference to church proscriptions (Inglis 2007a, 2007b). The findings in relation to the belief dimension and denominational belonging are generally unresponsive of these accounts. The belief dimension of religiosity has strong and consistent conservatizing effect on values net of the effects of other dimensions of religiosity and sociodemographic variables. This supports the theoretical linkage stated in relation to the hypotheses, that the belief dimension encompasses a degree of support or rejection of a whole system of beliefs that are systematised by the church, in the religious sphere in the first instance, but also in other spheres. The findings in relation to denomination are also unresponsive of these accounts, particularly the strong effect of denomination in relation to civic morality, net of the effect of the other religious dimensions. Yet there are findings that support these descriptions of residual religiosity that has little social significance in terms of values. One of the most consistent findings in the analysis of the Irish data was the lack of any statistically significant differences in values between those who practise their religion irregularly and those who never practise. This was also borne out in the regression analyses, where the effect of attending irregularly was one of the weakest effects in each of the models.

Furthermore, the analyses presented here do not offer a comprehensive examination of these religious individualisation theories. While the analysis does assess the effect of the belief dimension net of the other dimensions, a true test of the social significance of religious belief in isolation would isolate the interactive effect of beliefs with the other dimensions. Or the analysis would treat the belief dimension not as a continuous dimension but as one with discrete categories such as atheism, religious bricolage or syncretic beliefs, and orthodoxy. A more definitive analysis of religious individualisation theory(s) would explore the relative significance of each of these positions in relation to values.

The findings regarding the macro-level effects of societal characteristics represent some of the most important findings in the analysis. There is strong evidence to support secularization theory in several of the findings. Three relationships are evidenced by the findings in relation to the effects of modernization. Firstly, there is the macro to micro negative effect that modernization has on individual religiosity. That is, the more modernized the society, the less religious individuals are on both the belief and organizational dimensions. This finding is significant because it supports one of the more contentious aspects of secularization theory – that secularization, as a macro-level process that entails changes to the place of religion at the societal level, has a negative effect on individual religiosity. It is of substantial importance because it establishes a linkage between a concept that is fundamental to theories of secularization with findings relating to individual religiosity that are often measured, but occupy a contentious position in the theory.

Secondly, there is the macro to micro negative (liberalizing) effect of modernization in relation to personal morality. That is, the more modernized a society, the more liberal individuals are in terms of personal morality. This finding can be interpreted in terms that are supportive of a theory of secularization. It was hypothesised that the less control religious sphere has over the other spheres of society, the weaker its ability to socialize individuals in general through its control over other spheres such as the media, the education system, the polity etc. Although the findings do not offer direct evidence of this, the findings are supportive of the theory that the more differentiated (or secularized) the society, the more liberal the populace in terms of values. While the linkage between modernization and a more liberal populace can be interpreted in terms of the declining societal significance of

religion, there are several alternative explanations. Accompanying, and perhaps independent of, changes in the religious sphere, modernisation entails several interdependent changes that are likely to have a liberalizing effect on values in their own right. Structural and compositional change, already touched on in relation to the theoretical linkages between values and sociodemographic variables, are of particular note in this respect (Bergh 2007, Kraaykamp 2002). That is, one of the most important features of modernization is the emergence and proliferation of groups in society characterised by their high levels of education and employment in autonomous work roles. Owing to these characteristics, these individuals' values emphasise autonomy, and the rejection of authority and tradition (Van Deth and Scarbrough 1995). In particular, the expansion and increased emphasis on education in more modern societies has a liberalizing effect on values (Kraaykamp 2002, Scheepers *et al.* 2002, Doring 1992, Weil 1985). Also of particular importance is the increased social and economic autonomy of women, with increased education and participation in the workforce having a liberalizing effect on their values across several domains (Gelissen 2003, Abela 2001, Sackmann 1998, Listhaug *et al.* 1985). In summary, it is probable that structural changes inherent in modernisation have produced compositional changes, ones that are likely to have a general liberalizing effect on values the more modern the society. Whereas these changes represent the repercussions of the structural changes of modernisation, they may also reflect the cultural explanation outlined by Inglehart, touched on previously in relation to individualisation. That is, the increase in prosperity and decline in existential insecurity brought about by modernisation has a direct effect on the values of the populace (in their formative years) (Inglehart *et al.* 1996). And while it is possible that each of these aspects of modernisation could independently account for this growth in liberal values, it is likely a more complex combination (some reciprocal) between these structural, compositional, cultural and religious changes. In Inglehart's theorisation for example, it is this change in values that brings about a decline in religious orientations, quite the opposite of the initial explanation outlined here.

Thirdly, there is the macro effect of modernization on the micro level relationship between individual religiosity and individual values. That is, the degree to which a society is modernized mediates the relationship between religiosity and

values. Like the findings in relation to the effect of modernization on the dimensions of religiosity, this is a particularly significant finding because it establishes a linkage between the significance of religion at the macro level and the significance of religion at the micro level. Specifically this findings offers general support to the compartmentalization and privatisation strands of secularization theory. That is, as individuals move between the differentiated spheres of society, their values in one sphere become increasingly separated from their beliefs and values in other spheres. It implies what prominent secularization theorists such as Berger (1967), Bruce (2002) and Dobbelaere (2002) have theorised: that accompanying the decline in the societal significance of religion is a decline in the significance of religiosity at the individual level.

This theory that religiosity is compartmentalized is also supported by the findings of the preliminary hypotheses, contrasting the relationship between religiosity and each different set of values. The very weak relationship between religiosity and political and work values suggests that religiosity has no relevance to these more public values. One of the unsatisfactory aspects of the findings was the relatively low r-squared value in the regression models in relation to the civic morality regression models. On first inspection, this finding appears to be evidence showing religiosity to be privatised. That is, religiosity is strongly linked to values in the private realm (personal morality), but less so in relation to the public realm (civic morality). On balance however, the relative effect size of each sociodemographic variable in the models suggests that it is not just religiosity that is relatively poor at explaining variation in civic morality, but key sociodemographic variables too. The more plausible conclusion is that the low level of variation in the civic morality model accounts for the relative paucity of the r-squared value.

There are indications that secularization theory does not capture a complete picture of the situation, nor are the findings absolute in terms of supporting the hypotheses. Firstly, there is the inconsistency of the multilevel findings. The findings in relation to civic morality did not generally support any of the societal level hypotheses. The findings in relation to personal morality were generally supportive, but not invariably so.

Secondly, there are the findings regarding the positive relationship between modernization, personal morality and modernization. The conclusion that the liberalizing effects of modernization might be insulated against, or perhaps inflected in such a way that increases conservatism, are findings that do not easily fit within theories of modernization and secularization. As with the findings in relation to the social correlates of religiosity and values, this would not be a demonstration that secularization is not occurring, but rather that the effects of secularization are not uniformly distributed throughout modern society.

Thirdly, the findings in relation to religious context of a society are noteworthy in their lack of support for the hypotheses regarding the religious dimensions. There was no evidence that the level of pluralism in a society has an effect on the religious belief dimension or the organizational dimension. This lack of any significant findings in relation to pluralism do however concur with the findings of Voas *et al.* (2002) in relation to religious participation. There was however, some evidence that the religious context of a society mediates the relationship between personal morality and religiosity. In this respect, the findings demonstrate the value of investigating the relationship between societal characteristics and individual religiosity, and also investigating how societal characteristics mediate the relationship between individual religiosity and values.

6 Conclusion

The broad aim of this thesis was to theoretically and empirically examine the relationship between religion and values, principally in relation to the structural and cultural changes propounded in theories of modernization and secularization. With such an inclusive and comprehensive subject, the guiding principle of the research was to relate the general to the specific, to distil multidimensional concepts into distinct definitions and operationalizations, and to relate broad theories of social and cultural change to a series of testable hypotheses. This principle also guides the conclusions, with this chapter relating the findings of the research back to the theories of social and cultural change that informed it, elaborating on the significance of the findings and its contribution to the field. The chapter begins with a theoretical synthesis of the theory outlined in the literature review and methodology chapters. This is followed by a discussion of the significance of the findings and its contribution to the field. It concludes with a discussion of some of the limitations of the research and recommendations for future research.

6.1 Theoretical Synthesis

Firstly, values and religion were situated within the theoretical literature describing the apparatus of the social and cultural system. Values occupy a particularly important position in this regard, as does their relationship with the religious sphere. In Parsons' (1951, 1966) model of the social system, the institutionalization and internalization of common values are key in maintaining the social integration of a society. In this model, the cultural system, the source of values to which individuals conform, and the socialization system, which ensures values are internalized and transmitted to new generations, are key in maintaining the social order. The role of religion within this system is twofold: the first is articulating and maintaining values at the level of the cultural system, the second is fostering attachment and commitment to values the individual level. Furthermore, the monopoly of the religious sphere in the articulation of values means that each institutional sphere is dependent on religiously articulated values to legitimate their

own specific institutionalized values. Hence, the Parsonian model of society has been described as “a religiously based moral order” (Fenn 1970, p.112).

While the Parsonian model of society lays the theoretical foundations for conceptualising the relationship between religion and values, it was limited for the purposes of this research in several related ways. The first problem is the conceptualisation of religion in functional terms. Briefly stated, the problem with Parsons’ functional theorisation of religion is that the concept of a secular society for Parsons is a contradiction in terms (Fenn 1970). That is, a functional definition of religion from the outset predetermines the role of religion in society, and empirical questioning of its social significance is limited (Hamilton 2001). Secondly, and relatedly, is the inability of the Parsonian model to theoretically accommodate substantive social and cultural change, particularly change in the relative position of the religious sphere in a functionally differentiated society. From the perspective of theories of modernization and secularization, a modern functionally differentiated society is one in which the religious sphere has lost its dominant position relative to the other spheres. The question of whether it continues to articulate, legitimate, and foster commitment to values is in fact a question that requires investigation.

In order to investigate this question, a substantive definition of both religion and values, and a more empirically oriented theorisation of their relationship with social and cultural change, were required. The definitions and values studies of Rokeach (1969a), Kluckhohn (1951), Schwartz (1987, 1995), Hofstede (1980a, 2001), Inglehart (1977, 1990, 1997a), Halman (1996, 1999, 2003) and others were briefly reviewed. This review was then framed within wider theories relating values to the concept of culture and national culture, and relating values to theories of cultural change. One of the key conclusions of the review was of the importance of relating value change to macro and micro level changes in society, and specifying exactly the level of analysis at which theoretical linkages are made.

The attention of the literature review then turned to classic and contemporary analyses of the relationship between religion and values. Whereas the Parsonian model established very general macro and micro level linkages between the religion and values, these studies theorise the linkage in more precise terms.

Firstly, the values studies of Rokeach (1969a) and Schwartz (1995) in the field of social psychology were reviewed. These studies offer an overview of the type of values associated with individual religiosity (e.g. traditionalism, conservatism) and the different emphases on certain values in different denominations. Their analyses, while offering cogent theoretical linkages between individual religious commitment and values, theorise the relationship only at the micro level, with no reference to the wider social context.

Secondly, classical sociological theories of religion were reviewed, along with their application in more recent studies of religious and value change. The works of Marx (Marx and Engels 1970), Weber (1978) and Durkheim (1982) from classical sociology, and their application in contemporary studies by Inglis (1998, 2007b, 2007a), and Finke & Adamczyk (2008), were discussed. Key in each of these studies was the establishment of precise theoretical linkages between particular dimensions of religiosity and particular values, and linking these micro-level propositions with the wider social context. Marx for example, links belief in religious salvation to values of obedience and deference to authority. This micro-level theoretical linkage between belief and values is further linked to the macro level via the religious and cultural sphere being ultimately controlled by the economic sphere (i.e. serving the interests of the ruling classes).

Weber also linked values with religion via salvation beliefs, specifying that, according to the degree religious rationalization, these beliefs were combined into a coherent system of beliefs, values and worldviews by religious specialists and organizations. In the most rationalized religions, the linkage between the values and religion become divorced from religious specialists altogether. As religion becomes even more rationalized, even the belief aspect moves to a less central position, and values become wholly secular ones. Contemporary applications of Weber's ideas by Tom Inglis in relation to the Catholic Church in Ireland were then discussed. Inglis argues that ways of being moral and ways of being spiritual are becoming increasingly divorced from each other. That is, he argues that accompanying a decline in the church control over values, is a decline in church control over beliefs, and a weakening of the degree to which religious beliefs and values are related to one another more generally.

Durkheim's theorisation of the relationship emphasised the significance of religious institutions and collective religious belief and practice. That is, collective belief and practice is theorised by Durkheim to imbue the values emanating from religious institutions with an unparalleled legitimacy, that of the sacred. As with Parsons' theorisation, religion is theorised to have the effect of promoting attachment to values at the individual level, but also legitimizing values in other societal spheres. The work of Finke and Adamczyk was given particular attention, as one of the few empirical studies that aimed to assess the relative significance of the contextual effect of religiosity. That is, in addition to the proposition that the more religious an individual is, the more conservative they will be in terms of values (a micro-micro effect), they also propose that the more supportive the religious context, the more conservative the populace in general (a main macro-micro effect), and the more supportive the religious context, the stronger the conservatizing effect of religiosity on values (an interactive macro-micro effect).

These theorisations of the relationship between religion and values went on to form the basis of many of the hypotheses in the analysis, particularly the studies linking traditionalism and conservatism with religious commitment, the idea that each dimension of religiosity may have a differential effect in relation to values, the description of the relationship between each dimension of religiosity and values as a changeable one, and that the religious context of a society may have an effect on values and relationship between religiosity and values in a society. More generally, they informed the approach that an analysis that examines both micro and macro level relationships between religion and values was both necessary and valuable.

Having outlined some of the theoretical linkages between religion and values, the review then turned to the theories of social and cultural change. First, key theories of social and cultural change were related to value change. Two fundamental aspects of modernization were discussed, differentiation and individualization. Particular attention was given to functional differentiation, the central element of many classical and contemporary theories of social change. The most important idea is that the social structural differentiation of each institutional sphere is accompanied by a cultural differentiation. That is, institutional spheres develop their own values independent of the religious sphere, and as a result modern society is characterised by a plurality of life-world or life-orders with their own

values. The consequence of this plurality of life-worlds and values in many theories of social change (e.g. Durkheim, Parsons), is that social integration appears to be unachievable. Parsons' solution was the proposition that religiously articulated values have become generalized in modern society, but others such as Fenn (1970) and Luhmann (1977, 1990) see a plurality of life-worlds and values as sustainable for society, albeit a fragmented one.

The second fundamental aspect of modernization theory, individualisation, was then discussed. Briefly stated, the individualization theories of Beck (1992) and Bauman (1998) propose that modernity is characterised by an ethic of personal choice, self-determination, and self-fulfilment. In terms of values, this entails traditional values declining, and individuals being less bound by traditional social cleavages in the values they hold. Instead, values of self-fulfilment and personal choice become more widespread, and individuals increasingly pick and choose which values they hold. On reviewing the empirical evidence however, there are few studies that support these generalisations. An exception to this criticism is the work of Ronald Inglehart (1971, 1977, 1994, 1995, 1997a, 1997b, 1999, 2000), who theoretically and empirically charts the decline of traditional values and the increase in self-expression values. As a particularly significant contributor to the field of values studies and modernization, his work on value change was given particular attention.

One of the key theoretical positions taken from the overview of modernization theory is that socioeconomic change follows a relatively predictable pattern. Although societies may have different starting points, the core characteristics of modernization (e.g. industrialization, urbanization) produce relatively similar outcomes in each society. That is, with knowledge of one such trait (e.g. in the economic sphere), predictions regarding other societal traits (e.g. the political sphere) can be made with a reasonable degree of confidence (Inglehart 1995, Inkeles 1960). This position goes on to form the theoretical justification for operationalizing functional differentiation and rationalization in terms of key measures of societal complexity and economic performance.

This discussion of modernization theory formed the theoretical backdrop and conceptual foundation for the discussion of key theories of social and cultural change

relating the religious sphere, primarily secularization theory. As a paradigmatic theory through which the place of the religion in modern society has been theorised, secularization theory was discussed at length. Again particular emphasis was given to relationship between macro-level changes and micro-level changes, or broad versus narrow theories of secularization. It was evident that whereas the macro-level theorisation of secularization is quite robust, the theoretical and empirical linkage to the micro-level is contentious and disputed. With this in mind, one of the central aims of the review of secularization theory was to establish theoretical linkages between the macro and micro levels of secularization, with a view to generating hypotheses, the results of which would significantly contribute to the literature.

The concept of differentiation was again given substantial attention, as it represents “the analytical core” on which theoretical and empirical analyses of secularization should be based (Martin 2005a, p.20). Notwithstanding the debates on when secularization began, or what differing paths it takes, there is a general consensus that functional differentiation has diluted the authority of religion in modern societies. Thus, institutions of a society are no longer integrated on the basis of an all-encompassing religious worldview. Instead of looking at either the persistence of the dominant position of religion in society in terms of social integration and legitimizing in separate spheres (as in functional theorisation of the Parsonian model), or religion being relegated to a defunct position in society, the most theoretically robust argument is that the degree of influence the religious sphere in society is variable. This theoretical statement forms the basis of the hypotheses linking secularization at the macro-level with changes to religiosity and values at the micro level.

The precise theoretical linkage between this macro-level variability in functional differentiation and that of religiosity and values is primarily via the process of compartmentalization. That is, with each institutional sphere guided by its own autonomous values, values in one sphere become separate and compartmentalized from values in other spheres. In relation to the religious sphere, this means that one’s religiosity is increasingly separate from one’s values in other spheres – the privatization of religion. The only institutions theorised to still be within the sphere of influence of religion are those in the private sphere, such as the family. Furthermore, this is theorised to weaken the social base of the plausibility

structures that sustain religious beliefs and practices, with the effect of making them more easily cast off. There are however some limitations to this chain of theoretical linkages. The most important of these is the uncertainty that the autonomy of the religious sphere will have a negative effect on individual religiosity. That is, it is possible that the religious sphere is now better positioned in relation to ‘purely’ religious matters, without the constraints of being tied to other spheres.

The second fundamental concept in theories of secularization is that of rationalization. Rationalization, as a corresponding process to differentiation is linked with religion and values through the same theoretical linkage as differentiation. The sub-processes of scientization and sociologization however go slightly further in that they directly compete with and undermine a religious worldview. Taken together with differentiation however, this theoretical linkage is in some ways paradoxical. That is, with values in each sphere becoming compartmentalized, it would seem likely that religious and scientific worldviews and related values can co-exist more readily than in a less differentiated society. These reservations are borne out in the review of the often tenuous linkages between more rationalized worldviews and a decline in individual religiosity.

The fourth aspect of secularization theory given extensive attention in the review is that of pluralism (a correlate of differentiation, whereby the state no longer authorises a single religion). Peter Berger’s detailed theorisation of how pluralism is linked with a decline in individual religiosity was given particular attention. The main theoretical linkage is that with a number of competing religious worldviews, the certitudes that maintains religious beliefs, and the certitudes that legitimize values related to them, become relativized and less plausible. The theory that competition in the ‘religious market’ increases religious vitality was also discussed, as well as the lack of a body of empirical evidence to support the theory.

Finally, the review briefly summarises the debates surrounding secularization at the micro level. As noted at the outset of the review of secularization theory, the micro-level is where secularization theory is least theoretically robust. The statement of one of the pre-eminent secularization theorists, Karel Dobbelaere (Dobbelaere 1999, p.239), that “the religiousness of individuals is not a valid indicator in evaluating the process of secularization”, summarises the theoretical position of

individual religiosity within the paradigm. Such a position has been attacked as mere “evasion” by some critics, and it is unreflective of the emphases of empirical studies on secularization, but it is in fact accurate. This does not mean that secularization cannot have an effect on individual religiosity, or individual values, or the relationship between religiosity and values. Rather, it means that the effect of secularization on these micro-level variables and micro-level relationships, is one that is open to empirical questioning. It does not mean that individual religiosity is an index of secularization, but the theoretical linkages discussed in the review suggest that several aspects of secularization do indeed have an impact on the micro-level of religiosity and values. Furthermore, the review has shown that although there is a degree of theoretical consensus, there is a lack of empirical investigations that use and build upon the solid theoretical framework of the paradigm.

6.2 Significance of the research

Drawing on seminal and contemporary theory, the thesis formulated and tested several hypotheses regarding the specific relationship between each dimension of religiosity and values. In this regard, the thesis addresses an empirical gap in the literature whereby the exact relationship between the different dimensions of religiosity and values is understudied. Furthermore, by investigating the relative strength of the relationship between religiosity and values net of the effects of other sociodemographic variables, the thesis fills an empirical gap in our understanding of the relative significance of belonging, believing and practice. Thirdly, by investigating the degree to which this relationship is contingent on societal characteristics, the research provides unique findings on the relationship between religion and values that goes beyond the individual level analyses that characterise much of the research literature. Through the use of multilevel models that nest these individual level relationships within societies with different characteristics, the thesis addresses the micro-macro relationship that is well established in the theoretical literature on modernisation and secularisation, but lacking in empirical operationalisation.

At the most basic level, the research contributes to the literature mapping the relationships between different dimensions of religiosity and different values. Unlike the values studies of Schwartz, whose focus was on basic human values, the research showed that the relationship between individual religiosity and values was one that varied in strength and statistical significance according to the sphere in which the values were situated. In the fields of personal and civic morality, family and marriage values, the relationship between religiosity was a strong and consistent one. In relation to political values and work values, a statistically significant relationship was consistently absent. The findings vindicate the decision to focus the research not on basic human values, which are theorised to have an equal bearing in all social contexts, and instead to engage with the substantive subject to which values are related. In this regard, the findings confirm previous research linking conservatism and traditionalism with religious commitment, but further suggest that it is a relationship that varies according to the sphere in which the values are located. The findings are broadly supportive of previous research that suggest a public-private distinction in the relationship between religiosity and values. Furthermore, charting these relationships across European societies, and at four points in time over three decades, gives these findings an unparalleled depth and generalisability.

Another significant contribution of the research was in linking each dimension of religiosity with values. Building on classical and contemporary social theory in specifying theoretical linkages between each dimension of religiosity and values, the findings are significant in that a consistent relationship was found in relation to each dimension. That is, net of the effect of other dimensions, and net of the effect of sociodemographic variables, each dimension of religiosity is strongly related to values. This is particularly noteworthy in relation to the belief dimension and denominational belonging, dimensions of religiosity that have been considered somewhat inconsequential relative to other dimensions. The findings are particularly relevant when cognizant of the trends in Europe of declining practice and waning confidence in the churches, and the relatively less pessimistic trends in relation to belief and denominational belonging. This is not the complete picture however, with the findings in relation to irregular practice suggesting that 'residual' forms of religiosity may indeed be inconsequential in relation to values.

The research also offers an insight into the mechanisms and social correlates of value change and religious change that are occurring within societies. Building on theoretical and empirical work on the relationship between values, religiosity and various sociodemographic variables, the findings suggest that one of the most fundamental differences in religiosity and values is a generational one. Coupled with the consistently strong findings in relation to gender, education, age, and rural location, the research builds a model of society in which social cleavages are important predictors of values and religiosity. These research findings stand in contrast to depictions of society in theories of individualisation where these cleavages have become less relevant in differentiating individuals within society. The increase in values that emphasise personal choice and autonomy stand in contrast to this conclusion however, and it is recognised that the continuing significance of social cleavages does not necessarily represent evidence against individualisation.

In addition to these significant findings in relation to micro-level relationships, some of the most important aspects of the research are the relationships found between the micro-level and the macro-level of societal characteristics (between society differences). Having recognised that the linkage between the macro-level and these micro-level relationships was of utmost theoretical importance, the research went on to establish many of these relationships empirically. The results of these analyses represent a significant contribution to the theoretical and empirical literature on modernization and secularization.

At the most general level, the establishment that variation in religiosity and values is due to between-society differences as well as within-society differences is a significant finding in itself. It is significant insofar as it demonstrates that a model that only investigates within-society differences is insufficient, and that a multilevel model is most appropriate. It also vindicates the approach taken in this research, where both levels of analysis were given their due attention. It suggests that future research into values and religiosity should follow this approach. Furthermore, the finding that the religiosity has a differential effect on values in different societies demonstrate that macro level characteristics of societies have an effect on the micro-level relationship between religiosity and values.

At a more substantive level, the analysis of the effects of the macro-level concepts of modernization and religious context represent a significant contribution to the literature on secularization. Operationalizing and empirically testing hypotheses based on these key concepts represents a significant contribution to a field in which empirical analyses are rarely commensurate with the robust macro-level theory that inform them.

Establishing a relationship between macro-level processes and micro-level variables and relationships represents an important empirical confirmation of aspects of secularization theory. The findings of a significant main effect of modernization suggest that secularization, as a macro-level process, does have an effect at the micro-level of individual religiosity and values. The findings in relation to the interaction effects of modernization also suggest that secularization has an effect on the micro-level relationship between religiosity and values. To formulate these findings in terms of the theoretical linkages defined in the literature review and methodology, the evidence suggests that as the control of the religious sphere over other institutional spheres declines, so too does the overall ability of the religious sphere to influence the values, beliefs and practices of a society as a whole. Furthermore, as control of the religious sphere over other institutional spheres declines, individual religiosity becomes compartmentalized from values in other spheres, weakening the conservatizing effect of religiosity on values. One of the intriguing findings of the analysis however, was the positive interactive effect of modernization and regular practice. It suggests that the relationship between modernization, religiosity and values may not be as linear as hypothesised. A plausible explanation for this finding was offered, that a highly religious subsection of society insulate and fortify themselves from the more general secularizing forces, but this hypothesis clearly requires and warrants further research.

In summary, the thesis represents an original contribution to the literature in several respects. Firstly, it identifies and tests the specific relationships between the different dimensions of religiosity and values in several domains. Secondly, it evaluates the relative strength and significance of each dimension of religiosity in its relationship to values. Third, through multilevel analyses, the thesis assesses the degree to which individual religiosity, individual values, and their micro-level relationship, are contingent on macro-characteristics of societies. The findings of the

analysis are distinctive in establishing that the relationship between different dimensions of religiosity and values is contingent on macro-level characteristics of societies, particularly the degree of modernization, and to a lesser extent, the national religious context.

6.3 Limitations and directions for future research

Finally, the findings in relation to some of the operationalisations of modernization, religious context, and the degree of separation between religion and state, point to some of the limitations of this research. One is that the operationalisations of the concepts may have failed to capture them adequately, and lack of many significant findings are a symptom of this failure. This is a plausible explanation in relation to one of the operationalisations of modernization, where the proportion of the workforce engaged in agriculture is at best an indirect measure of modernization. Relating these indirect indicators of modernization to the structural changes that form the theoretical basis of secularization theory (functional differentiation and rationalization) is challenging. Operationalizing the sub-processes of modernizations such as sociologization and scientization might offer a much more valuable insight into the ways in which societies are pervaded by rational and scientific modes of thought, and what effect this has in terms of religiosity and values. The findings in relation to pluralism are less amenable to an explanation of inadequate operationalization, the Herfindahl index being a well-established index of pluralism. In light of more in-depth studies on the relationship between pluralism and religious participation Voas *et al.* (2002), it seems likely that the lack of significant findings in relation to pluralism do indeed signify that pluralism has little effect on the religiosity, values, or the relationship between religiosity and values. The findings in relation to national religious context only partially support this conclusion, although the focus on national context may not adequately capture the contextual effect of religiosity. The field in which the contextual effect of religiosity has a reasonably established body of findings is in relation to deviance (Stark 1996, Stark and Bainbridge 1996, Regnerus 2003). In this body of work, the contextual effect is based on much smaller units of analysis – schools and communities for example. It seems plausible that the contextual effect of religiosity may only apply

to smaller pockets of populations and communities, and is less discernible in large-scale studies such as this one. It suggests future research on the relationship between religiosity and values, on smaller units nested within societies, would provide a valuable insight into the contextual effect of religiosity.

To conclude, the various limitations of these operationalisations underscore the difficulty in finding adequate indices on which macro-level concepts can be measured. The findings in relation to modernization, although significant, are based on indices that only indirectly capture the concept. The most valuable enterprise to further the paradigm of secularization and modernization theory would be to develop indices that attempt to capture these macro-level concepts with a greater degree of accuracy and breadth. This research has made significant progress in establishing empirical linkages between these macro-level phenomena with the micro-level outcomes, which represents an important contribution to the study of religion, values and secularization. This accomplishment could be improved on considerably with indices that are commensurate with the robust macro-level theory that makes up the secularization paradigm.

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Appendices

Appendix 1: H1 DV1: Pooled sample *t*-test for Equality of Means

<i>t</i>-test for Equality of Means: Pooled sample							
	<i>t</i>	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% CI	
						Lower	Upper
1981	31.641	1733.438	.000	2.08806	.06599	1.95863	2.21750
1990	41.185	5992.225	.000	1.59449	.03872	1.51860	1.67039
1999	39.478	5929.876	.000	1.66740	.04224	1.58460	1.75019
2008	37.810	9378.720	.000	1.39655	.03694	1.32415	1.46896

Appendix 2: H1 DV1 Cross-national *t*-test

<i>t</i>-test for Equality of Means: Personal morality								
Country	Wave	<i>t</i>	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
							Lower	Upper
Belgium	1981	6.95	188.19	0.000	1.24	0.18	0.89	1.59
	1990	16.87	1336.30	0.000	1.55	0.09	1.37	1.73
	1999	14.75	1780.22	0.000	1.48	0.10	1.28	1.67
	2008	12.22	1466.58	0.000	1.14	0.09	0.96	1.33
Denmark	1981	6.69	70.14	0.000	1.99	0.30	1.39	2.58
	1999	-0.15	850.00	0.879	-0.04	0.26	-0.55	0.47
	2008	3.98	1399.75	0.000	0.61	0.15	0.31	0.92
France	1981	12.88	492.75	0.000	1.82	0.14	1.54	2.10
	1990	9.44	712.52	0.000	1.30	0.14	1.03	1.57
	1999	8.60	1401.72	0.000	0.95	0.11	0.73	1.17

	2008	7.67	1428.9 8	0.000	0.85	0.11	0.63	1.07
Germany	1981	8.86	122.11	0.000	2.06	0.23	1.60	2.52
	1990	8.67	2624.6 3	0.000	0.82	0.10	0.64	1.01
	1999	6.71	1779.4 0	0.000	0.84	0.12	0.59	1.08
	2008	7.60	1868.6 7	0.000	0.85	0.11	0.63	1.07
Iceland	1981	4.22	864.61	0.000	2.37	0.56	1.27	3.48
	1990	1.15	14.26	0.267	0.83	0.72	-0.71	2.36
	1999	2.04	867.00	0.042	0.61	0.30	0.02	1.20
	2008	1.46	64.79	0.150	0.36	0.25	-0.14	0.86
Ireland	1981	7.42	1010.6 1	0.000	2.92	0.39	2.14	3.69
	1990	5.90	36.40	0.000	2.21	0.37	1.45	2.96
	1999	4.58	865.49	0.000	1.13	0.25	0.65	1.62
	2008	5.03	784.07	0.000	1.09	0.22	0.66	1.51
Italy	1981	11.4 2	87.03	0.000	2.96	0.26	2.45	3.48
	1990	15.2 3	340.51	0.000	2.17	0.14	1.89	2.45
	1999	13.7 0	423.15	0.000	1.79	0.13	1.53	2.04
Malta	1990	1.66	6.28	0.145	2.01	1.21	-0.91	4.93
	1999	3.44	13.77	0.004	2.02	0.59	0.76	3.27
	2008	5.68	29.93	0.000	2.89	0.51	1.85	3.93

Netherlands	1981	13.7 7	688.77	0.000	2.15	0.16	1.85	2.46
	1990	14.1 9	944.60	0.000	2.02	0.14	1.74	2.29
	1999	11.6 8	970.59	0.000	1.55	0.13	1.29	1.81
	2008	18.8 3	1370.7 8	0.000	2.02	0.11	1.81	2.24
Norway	1981	5.78	903.00	0.000	1.81	0.31	1.20	2.43
	1990	5.08	124.84	0.000	1.20	0.24	0.73	1.67
	2008	6.47	1054.0 6	0.000	0.97	0.15	0.68	1.27
Poland	1990	6.04	900.00	0.000	1.77	0.29	1.19	2.34
	1999	6.19	41.89	0.000	2.56	0.41	1.72	3.39
	2008	6.95	1310.4 5	0.000	1.79	0.26	1.29	2.30
Slovak Republic	1990	10.2 3	438.72	0.000	1.40	0.14	1.13	1.67
	1999	12.2 1	1074.0 1	0.000	1.93	0.16	1.62	2.24
	2008	4.37	1226.9 5	0.000	0.66	0.15	0.36	0.96
Spain	1981	15.4 3	186.01	0.000	3.09	0.20	2.70	3.49
	1990	12.9 7	379.32	0.000	1.84	0.14	1.56	2.12
	1999	9.50	239.97	0.000	2.04	0.21	1.62	2.46
	2008	10.8 5	660.29	0.000	1.46	0.13	1.19	1.72

Sweden	1981	-0.40	736.00	0.690	-0.12	0.31	-0.73	0.49
	1990	2.18	882.00	0.030	0.41	0.19	0.04	0.77
	1999	1.28	882.83	0.200	0.19	0.15	-0.10	0.48
	2008	2.11	833.91	0.035	0.32	0.15	0.02	0.62
Great Britain	1981	5.22	104.29	0.000	1.25	0.24	0.77	1.72
	1990	6.70	1359.10	0.000	0.66	0.10	0.47	0.86
	1999	1.97	202.25	0.050	0.42	0.21	0.00	0.83
	2008	6.17	1373.08	0.000	0.75	0.12	0.51	0.98
Northern Ireland	1981	2.29	266.06	0.023	1.15	0.50	0.16	2.14
	1990	1.19	284.00	0.237	0.39	0.33	-0.26	1.04
	1999	7.16	791.32	0.000	1.49	0.21	1.08	1.90
	2008	2.74	418.53	0.006	0.59	0.21	0.17	1.01

Appendix 3 : H1 DV2 Pooled sample *t*-test

<i>t</i>-test for Equality of Means: Pooled sample							
	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% CI	
						Lower	Upper
1981	19.160	1722.777	0.000	0.803	0.042	0.720	0.885
1990	21.366	6105.864	0.000	0.498	0.023	0.453	0.544
1999	21.407	5493.676	0.000	0.534	0.025	0.485	0.583
2008	16.394	8805.115	0.000	0.341	0.021	0.300	0.382

Appendix 4 : H1 DV2 Cross-national *t*-test

t-test for Equality of Means Civic Morality								
Country	Wave	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
							Lower	Upper
Belgium	1981	2.69	948.43	0.007	0.33	0.12	0.09	0.57
	1990	7.72	1433.49	0.000	0.51	0.07	0.38	0.64
	1999	4.72	1293.50	0.000	0.30	0.06	0.18	0.43
	2008	5.06	1299.67	0.000	0.30	0.06	0.18	0.42
Denmark	1981	1.91	68.51	0.061	0.27	0.14	-0.01	0.56
	1990	2.01	93.31	0.047	0.23	0.12	0.00	0.47
	1999	-0.26	1001.00	0.793	-0.02	0.08	-0.17	0.13
	2008	1.33	204.20	0.184	0.10	0.08	-0.05	0.25
France	1981	8.34	425.22	0.000	1.01	0.12	0.77	1.24
	1990	5.77	731.55	0.000	0.57	0.10	0.37	0.76
	1999	5.33	1344.71	0.000	0.41	0.08	0.26	0.56

	2008	4.83	1468.7 6	0.000	0.33	0.07	0.20	0.46
Germany	1981	4.60	126.72	0.000	0.73	0.16	0.41	1.04
	1990	1.46	1042.5 8	0.144	0.08	0.06	-0.03	0.19
	1999	2.04	650.80	0.042	0.15	0.07	0.01	0.30
	2008	1.04	873.43	0.297	0.07	0.07	-0.06	0.20
Iceland	1981	- 0.32	912.10	0.745	-0.09	0.27	-0.63	0.45
	1990	2.21	689.00	0.028	0.62	0.28	0.07	1.17
	1999	1.82	952.00	0.068	0.26	0.14	-0.02	0.54
	2008	2.22	786.59	0.027	0.22	0.10	0.03	0.41
Ireland	1981	3.35	1119.2 0	0.001	1.04	0.31	0.43	1.65
	1990	3.34	38.27	0.002	0.82	0.25	0.32	1.31
	1999	4.16	85.88	0.000	0.57	0.14	0.30	0.84
	2008	3.22	915.36	0.001	0.42	0.13	0.17	0.68
Italy	1981	2.88	88.39	0.005	0.47	0.16	0.14	0.79
	1990	3.20	1936.7 8	0.001	0.24	0.08	0.09	0.39
	1999	5.70	441.70	0.000	0.42	0.07	0.28	0.57
	2008	2.90	338.85	0.004	0.25	0.09	0.08	0.42
Malta	1990	2.31	8.98	0.046	1.08	0.47	0.02	2.14
	1999	1.48	13.75	0.161	0.53	0.36	-0.24	1.31
	2008	1.93	37.53	0.061	0.61	0.31	-0.03	1.24

Netherlands	1981	5.87	746.02	0.000	0.42	0.07	0.28	0.57
	1990	6.32	951.61	0.000	0.44	0.07	0.31	0.58
	1999	4.72	996.46	0.000	0.31	0.07	0.18	0.44
	2008	3.31	1524.72	0.001	0.16	0.05	0.07	0.26
Norway	1981	1.87	987.00	0.062	0.27	0.14	-0.01	0.55
	1990	1.66	136.73	0.100	0.17	0.10	-0.03	0.38
	2008	3.71	1078.07	0.000	0.27	0.07	0.12	0.41
Poland	1990	-0.15	936.00	0.877	-0.03	0.18	-0.37	0.32
	1999	1.59	47.07	0.119	0.31	0.20	-0.08	0.71
	2008	2.78	67.37	0.007	0.71	0.25	0.20	1.21
Slovak Republic	1990	3.40	504.89	0.001	0.32	0.09	0.14	0.51
	1999	4.69	407.21	0.000	0.59	0.12	0.34	0.83
	2008	5.54	1422.37	0.000	0.57	0.10	0.37	0.77
Spain	1981	9.02	192.79	0.000	1.24	0.14	0.97	1.51
	1990	7.23	398.44	0.000	0.61	0.08	0.44	0.77
	1999	4.75	272.10	0.000	0.52	0.11	0.31	0.74
	2008	2.32	1376.28	0.020	0.19	0.08	0.03	0.34
Sweden	1981	1.55	69.36	0.125	0.20	0.13	-0.06	0.46
	1990	2.37	1012.00	0.018	0.18	0.08	0.03	0.33
	1999	2.45	368.24	0.015	0.20	0.08	0.04	0.36

	2008	3.18	991.84	0.002	0.30	0.09	0.11	0.48
Great Britain	1981	3.88	115.75	0.000	0.57	0.15	0.28	0.86
	1990	8.34	1137.74	0.000	0.48	0.06	0.37	0.59
	1999	3.75	206.18	0.000	0.45	0.12	0.21	0.68
	2008	6.08	1293.98	0.000	0.33	0.05	0.22	0.43
Northern Ireland	1981	0.74	301.89	0.459	0.26	0.35	-0.42	0.94
	1990	0.42	296.00	0.677	0.08	0.19	-0.30	0.46
	1999	2.82	151.25	0.005	0.39	0.14	0.12	0.66
	2008	1.70	466.17	0.089	0.30	0.18	-0.05	0.65

Appendix 5: H1 DV3 Pooled sample *t*-test

<i>t</i>-test for Equality of Means: Pooled sample							
	<i>t</i>	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Ci	
						Lower	Upper
1990	8.964	6203.559	.000	.270	.031	.218	.340
1999	6.142	10457	.000	.237	.038	.161	.312
2008	8.221	9021.488	.000	.216	.026	.165	.268

Appendix 6: H1 DV3 Cross-national *t*-test

<i>t</i>-test for Equality of Means: State vs. Personal Responsibility								
Country	Wave	<i>t</i>	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
							Lower	Upper
Belgium	1990	2.49	1303.20	0.013	0.20	0.08	0.04	0.36
	2008	1.01	1463.72	0.314	0.07	0.07	-0.07	0.22
Denmark	1990	3.71	91.27	0.000	0.77	0.21	0.36	1.18
	2008	3.29	205.43	0.001	0.47	0.14	0.19	0.76
France	1990	5.34	677.25	0.000	0.62	0.12	0.39	0.85
	1999	5.83	1457.12	0.000	0.51	0.09	0.34	0.68
	2008	4.28	1458.90	0.000	0.37	0.09	0.20	0.54
Germany	1990	3.36	2905.79	0.001	0.24	0.07	0.10	0.38
	1999	4.24	600.34	0.000	0.43	0.10	0.23	0.63
	2008	10.41	862.83	0.000	0.83	0.08	0.67	0.99
Iceland	1990	1.03	668.00	0.305	0.44	0.43	-0.40	1.28

	1999	0.29	908.00	0.774	0.07	0.25	-0.43	0.57
	2008	1.90	763.14	0.058	0.37	0.20	-0.01	0.76
Ireland	1990	2.41	980.00	0.016	0.68	0.28	0.13	1.23
	1999	2.93	899.99	0.003	0.59	0.20	0.19	0.99
	2008	1.56	820.59	0.119	0.27	0.18	-0.07	0.62
Italy	1990	2.03	1712.20	0.042	0.24	0.12	0.01	0.48
	1999	0.28	458.45	0.782	0.03	0.10	-0.17	0.23
	2008	1.47	1220.24	0.143	0.17	0.12	-0.06	0.40
Malta	1990	-0.23	312.66	0.822	-0.14	0.63	-1.39	1.10
	2008	0.97	1227.42	0.333	0.28	0.29	-0.29	0.84
Netherlands	1990	3.13	894.70	0.002	0.28	0.09	0.10	0.45
	1999	0.34	954.32	0.734	0.03	0.09	-0.15	0.21
	2008	-1.93	1472.83	0.054	-0.14	0.07	-0.27	0.00
Norway	1990	1.54	132.63	0.126	0.25	0.16	-0.07	0.58
	2008	-0.32	1073.91	0.752	-0.03	0.11	-0.25	0.18
Poland	1990	0.07	872.00	0.943	0.02	0.30	-0.57	0.61
	1999	-2.28	981.32	0.023	-0.58	0.26	-1.08	-0.08
	2008	-0.61	1343.91	0.542	-0.13	0.21	-0.55	0.29
Slovak Republic	1990	-1.65	961.00	0.099	-0.20	0.12	-0.43	0.04
	2008	-0.56	1323.45	0.578	-0.06	0.10	-0.25	0.14

Spain	1990	4.77	360.34	0.000	0.54	0.11	0.32	0.76
	2008	3.01	1293.1 2	0.003	0.28	0.09	0.10	0.46
Sweden	1990	0.97	976.00	0.331	0.13	0.13	-0.13	0.38
	2008	1.45	562.08	0.147	0.19	0.13	-0.07	0.45
Great Britain	1990	2.12	1405.3 9	0.034	0.21	0.10	0.02	0.41
	1999	-1.03	866.69	0.301	-0.16	0.15	-0.46	0.14
	2008	0.74	1291.8 5	0.459	0.07	0.09	-0.11	0.24
Northern Ireland	1990	0.80	289.00	0.425	0.27	0.34	-0.40	0.94
	1999	3.32	819.75	0.001	0.50	0.15	0.20	0.80
	2008	0.32	409.33	0.750	0.06	0.18	-0.30	0.42

Appendix 7: H1 DV4 Pooled sample chi-square test of association

χ^2 test								Asymp.
Pooled		Post-				N	X ²	Sig. (2-
		materialist						sided)
	Belong	No	30.5%	50.1%	19.4%			
1981		Yes	11.9%	53.1%	35.0%			
	Total		13.8%	52.8%	33.4%	14461	439.941	.000
1990	Belong	No	29.8%	55.0%	15.2%			
		Yes	17.7%	58.3%	24.0%			
	Total		20.2%	57.6%	22.2%	21096	381.810	.000
1999	Belong	No	24.3%	57.3%	18.4%			
		Yes	14.8%	60.0%	25.2%			
	Total		16.8%	59.4%	23.7%	17330	217.798	.000
2008	Belong	No	22.0%	61.6%	16.3%			
		Yes	13.3%	62.6%	24.2%			
	Total		15.5%	62.3%	22.1%	20490	306.954	.000

Appendix 8: H1 DV4 Cross-national chi-square test of association

Pearson Chi-Square: Materialism-Postmaterialism					
	Wave	Value	df	Asymp. Sig. (2-sided)	N
Belgium	1981	6.912 ^a	2	.032	863
	1990	52.770 ^b	2	.000	2600
	1999	26.951 ^c	2	.000	1812
	2008	24.257 ^d	2	.000	1497
Denmark	1981	16.576 ^e	2	.000	1057
	1990	29.992 ^f	2	.000	975
	1999	33.061 ^g	2	.000	939
	2008	12.665 ^h	2	.002	1448
France	1981	76.281 ⁱ	2	.000	1138
	1990	11.534 ^j	2	.003	963
	1999	33.604 ^k	2	.000	1573
	2008	26.228 ^l	2	.000	1483
Germany	1981	48.316 ^m	2	.000	1239
	1990	13.631 ⁿ	2	.001	3294
	1999	1.769 ^o	2	.413	1953

	2008	.999 ^p	2	.607	1960
Iceland	1981	5.962 ^d	2	.051	892
	1990	7.973 ^r	2	.019	680
	1999	13.563 ^s	2	.001	946
	2008	9.867 ^t	2	.007	769
Ireland	1981	26.114 ^u	2	.000	1174
	1990	15.613 ^v	2	.000	988
	1999	7.711 ^w	2	.021	974
	2008	11.104 ^x	2	.004	923
Italy	1981	28.613 ^y	2	.000	1284
	1990	43.653 ^z	2	.000	1950
	1999	13.243 ^{aa}	2	.001	1889
	2008	40.269 ^{ab}	2	.000	1373
Malta	1981	. ^{ac}			388
	1990	3.153 ^{ad}	2	.207	349
	1999	1.021 ^{ae}	2	.600	997
	2008	28.075 ^{af}	2	.000	1444
Netherlands	1981	43.804 ^{ag}	2	.000	1039
	1990	41.828 ^{ah}	2	.000	987
	1999	19.414 ^{ai}	2	.000	987
	2008	16.277 ^{aj}	2	.000	1515
Norway	1981	93.522 ^{ak}	2	.000	945
	1990	52.360 ^{al}	2	.000	1195
	2008	31.767 ^{am}	2	.000	1077
Poland	1990	1.126 ^{an}	2	.570	928
	1999	7.282 ^{ao}	2	.026	1047
	2008	10.278 ^{ap}	2	.006	1427
Slovak Republic	1990	10.329 ^{aq}	2	.006	1049
	1999	2.681 ^{ar}	2	.262	1216
	2008	5.379 ^{as}	2	.068	1388
Spain	1981	153.498 ^{at}	2	.000	2120
	1990	67.346 ^{au}	2	.000	2402

	1999	67.827 ^{av}	2	.000	1075
	2008	30.717 ^{aw}	2	.000	1397
Sweden					
	1981	3.567 ^{ax}	2	.168	891
	1990	.562 ^{ay}	2	.755	1006
	1999	1.704 ^{az}	2	.427	985
	2008	2.476 ^{ba}	2	.290	822
Great Britain					
	1981	12.673 ^{bb}	2	.002	1134
	1990	15.325 ^{bc}	2	.000	1434
	2008	1.392 ^{bd}	2	.499	1487
Northern Ireland					
	1981	.481 ^{bc}	2	.786	301
	1990	.751 ^{bf}	2	.687	296
	1999	.313 ^{bg}	2	.855	936
	2008	.061 ^{bh}	2	.970	480

Appendix 9: H1 DV5 Pooled sample *t*-test

<i>t</i>-test for Equality of Means: Pooled sample							
	<i>t</i>	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% CI	
						Lower	Upper
1981	0.509	2023.209	0.611	0.004	0.008	-0.012	0.021
1990	2.101	22191.048	0.036	0.010	0.005	0.001	0.020
1999	11.793	6660.327	0.000	0.063	0.005	0.052	0.073
2008	9.454	9882.859	0.000	0.045	0.005	0.036	0.054

Appendix 10: H1 DV5 Cross-national *t*-test

<i>t</i>-test for Equality of Means: Intrinsic work values								
Country	Wave	<i>t</i>	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
							Lower	Upper
Belgium	1981	-1.305	1032.35	0.193	-0.03	0.03	-0.09	0.02
	1990	0.709	2785.89	0.484	0.01	0.01	-0.02	0.03
	1999	1.250	1910.00	0.212	0.02	0.02	-0.01	0.05
	2008	0.422	1495.42	0.676	0.01	0.01	-0.02	0.03
Denmark	1981	0.670	1180.00	0.502	0.03	0.04	-0.05	0.10
	1990	-0.83	97.27	0.410	-0.03	0.03	-0.10	0.04
	1999	0.860	1016.00	0.388	0.02	0.03	-0.03	0.08
	2008	-0.022	1480.52	0.980	0.00	0.02	-0.04	0.04
France	1981	-3.92	502.54	0.000	-0.07	0.02	-0.10	-0.03
	1990	-1.510	1000.00	0.131	-0.02	0.02	-0.05	0.01

	1999	- 1.18	1613.0 0	0.240	-0.02	0.01	-0.04	0.01
	2008	- 1.17	1487.9 2	0.240	-0.01	0.01	-0.04	0.01
Germany	1981	0.79 4	1296.5	0.430	0.02	0.03	-0.04	0.09
	1990	- 0.08	3431.4 5	0.938	0.00	0.01	-0.03	0.02
	1999	- 1.23	1851.0 1	0.218	-0.02	0.01	-0.05	0.01
	2008	- 1.14	2007.5 3	0.252	-0.01	0.01	-0.04	0.01
Iceland	1981	- 1.87	925.00	0.062	-0.15	0.08	-0.32	0.01
	1990	0.73	699.00	0.467	0.05	0.07	-0.09	0.19
	1999	- 0.53	964.00	0.596	-0.02	0.05	-0.11	0.06
	2008	- 0.94	794.83	0.350	-0.03	0.03	-0.10	0.03
Ireland	1981	0.66 3	1214.2	0.512	0.05	0.08	-0.10	0.20
	1990	- 1.35	998.00	0.177	-0.07	0.05	-0.16	0.03
	1999	0.61 8	1008.0	0.542	0.02	0.03	-0.05	0.09
	2008	0.56	749.09	0.576	0.02	0.03	-0.05	0.08
Italy	1981	- 1.88	94.12	0.063	-0.07	0.04	-0.14	0.00
	1990	- 2.43	393.87	0.016	-0.05	0.02	-0.08	-0.01
	1999	3.94 0	1996.0	0.000	0.07	0.02	0.03	0.10

	2008	1.32	1453.8 3	0.185	0.03	0.02	-0.01	0.07
Malta	1990	1.03	391.00	0.303	0.12	0.11	-0.11	0.34
	1999	- 0.24	998.63	0.808	-0.02	0.08	-0.17	0.13
	2008	- 0.25	1402.6 0	0.803	-0.01	0.05	-0.10	0.08
Netherlands	1981	0.25	1186.4 2	0.801	0.00	0.02	-0.03	0.04
	1990	2.20	1007.4 4	0.028	0.04	0.02	0.00	0.08
	1999	- 0.68	999.48	0.497	-0.01	0.02	-0.05	0.02
	2008	1.38	1493.0 2	0.167	0.02	0.02	-0.01	0.06
Norway	1981	- 0.08	1047.0 0	0.938	0.00	0.05	-0.09	0.09
	1990	0.61	1232.0 0	0.545	0.01	0.02	-0.03	0.06
	2008	1.15	1086.2 5	0.250	0.02	0.02	-0.02	0.06
Poland	1990	- 0.41	980.00	0.681	-0.02	0.05	-0.11	0.07
	1999	1.29	1093.0 0	0.196	0.05	0.04	-0.03	0.13
	2008	- 0.86	1397.1 5	0.389	-0.03	0.03	-0.10	0.04
Slovak Republic	1990	0.19	1130.0 0	0.853	0.00	0.02	-0.04	0.04
	1999	1.52	1325.2 4	0.128	0.02	0.02	-0.01	0.05

	2008	- 1.74	1368.1 3	0.082	-0.03	0.02	-0.07	0.00
Spain	1981	- 2.12	239.44	0.035	-0.05	0.03	-0.10	0.00
	1990	- 0.04	2633.2 2	0.972	0.00	0.02	-0.04	0.03
	1999	1.03 0	1198.0	0.304	0.02	0.02	-0.02	0.07
	2008	- 3.23	625.11	0.001	-0.05	0.02	-0.08	-0.02
Sweden	1981	- 0.54	952.00	0.587	-0.02	0.04	-0.09	0.05
	1990	- 0.15	1040.0 0	0.882	0.00	0.03	-0.05	0.05
	1999	0.11 1	1011.9	0.915	0.00	0.02	-0.04	0.05
	2008	- 2.11	1138.4 6	0.035	-0.04	0.02	-0.08	0.00
Great Britain	1981	- 0.37	1163.7 0	0.708	-0.01	0.03	-0.07	0.05
	1990	- 3.73	1291.5 8	0.000	-0.06	0.02	-0.09	-0.03
	1999	- 2.14	979.27	0.033	-0.05	0.03	-0.10	0.00
	2008	- 2.04	1519.2 5	0.041	-0.03	0.02	-0.06	0.00
Northern Ireland	1981	- 0.84	306.60	0.404	-0.08	0.10	-0.27	0.11
	1990	0.29	302.00	0.771	0.02	0.06	-0.09	0.13
	1999	- 1.24	995.74	0.215	-0.03	0.03	-0.09	0.02
	2008	1.15	174.96	0.251	0.04	0.03	-0.03	0.10

Appendix 11: H1 DV6 Pooled Sample *t*-test

<i>t</i>-test for Equality of Means: Pooled sample							
	<i>t</i>	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Ci	
						Lower	Upper
1981	0.817	2053.331	0.414	0.007	0.008	-0.009	0.023
1990	-3.484	7307.905	0.000	-0.018	0.005	-0.028	-0.008
1999	8.005	6724.345	0.000	0.044	0.006	0.033	0.055
2008	2.721	9872.176	0.007	0.014	0.005	0.004	0.024

Appendix 12: H1 DV6 Cross-national *t*-test

<i>t</i>-test for Equality of Means: Extrinsic Work Values								
Country	Wave	<i>t</i>	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
							Lower	Upper
Belgium	1981	-1.325	1032.35	0.186	-0.04	0.03	-0.09	0.02
	1990	-1.409	2785.89	0.161	-0.02	0.01	-0.04	0.01
	1999	1.219	1518.39	0.226	0.02	0.02	-0.01	0.05
	2008	0.272	1495.42	0.787	0.00	0.01	-0.02	0.03
Denmark	1981	-0.950	1180.00	0.341	-0.04	0.04	-0.12	0.04
	1990	-1.680	1028.00	0.092	-0.05	0.03	-0.11	0.01
	1999	-0.610	1016.00	0.539	-0.02	0.03	-0.07	0.04
	2008	0.042	1480.52	0.971	0.00	0.02	-0.04	0.04
France	1981	-1.480	1198.00	0.140	-0.03	0.02	-0.06	0.01
	1990	-1.530	1000.00	0.127	-0.03	0.02	-0.06	0.01

	1999	- 0.69	1420.5 6	0.493	-0.01	0.01	-0.04	0.02
	2008	- 1.92	1487.9 2	0.056	-0.03	0.01	-0.06	0.00
Germany	1981	- 0.26	1296.5 4	0.796	-0.01	0.03	-0.06	0.05
	1990	- 0.74	3431.4 5	0.457	-0.01	0.01	-0.03	0.01
	1999	0.31 9	1867.2 9	0.759	0.01	0.02	-0.03	0.04
	2008	- 0.51	2007.5 3	0.608	-0.01	0.01	-0.04	0.02
Iceland	1981	- 1.82	925.00	0.069	-0.15	0.08	-0.31	0.01
	1990	0.28	699.00	0.782	0.02	0.08	-0.13	0.17
	1999	- 0.86	964.00	0.392	-0.04	0.05	-0.14	0.05
	2008	0.66	794.83	0.512	0.02	0.04	-0.05	0.10
Ireland	1981	- 1.17	1214.2 3	0.241	-0.09	0.07	-0.23	0.06
	1990	- 1.80	998.00	0.073	-0.09	0.05	-0.18	0.01
	1999	0.72 4	1009.2 4	0.474	0.03	0.04	-0.05	0.10
	2008	- 0.25	758.36	0.805	-0.01	0.04	-0.08	0.07
Italy	1981	- 2.49	1346.0 0	0.013	-0.08	0.03	-0.14	-0.02
	1990	- 3.45	2013.4 9	0.001	-0.07	0.02	-0.10	-0.03
	1999	4.57 0	1996.0 0	0.000	0.08	0.02	0.05	0.12

	2008	1.42	1430.18	0.156	0.03	0.02	-0.01	0.08
Malta	1990	0.88	391.00	0.377	0.10	0.12	-0.13	0.33
	1999	-2.45	14.51	0.027	-0.13	0.05	-0.25	-0.02
	2008	-0.53	1391.11	0.594	-0.03	0.06	-0.15	0.08
Netherlands	1981	-0.25	948.54	0.799	0.00	0.02	-0.04	0.03
	1990	0.99	1015.00	0.323	0.02	0.02	-0.02	0.06
	1999	-0.08	999.48	0.938	0.00	0.02	-0.04	0.03
	2008	-2.30	1475.09	0.022	-0.03	0.01	-0.06	-0.01
Norway	1981	-1.39	1047.00	0.164	-0.07	0.05	-0.17	0.03
	1990	-1.16	1232.00	0.247	-0.03	0.03	-0.09	0.02
	2008	0.48	1086.25	0.630	0.01	0.02	-0.03	0.05
Poland	1990	0.02	980.00	0.984	0.00	0.05	-0.09	0.10
	1999	0.20	1092.32	0.841	0.01	0.05	-0.09	0.11
	2008	0.84	70.04	0.401	0.03	0.04	-0.04	0.10
Slovak Republic	1990	-2.48	1130.00	0.013	-0.05	0.02	-0.09	-0.01
	1999	0.36	1325.24	0.721	0.01	0.02	-0.03	0.04
	2008	1.91	1365.78	0.057	0.04	0.02	0.00	0.09

Spain	1981	- 1.93	2301.0 0	0.054	-0.05	0.02	-0.10	0.00
	1990	- 0.16	474.67 0	0.875	0.00	0.02	-0.04	0.03
	1999	0.53 0	1198.0 0	0.594	0.01	0.03	-0.04	0.07
	2008	- 2.13	1482.1 7	0.034	-0.03	0.01	-0.06	0.00
Sweden	1981	0.78	952.00	0.434	0.03	0.04	-0.05	0.11
	1990	- 1.14	1040.0 0	0.254	-0.03	0.02	-0.07	0.02
	1999	1.33 1	1011.9 1	0.184	0.03	0.02	-0.01	0.07
	2008	- 0.10	691.43	0.924	0.00	0.02	-0.04	0.03
Great Britain	1981	- 1.34	1163.7 0	0.181	-0.04	0.03	-0.10	0.02
	1990	2.38 0	1482.0 0	0.017	0.04	0.02	0.01	0.07
	1999	- 0.49	979.27	0.626	-0.01	0.03	-0.06	0.04
	2008	0.86 1	1423.6 1	0.387	0.01	0.02	-0.02	0.05
Northern Ireland	1981	0.96	306.60	0.340	0.09	0.10	-0.10	0.28
	1990	0.30	302.00	0.762	0.02	0.05	-0.09	0.12
	1999	- 0.75	995.74	0.455	-0.02	0.03	-0.08	0.04
	2008	0.90	416.56	0.370	0.04	0.04	-0.04	0.11

Appendix 13: H1 DV7: Pooled sample t-test for Equality of Means

t-test for Equality of Means: Pooled sample							
	<i>t</i>	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Ci	
						Lower	Upper
1981	15.532	2056.972	0.000	0.216	0.014	0.189	0.244
1990	29.800	8150.138	0.000	0.244	0.008	0.228	0.260
1999	30.869	7698.533	0.000	0.264	0.009	0.247	0.280
2008	30.546	11094.436	0.000	0.240	0.008	0.225	0.256

Appendix 14: H1 DV7: Cross-national t-test for Equality of Means

Country	Wave	<i>t</i>	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
							Upper	Lower
Belgium	1981	6.84	227.67	0.000	0.34	0.05	0.24	0.44
	1990	14.10	1966.43	0.000	0.29	0.02	0.25	0.33
	1999	12.24	1655.37	0.000	0.29	0.02	0.24	0.33
	2008	11.24	1427.27	0.000	0.27	0.02	0.23	0.32
Denmark	1981	0.04	1130.59	0.966	0.00	0.07	-0.13	0.14
	1990	1.56	997.00	0.119	0.09	0.06	-0.02	0.19
	1999	0.33	953.00	0.742	0.02	0.05	-0.07	0.10
	2008	1.14	1414.38	0.253	0.04	0.04	-0.03	0.11
France	1981	9.61	683.64	0.000	0.31	0.03	0.25	0.38
	1990	8.09	911.63	0.000	0.27	0.03	0.20	0.33
	1999	7.58	1489.26	0.000	0.19	0.03	0.14	0.24
	2008	7.65	1437.61	0.000	0.20	0.03	0.15	0.25
Germany	1981	4.43	139.05	0.000	0.19	0.04	0.11	0.27

	1990	8.72	1276.69	0.000	0.16	0.02	0.12	0.20
	1999	6.78	899.74	0.000	0.17	0.03	0.12	0.22
	2008	5.19	960.26	0.000	0.14	0.03	0.09	0.19
Iceland	1981	1.21	904.48	0.226	0.17	0.14	-0.11	0.46
	1990	-1.03	685.00	0.304	-0.14	0.13	-0.39	0.12
	1999	0.20	946.00	0.840	0.01	0.07	-0.11	0.14
	2008	2.02	773.08	0.044	0.11	0.05	0.00	0.21
Ireland	1981	3.52	1193.44	0.000	0.50	0.14	0.22	0.77
	1990	6.22	44.60	0.000	0.38	0.06	0.26	0.50
	1999	5.27	105.37	0.000	0.28	0.05	0.18	0.39
	2008	4.44	908.36	0.000	0.27	0.06	0.15	0.38
Italy	1981	2.02	1304.74	0.044	0.13	0.06	0.00	0.25
	1990	10.87	472.21	0.000	0.32	0.03	0.26	0.38
	1999	7.75	521.76	0.000	0.22	0.03	0.16	0.28
	2008	4.58	1411.70	0.000	0.16	0.04	0.09	0.23
Malta	1990	2.28	378.13	0.023	0.47	0.20	0.06	0.87
	1999	3.99	988.14	0.000	0.57	0.14	0.29	0.85
	2008	6.36	1457.67	0.000	0.56	0.09	0.39	0.73
Netherlands	1981	7.79	923.40	0.000	0.27	0.03	0.20	0.33
	1990	8.70	969.80	0.000	0.29	0.03	0.23	0.36
	1999	9.30	786.28	0.000	0.27	0.03	0.22	0.33

	2008	10.33	1417.14	0.000	0.26	0.03	0.21	0.31
Norway	1981	1.92	47.78	0.061	0.14	0.07	-0.01	0.28
	1990	1.59	1215.00	0.111	0.08	0.05	-0.02	0.18
	2008	2.74	1079.85	0.006	0.10	0.04	0.03	0.17
Poland	1990	7.05	32.77	0.000	0.52	0.07	0.37	0.68
	1999	3.14	1009.01	0.002	0.29	0.09	0.11	0.47
	2008	2.20	1392.62	0.028	0.16	0.07	0.02	0.31
Slovak Republic	1990	9.13	624.33	0.000	0.33	0.04	0.26	0.40
	1999	9.81	562.16	0.000	0.32	0.03	0.26	0.38
	2008	8.58	680.92	0.000	0.26	0.03	0.20	0.32
Spain	1981	4.65	2238.43	0.000	0.20	0.04	0.12	0.29
	1990	9.72	485.06	0.000	0.29	0.03	0.23	0.35
	1999	7.16	351.87	0.000	0.27	0.04	0.20	0.35
	2008	6.86	758.94	0.000	0.19	0.03	0.14	0.25
Sweden	1981	-0.02	946.00	0.983	0.00	0.07	-0.14	0.14
	1990	1.45	1029.00	0.148	0.06	0.04	-0.02	0.15
	1999	1.49	979.77	0.138	0.05	0.04	-0.02	0.12
	2008	0.96	972.22	0.336	0.03	0.03	-0.03	0.09
Great Britain	1981	6.58	150.75	0.000	0.28	0.04	0.20	0.37
	1990	7.93	1417.82	0.000	0.22	0.03	0.17	0.28

	1999	4.33	252.78	0.000	0.17	0.04	0.09	0.24
	2008	5.10	1442.90	0.000	0.13	0.03	0.08	0.19
Northern Ireland	1981	0.96	306.60	0.340	0.17	0.18	-0.18	0.53
	1990	2.47	39.17	0.018	0.23	0.09	0.04	0.41
	1999	8.10	194.54	0.000	0.39	0.05	0.30	0.49
	2008	2.53	468.93	0.012	0.18	0.07	0.04	0.32

Appendix 15: H1 DV8 Pooled sample *t*-test

<i>t</i>-test for Equality of Means: Pooled sample							
	<i>t</i>	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Ci	
						Lower	Upper
1981	4.912	15368.625	0.000	0.074	0.015	0.044	0.103
1990	2.889	7088.407	0.004	0.027	0.009	0.009	0.046
1999	4.266	18974.213	0.000	0.043	0.010	0.023	0.063
2008	0.673	9989.180	0.501	0.006	0.009	-0.011	0.023

Appendix 16: H1 DV8 Cross-national *t*-test

<i>t</i>-test for Equality of Means: Marriage Values Material Conditions								
Country	Wave	<i>t</i>	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
							Lower	Upper
Belgium	1981	2.17	982.25	.030	0.10	0.05	0.01	0.19
	1990	4.78	2765.66	.000	0.11	0.02	0.06	0.15
	1999	3.62	1891.61	.000	0.10	0.03	0.04	0.15
	2008	1.00	1503.64	.316	0.03	0.03	-0.02	0.07
Denmark	1981	1.52	1157.86	.129	0.11	0.07	-0.03	0.24
	1990	-0.49	1016.00	.626	-0.03	0.06	-0.14	0.09
	1999	0.66	1001.00	.508	0.03	0.05	-0.07	0.14
	2008	-1.55	1489.34	.120	-0.06	0.04	-0.14	0.02
France	1981	3.69	508.04	.000	0.14	0.04	0.06	0.21
	1990	0.97	992.00	.333	0.03	0.04	-0.04	0.10
	1999	1.89	1604.59	.059	0.05	0.03	0.00	0.11

	2008	2.56	1493.5	.010	0.07	0.03	0.02	0.13
			7					
Germany	1981	0.57	1267.0	.571	0.03	0.06	-0.08	0.14
			2					
	1990	-	1112.5	.000	-0.08	0.02	-0.12	-0.04
		3.63	7					
	1999	0.59	2009.8	.556	0.02	0.03	-0.04	0.07
			8					
	2008	-	1998.5	.755	-0.01	0.03	-0.06	0.04
		0.31	6					
Iceland	1981	1.02	920.90	.306	0.16	0.16	-0.15	0.47
	1990	-	693.00	.725	-0.05	0.14	-0.33	0.23
		0.35						
	1999	2.80	961.00	.005	0.22	0.08	0.07	0.38
	2008	1.49	788.16	.136	0.10	0.07	-0.03	0.24
Ireland	1981	3.24	1203.7	.001	0.43	0.13	0.17	0.70
			1					
	1990	2.55	991.00	.011	0.21	0.08	0.05	0.37
	1999	0.14	997.12	.885	0.01	0.07	-0.12	0.14
	2008	2.96	929.81	.003	0.17	0.06	0.06	0.28
Italy	1981	-	91.91	.099	-0.12	0.07	-0.27	0.02
		1.67						
	1990	2.60	2008.1	.009	0.10	0.04	0.02	0.17
			1					
	1999	1.55	1968.0	.121	0.05	0.03	-0.01	0.12
			0					
	2008	1.49	1452.1	.136	0.06	0.04	-0.02	0.14
			0					
Malta	1990	0.20	381.22	.838	0.04	0.22	-0.39	0.47

	1999	- 0.30	996.12	.763	-0.04	0.15	-0.33	0.24
	2008	1.97	38.37	.056	0.23	0.12	-0.01	0.46
Netherlands	1981	2.25	1154.3 2	.025	0.08	0.03	0.01	0.15
	1990	4.51	1005.7 4	.000	0.16	0.03	0.09	0.22
	1999	3.80	964.46	.000	0.13	0.04	0.06	0.20
	2008	0.19	1538.0 5	.850	0.01	0.03	-0.05	0.06
Norway	1981	1.41	1036.0 0	.160	0.12	0.08	-0.05	0.28
	1990	2.16	1225.0 0	.031	0.11	0.05	0.01	0.21
	2008	2.21	1084.3 6	.028	0.09	0.04	0.01	0.17
Poland	1990	0.69	963.00	.491	0.07	0.09	-0.12	0.25
	1999	1.76	1080.7 9	.079	0.14	0.08	-0.02	0.29
	2008	- 0.71	71.08	.480	-0.04	0.06	-0.17	0.08
Slovak Republic	1990	2.84	543.16	.005	0.10	0.04	0.03	0.17
	1999	- 1.28	1317.1 0	.202	-0.04	0.03	-0.11	0.02
	2008	- 3.85	569.79	.000	-0.12	0.03	-0.18	-0.06
Spain	1981	4.37	2259.5 2	.000	0.19	0.04	0.11	0.28
	1990	2.88	2612.7 4	.004	0.09	0.03	0.03	0.16

	1999	1.25	1174.0	.212	0.06	0.04	-0.03	0.14
			0					
	2008	-	1480.9	.831	-0.01	0.03	-0.07	0.05
		0.21	8					
Sweden	1981	0.92	949.00	.360	0.06	0.07	-0.07	0.20
	1990	-	1039.0	.701	-0.02	0.04	-0.10	0.07
		0.38	0					
	1999	-	378.82	.313	-0.04	0.04	-0.11	0.04
		1.01						
	2008	1.47	1084.7	.142	0.05	0.03	-0.02	0.11
			1					
Great Britain	1981	3.57	1153.8	.000	0.20	0.06	0.09	0.31
			1					
	1990	-	1280.6	.770	-0.01	0.03	-0.07	0.05
		0.29	6					
	1999	-	956.70	.552	-0.03	0.05	-0.13	0.07
		0.60						
	2008	0.40	1520.7	.688	0.01	0.03	-0.05	0.07
			3					
Northern Ireland	1981	1.79	306.60	.075	0.29	0.16	-0.03	0.62
	1990	0.86	301.00	.391	0.10	0.11	-0.12	0.32
	1999	0.87	977.69	.383	0.05	0.05	-0.06	0.15
	2008	2.46	479.90	.014	0.16	0.07	0.03	0.29

Appendix 17: H1 DV9 Pooled sample *t*-test

<i>t</i>-test for Equality of Means: Pooled sample							
	<i>t</i>	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Ci	
						Lower	Upper
1999	16.005	5694.283	0.000	0.405	0.025	0.355	0.455
2008	22.988	9700.612	0.000	0.474	0.021	0.434	0.515

Appendix 18: H1 DV9 Cross-national *t*-test

<i>t</i>-test for Equality of Means: Traditional family pattern								
		<i>t</i>	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
							Lower	Upper
Belgium	1999	6.94	1505.73	0.000	0.45	0.06	0.32	0.58
	2008	7.29	1394.43	0.000	0.48	0.07	0.35	0.61
Denmark	1999	0.32	857.00	0.751	0.04	0.13	-0.21	0.30
	2008	-0.32	1344.26	0.749	-0.03	0.10	-0.22	0.16
France	1999	7.85	1305.58	0.000	0.52	0.07	0.39	0.64
	2008	6.72	1447.00	0.000	0.45	0.07	0.32	0.58
Germany	1999	1.99	1835.17	0.047	0.15	0.08	0.00	0.30
	2008	5.06	942.48	0.000	0.35	0.07	0.21	0.49
Iceland	1999	-0.03	876.00	0.977	-0.01	0.22	-0.44	0.42
	2008	-0.41	745.88	0.681	-0.07	0.16	-0.38	0.25
Ireland	1999	1.70	892.76	0.090	0.21	0.13	-0.03	0.46
		4.47	163.72	0.000	0.45	0.10	0.25	0.65

	2008							
Italy	1999	5.00	1855.00	0.000	0.38	0.08	0.23	0.53
	2008	6.49	334.02	0.000	0.60	0.09	0.42	0.78
Malta	1999	2.69	14.23	0.018	0.72	0.27	0.15	1.29
	2008	2.12	1356.59	0.034	0.46	0.22	0.03	0.89
Netherlands	1999	4.15	883.07	0.000	0.22	0.05	0.12	0.32
	2008	7.09	1337.74	0.000	0.29	0.04	0.21	0.37
Norway	2008	0.64	1047.81	0.524	0.06	0.09	-0.12	0.23
Poland	1999	3.60	996.75	0.000	0.71	0.20	0.32	1.10
	2008	4.89	1333.27	0.000	0.79	0.16	0.47	1.11
Slovak Republic	1999	5.57	1221.00	0.000	0.47	0.08	0.31	0.64
	2008	5.02	1397.73	0.000	0.39	0.08	0.24	0.54
Spain	1999	5.47	280.67	0.000	0.56	0.10	0.36	0.76
	2008	8.05	650.78	0.000	0.63	0.08	0.48	0.78
Sweden	2008	-1.44	585.07	0.151	-0.09	0.06	-0.21	0.03
Great Britain	1999	3.24	838.34	0.001	0.35	0.11	0.14	0.57
	2008	3.64	1392.88	0.000	0.21	0.06	0.09	0.32
Northern Ireland	1999	3.07	186.82	0.002	0.28	0.09	0.10	0.45
	2008	-1.64	429.63	0.103	-0.18	0.11	-0.40	0.04

Appendix 19: H2 DV1 Pooled sample correlations

Correlations: Pooled Sample		Value	Sig.
1981	Pearson's R	.531	.000
	Spearman Correlation	.545	.000
	N	9339	
1990	Pearson's R	.505	.000
	Spearman Correlation	.520	.000
	N	13071	
1999	Pearson's R	.503	.000
	Spearman Correlation	.526	.000
	N	12931	
2008	Pearson's R	.504	.000
	Spearman Correlation	.513	.000
	N	14487	

Appendix 20: H2 DV1 Cross-national correlations

Country	Wave	Correlation	Value	Sig.
Belgium	1981	Pearson's R	.399	.000
		Spearman Correlation	.406	.000
		N	623	
	1990	Pearson's R	.404	.000
		Spearman Correlation	.409	.000
		N	1725	
	1999	Pearson's R	.362	.000
		Spearman Correlation	.358	.000
		N	1292	
	2008	Pearson's R	.378	.000
		Spearman Correlation	.369	.000
		N	1371	
Denmark	1981	Pearson's R	.502	.000
		Spearman Correlation	.471	.000
		N	641	
	1999	Pearson's R	.341	.000
		Spearman Correlation	.294	.000
		N	609	
	2008	Pearson's R	.335	.000
		Spearman Correlation	.307	.000
		N	1140	
France	1981	Pearson's R	.398	.000
		Spearman Correlation	.394	.000

			885	
	1990	Pearson's R	.324	.000
		Spearman Correlation	.306	.000
			688	
	1999	Pearson's R	.219	.000
		Spearman Correlation	.214	.000
			1130	
	2008	Pearson's R	.285	.000
		Spearman Correlation	.277	.000
			1312	
Germany	1981	Pearson's R	.525	.000
		Spearman Correlation	.537	.000
			735	
	1990	Pearson's R	.447	.000
		Spearman Correlation	.451	.000
			1513	
	1999	Pearson's R	.333	.000
		Spearman Correlation	.327	.000
			1374	
	2008	Pearson's R	.351	.000
		Spearman Correlation	.337	.000
			1350	
Iceland	1981	Pearson's R	.375	.000
		Spearman Correlation	.376	.000
			705	
	1990	Pearson's R	.334	.000
		Spearman Correlation	.342	.000
			480	
	1999	Pearson's R	.315	.000
		Spearman Correlation	.317	.000
			644	
	2008	Pearson's R	.336	.000
		Spearman Correlation	.345	.000
			564	
Ireland	1981	Pearson's R	.480	.000
		Spearman Correlation	.394	.000
			843	
	1990	Pearson's R	.399	.000
		Spearman Correlation	.343	.000
			822	
	1999	Pearson's R	.358	.000
		Spearman Correlation	.417	.000
			690	

	2008	Pearson's R	.346	.000
		Spearman Correlation	.402	.000
			573	
Italy	1981	Pearson's R	.517	.000
		Spearman Correlation	.499	.000
			787	
	1990	Pearson's R	.540	.000
		Spearman Correlation	.540	.000
			1284	
	1999	Pearson's R	.433	.000
		Spearman Correlation	.449	.000
			1403	
Malta	1990	Pearson's R	.424	.000
		Spearman Correlation	.323	.000
			285	
	1999	Pearson's R	.289	.000
		Spearman Correlation	.293	.000
			878	
	2008	Pearson's R	.374	.000
		Spearman Correlation	.284	.000
			1064	
Netherlands	1981	Pearson's R	.501	.000
		Spearman Correlation	.509	.000
			727	
	1990	Pearson's R	.546	.000
		Spearman Correlation	.537	.000
			713	
	1999	Pearson's R	.505	.000
		Spearman Correlation	.487	.000
			895	
	2008	Pearson's R	.516	.000
		Spearman Correlation	.491	.000
			1261	
Norway	1981	Pearson's R	.473	.000
		Spearman Correlation	.500	.000
			649	
	1990	Pearson's R	.453	.000
		Spearman Correlation	.472	.000
			755	
	2008	Pearson's R	.399	.000
		Spearman Correlation	.386	.000
			991	
Poland	1990	Pearson's R	.293	.000

		Spearman Correlation	.259	.000
			680	
	1999	Pearson's R	.370	.000
		Spearman Correlation	.384	.000
			738	
	2008	Pearson's R	.222	.000
		Spearman Correlation	.295	.000
			1173	
Slovak Republic	1990	Pearson's R	.491	.000
		Spearman Correlation	.509	.000
			638	
	1999	Pearson's R	.492	.000
		Spearman Correlation	.524	.000
			758	
	2008	Pearson's R	.227	.000
		Spearman Correlation	.294	.000
			1047	
Spain	1981	Pearson's R	.529	.000
		Spearman Correlation	.517	.000
			1406	
	1990	Pearson's R	.573	.000
		Spearman Correlation	.564	.000
			1679	
	1999	Pearson's R	.502	.000
		Spearman Correlation	.494	.000
			713	
	2008	Pearson's R	.528	.000
		Spearman Correlation	.535	.000
			972	
Sweden	1981	Pearson's R	.390	.000
		Spearman Correlation	.399	.000
			488	
	1990	Pearson's R	.305	.000
		Spearman Correlation	.291	.000
			612	
	1999	Pearson's R	.323	.000
		Spearman Correlation	.271	.000
			627	
	2008	Pearson's R	.528	.000
		Spearman Correlation	.385	.000
			509	
Great Britain	1981	Pearson's R	.274	.000
		Spearman Correlation	.283	.000

			781	
	1990	Pearson's R	.353	.000
		Spearman Correlation	.356	.000
			942	
	1999	Pearson's R	.250	.000
		Spearman Correlation	.279	.000
			621	
	2008	Pearson's R	.330	.000
		Spearman Correlation	.342	.000
			1087	
Northern Ireland	1981	Pearson's R	.411	.000
		Spearman Correlation	.476	.000
			208	
	1990	Pearson's R	.279	.000
		Spearman Correlation	.329	.000
			241	
	1999	Pearson's R	.327	.000
		Spearman Correlation	.390	.000
			584	
	2008	Pearson's R	.049	.373
		Spearman Correlation	.204	.000
			334	

Appendix 21: H2 DV2 Pooled sample correlations

Correlations: All selected countries		Value	Sig.
1981	Pearson's R	.245	.000
	Spearman Correlation	.275	.000
	N	10209	
1990	Pearson's R	.212	.000
	Spearman Correlation	.235	.000
	N	14755	
1999	Pearson's R	.179	.000
	Spearman Correlation	.231	.000
	N	13809	
2008	Pearson's R	.118	.000
	Spearman Correlation	.193	.000
	N	16374	

Appendix 22: H2 DV2 Cross-national correlations

Country	Wave	Correlation	Value	Sig.
Belgium	1981	Pearson's R	.228	.000
		Spearman Correlation	.266	.000
		N	639	
	1990	Pearson's R	.190	.000
		Spearman Correlation	.198	.000
		N	1842	
	1999	Pearson's R	.115	.000
		Spearman Correlation	.120	.000
		N	1347	
	2008	Pearson's R	.133	.000
		Spearman Correlation	.135	.000
		N	1390	
Denmark	1981	Pearson's R	.246	.000
		Spearman Correlation	.262	.000
		N	664	
	1990	Pearson's R	.105	.004
		Spearman Correlation	.144	.000
		N	736	
	1999	Pearson's R	.066	.080
		Spearman Correlation	.112	.003
		N	699	
	2008	Pearson's R	.076	.010
		Spearman Correlation	.108	.000
		N	1164	

France	1981	Pearson's R	.215	.000
		Spearman Correlation	.199	.000
			888	
	1990	Pearson's R	.201	.000
		Spearman Correlation	.217	.000
			718	
	1999	Pearson's R	.116	.000
		Spearman Correlation	.117	.000
			1220	
	2008	Pearson's R	.085	.002
		Spearman Correlation	.087	.001
			1342	
Germany	1981	Pearson's R	.337	.000
		Spearman Correlation	.362	.000
			742	
	1990	Pearson's R	.221	.000
		Spearman Correlation	.224	.000
			1777	
	1999	Pearson's R	.089	.001
		Spearman Correlation	.099	.000
			1502	
	2008	Pearson's R	.072	.006
		Spearman Correlation	.062	.019
			1435	
Iceland	1981	Pearson's R	.286	.000
		Spearman Correlation	.310	.000
			740	
	1990	Pearson's R	.267	.000
		Spearman Correlation	.292	.000
			506	
	1999	Pearson's R	.116	.002
		Spearman Correlation	.170	.000
			693	
	2008	Pearson's R	.098	.016
		Spearman Correlation	.103	.011
			599	
Ireland	1981	Pearson's R	.305	.000
		Spearman Correlation	.279	.000
			918	
	1990	Pearson's R	.273	.000
		Spearman Correlation	.251	.000
			860	
1999	Pearson's R	.193	.000	

		Spearman Correlation	.283	.000
			730	
	2008	Pearson's R	.214	.000
		Spearman Correlation	.254	.000
			675	
Italy	1981	Pearson's R	.218	.000
		Spearman Correlation	.205	.000
			841	
	1990	Pearson's R	.103	.000
		Spearman Correlation	.196	.000
			1333	
	1999	Pearson's R	.167	.000
		Spearman Correlation	.200	.000
			1447	
	2008	Pearson's R	.043	.185
		Spearman Correlation	.098	.002
			949	
Malta	1981	Pearson's R	-.005	.929
		Spearman Correlation	.112	.036
			354	
	1990	Pearson's R	.224	.000
		Spearman Correlation	.214	.000
			313	
	1999	Pearson's R	.174	.000
		Spearman Correlation	.194	.000
			877	
	2008	Pearson's R	.106	.000
		Spearman Correlation	.316	.000
			1296	
Netherlands	1981	Pearson's R	.238	.000
		Spearman Correlation	.263	.000
			778	
	1990	Pearson's R	.261	.000
		Spearman Correlation	.272	.000
			725	
	1999	Pearson's R	.147	.000
		Spearman Correlation	.184	.000
			887	
	2008	Pearson's R	.154	.000
		Spearman Correlation	.165	.000
			1283	
Norway	1981	Pearson's R	.295	.000
		Spearman Correlation	.336	.000

			691	
	1990	Pearson's R	.253	.000
		Spearman Correlation	.287	.000
			821	
	2008	Pearson's R	.145	.000
		Spearman Correlation	.188	.000
			992	
Poland	1990	Pearson's R	.054	.150
		Spearman Correlation	.087	.022
			700	
	1999	Pearson's R	.101	.004
		Spearman Correlation	.131	.000
			809	
	2008	Pearson's R	.100	.001
		Spearman Correlation	.189	.000
			1210	
Slovak Republic	1990	Pearson's R	.153	.000
		Spearman Correlation	.178	.000
			720	
	1999	Pearson's R	.170	.000
		Spearman Correlation	.182	.000
			864	
	2008	Pearson's R	.163	.000
		Spearman Correlation	.177	.000
			1146	
Spain	1981	Pearson's R	.314	.000
		Spearman Correlation	.315	.000
			1455	
	1990	Pearson's R	.188	.000
		Spearman Correlation	.175	.000
			1765	
	1999	Pearson's R	.160	.000
		Spearman Correlation	.205	.000
			764	
	2008	Pearson's R	.141	.000
		Spearman Correlation	.164	.000
			1029	
Sweden	1981	Pearson's R	.118	.005
		Spearman Correlation	.171	.000
			564	
	1990	Pearson's R	.155	.000
		Spearman Correlation	.148	.000
			667	

	1999	Pearson's R	.148	.000
		Spearman Correlation	.151	.000
			690	
	2008	Pearson's R	.071	.087
		Spearman Correlation	.082	.047
			584	
Great Britain	1981	Pearson's R	.225	.000
		Spearman Correlation	.256	.000
			804	
	1990	Pearson's R	.272	.000
		Spearman Correlation	.249	.000
			1010	
	1999	Pearson's R	.135	.001
		Spearman Correlation	.168	.000
			625	
	2008	Pearson's R	.183	.000
		Spearman Correlation	.252	.000
			1153	
Northern Ireland	1981	Pearson's R	.265	.000
		Spearman Correlation	.373	.000
			230	
	1990	Pearson's R	.175	.006
		Spearman Correlation	.252	.000
			251	
	1999	Pearson's R	.091	.020
		Spearman Correlation	.227	.000
			657	
	2008	Pearson's R	.114	.031
		Spearman Correlation	.272	.000
			357	

Appendix 23: H2 DV3 Pooled sample correlations

Correlations: All selected countries		Value	Sig.
1990	Pearson's R	-.009	.282
	Spearman Correlation	-.015	.088
	N	13631	
1999	Pearson's R	-.035	.002
	Spearman Correlation	-.038	.001
	N	8080	
2008	Pearson's R	.013	.116
	Spearman Correlation	.014	.079
	N	15561	

Appendix 24: H2 DV3 Cross-national correlations

Country	Wave	Correlation	Value	Sig.
Belgium	1990	Pearson's R	.029	.236
		Spearman Correlation	.026	.298
		N	1643	
	2008	Pearson's R	-.008	.772
		Spearman Correlation	-.008	.758
		N	1359	
Denmark	1990	Pearson's R	.080	.033
		Spearman Correlation	.075	.046
		N	715	
	2008	Pearson's R	-.012	.693
		Spearman Correlation	-.014	.636
		N	1127	
France	1990	Pearson's R	.143	.000
		Spearman Correlation	.142	.000
		N	677	
	1999	Pearson's R	.026	.363
		Spearman Correlation	.027	.348
		N	1186	
	2008	Pearson's R	.055	.046
		Spearman Correlation	.075	.006
		N	1327	
Germany	1990	Pearson's R	.113	.000
		Spearman Correlation	.118	.000
		N	1621	
	1999	Pearson's R	-.015	.584
		Spearman Correlation	-.004	.884
		N	1384	

	2008	Pearson's R	.211	.000
		Spearman Correlation	.214	.000
			1382	
Iceland	1990	Pearson's R	.078	.084
		Spearman Correlation	.086	.057
			494	
	1999	Pearson's R	-.064	.099
		Spearman Correlation	-.077	.048
			665	
	2008	Pearson's R	-.014	.745
		Spearman Correlation	.002	.966
			582	
Ireland	1990	Pearson's R	.052	.127
		Spearman Correlation	.053	.117
			862	
	1999	Pearson's R	.088	.019
		Spearman Correlation	.107	.004
			703	
	2008	Pearson's R	.058	.155
		Spearman Correlation	.070	.088
			603	
Italy	1990	Pearson's R	.037	.203
		Spearman Correlation	.035	.234
			1186	
	1999	Pearson's R	-.019	.485
		Spearman Correlation	-.039	.151
			1352	
	2008	Pearson's R	.059	.093
		Spearman Correlation	.051	.142
			826	
Malta	1990	Pearson's R	.006	.922
		Spearman Correlation	.036	.562
			259	
	2008	Pearson's R	.092	.002
		Spearman Correlation	.143	.000
			1091	
Netherlands	1990	Pearson's R	.133	.000
		Spearman Correlation	.129	.001
			689	
	1999	Pearson's R	-.022	.513
		Spearman Correlation	-.025	.470
			868	
	2008	Pearson's R	-.093	.001

		Spearman Correlation	-.086	.002
			1263	
Norway	1990	Pearson's R	.006	.861
		Spearman Correlation	.027	.439
			800	
	2008	Pearson's R	-.063	.047
		Spearman Correlation	-.068	.032
			998	
Poland	1990	Pearson's R	.047	.230
		Spearman Correlation	.044	.263
			660	
	1999	Pearson's R	-.097	.006
		Spearman Correlation	-.105	.003
			782	
	2008	Pearson's R	-.033	.259
		Spearman Correlation	-.062	.033
			1173	
Slovak Republic	1990	Pearson's R	-.028	.482
		Spearman Correlation	-.035	.378
			652	
	2008	Pearson's R	-.077	.011
		Spearman Correlation	-.060	.047
			1084	
Spain	1990	Pearson's R	.139	.000
		Spearman Correlation	.125	.000
			1503	
	2008	Pearson's R	.117	.000
		Spearman Correlation	.114	.000
			991	
Sweden	1990	Pearson's R	-.031	.421
		Spearman Correlation	.000	.998
			655	
	2008	Pearson's R	-.087	.035
		Spearman Correlation	-.127	.002
			585	
Great Britain	1990	Pearson's R	-.034	.289
		Spearman Correlation	-.065	.044
			963	
	1999	Pearson's R	-.001	.982
		Spearman Correlation	-.012	.774
			604	
	2008	Pearson's R	-.056	.061
		Spearman Correlation	-.061	.042

			1107	
Northern Ireland	1990	Pearson's R	.020	.753
		Spearman Correlation	.024	.712
			248	
	1999	Pearson's R	.117	.004
		Spearman Correlation	.165	.000
			592	
	2008	Pearson's R	.090	.099
		Spearman Correlation	.152	.005
			337	

Appendix 25: H2 DV4 Pooled sample correlations

Spearman Correlations: Pooled data		
1981	Spearman's rho	-.228**
1990	Spearman's rho	-.179**
1999	Spearman's rho	-.139**
2008	Spearman's rho	-.196**

** $p < .001$, * $p < .05$

Appendix 26: H2 DV4 Cross-national correlations

Correlations: Materialism Postmaterialism				
			Value	Approx. Sig.
Belgium	1981	Pearson's R	-.051	.220
		Spearman Correlation	-.053	.200
			583	
	1990	Pearson's R	-.090	.000
		Spearman Correlation	-.098	.000
			1831	
1999	Pearson's R	-.073	.007	
	Spearman Correlation	-.083	.002	
		1367		
2008	Pearson's R	-.125	.000	
	Spearman Correlation	-.132	.000	
		1369		
Denmark	1981	Pearson's R	-.199	.000
		Spearman Correlation	-.199	.000
			601	
	1990	Pearson's R	-.103	.006
		Spearman Correlation	-.130	.000
			720	
1999	Pearson's R	-.019	.635	
	Spearman Correlation	-.017	.671	
		659		
2008	Pearson's R	-.088	.003	
	Spearman Correlation	-.104	.000	
		1135		
France	1981	Pearson's R	-.188	.000
		Spearman Correlation	-.199	.000

			867	
	1990	Pearson's R	-.146	.000
		Spearman Correlation	-.138	.000
			718	
	1999	Pearson's R	-.132	.000
		Spearman Correlation	-.123	.000
			1216	
	2008	Pearson's R	-.131	.000
		Spearman Correlation	-.132	.000
			1319	
Germany	1981	Pearson's R	-.273	.000
		Spearman Correlation	-.268	.000
			707	
	1990	Pearson's R	-.172	.000
		Spearman Correlation	-.170	.000
			1841	
	1999	Pearson's R	.031	.233
		Spearman Correlation	.035	.175
			1528	
	2008	Pearson's R	-.094	.000
		Spearman Correlation	-.090	.001
			1471	
Iceland	1981	Pearson's R	-.152	.000
		Spearman Correlation	-.140	.000
			705	
	1990	Pearson's R	-.164	.000
		Spearman Correlation	-.163	.000
			501	
	1999	Pearson's R	-.168	.000
		Spearman Correlation	-.151	.000
			688	
	2008	Pearson's R	-.114	.006
		Spearman Correlation	-.107	.010
			583	
Ireland	1981	Pearson's R	-.217	.000
		Spearman Correlation	-.203	.000
			954	
	1990	Pearson's R	-.103	.002
		Spearman Correlation	-.095	.005
			867	
	1999	Pearson's R	-.069	.060
		Spearman Correlation	-.022	.554
			739	

	2008	Pearson's R	-.154	.000
		Spearman Correlation	-.167	.000
			654	
Italy	1981	Pearson's R	-.189	.000
		Spearman Correlation	-.177	.000
			846	
	1990	Pearson's R	-.183	.000
		Spearman Correlation	-.166	.000
			1331	
	1999	Pearson's R	-.111	.000
		Spearman Correlation	-.117	.000
			1423	
	2008	Pearson's R	-.170	.000
		Spearman Correlation	-.159	.000
			913	
Malta	1981	Pearson's R	-.048	.384
		Spearman Correlation	-.087	.114
			331	
	1990	Pearson's R	.010	.865
		Spearman Correlation	-.044	.455
			289	
	1999	Pearson's R	-.023	.504
		Spearman Correlation	-.028	.410
			881	
	2008	Pearson's R	-.091	.001
		Spearman Correlation	-.119	.000
			1268	
Netherlands	1981	Pearson's R	-.171	.000
		Spearman Correlation	-.176	.000
			732	
	1990	Pearson's R	-.236	.000
		Spearman Correlation	-.233	.000
			720	
	1999	Pearson's R	-.108	.001
		Spearman Correlation	-.109	.001
			863	
	2008	Pearson's R	-.151	.000
		Spearman Correlation	-.150	.000
			1260	
Norway	1981	Pearson's R	-.117	.003
		Spearman Correlation	-.103	.008
			658	
	1990	Pearson's R	-.037	.292

		Spearman Correlation	-.032	.367
			817	
	2008	Pearson's R	-.041	.198
		Spearman Correlation	-.055	.087
			970	
Poland	1990	Pearson's R	-.060	.115
		Spearman Correlation	-.059	.120
			691	
	1999	Pearson's R	-.131	.000
		Spearman Correlation	-.121	.000
			826	
	2008	Pearson's R	-.109	.000
		Spearman Correlation	-.091	.002
			1202	
Slovak Republic	1990	Pearson's R	-.123	.001
		Spearman Correlation	-.135	.000
			700	
	1999	Pearson's R	-.030	.385
		Spearman Correlation	-.042	.227
			831	
	2008	Pearson's R	-.039	.205
		Spearman Correlation	-.024	.425
			1067	
Spain	1981	Pearson's R	-.354	.000
		Spearman Correlation	-.320	.000
			1445	
	1990	Pearson's R	-.292	.000
		Spearman Correlation	-.278	.000
			1687	
	1999	Pearson's R	-.291	.000
		Spearman Correlation	-.287	.000
			757	
	2008	Pearson's R	-.110	.000
		Spearman Correlation	-.118	.000
			1030	
Sweden	1981	Pearson's R	-.107	.012
		Spearman Correlation	-.132	.002
			556	
	1990	Pearson's R	-.087	.025
		Spearman Correlation	-.074	.058
			663	
	1999	Pearson's R	-.035	.356
		Spearman Correlation	-.047	.218

			681	
	2008	Pearson's R	.013	.777
		Spearman Correlation	.052	.266
			466	
Great Britain	1981	Pearson's R	-.098	.006
		Spearman Correlation	-.087	.015
			780	
	1990	Pearson's R	-.051	.098
		Spearman Correlation	-.043	.162
			1042	
	2008	Pearson's R	-.060	.045
		Spearman Correlation	-.055	.068
			1124	
Northern Ireland	1981	Pearson's R	.052	.438
		Spearman Correlation	.131	.050
			226	
	1990	Pearson's R	-.051	.425
		Spearman Correlation	-.061	.340
			249	
	1999	Pearson's R	-.080	.038
		Spearman Correlation	-.105	.006
			671	
	2008	Pearson's R	-.001	.985
		Spearman Correlation	-.059	.268
			357	

Appendix 27: H2 DV5 Pooled sample correlations

Correlations: Pooled sample		Value	Sig.
1981	Pearson's R	.008	.386
	Spearman Correlation	.010	.303
	N	10583	
1990	Pearson's R	.011	.194
	Spearman Correlation	.009	.243
	N	15308	
1999	Pearson's R	.164	.000
	Spearman Correlation	.169	.000
	N	14120	
2008	Pearson's R	.200	.000
	Spearman Correlation	.199	.000
	N	16242	

Appendix 28: H2 DV5 Cross-national correlations

Country	Wave	Value	Sig.	Sig.
Belgium	1981	Pearson's R	-.030	.435
		Spearman Correlation	-.053	.175
		N	661	
	1990	Pearson's R	-.061	.007
		Spearman Correlation	-.060	.008
		N	1953	
	1999	Pearson's R	-.029	.269
		Spearman Correlation	-.027	.315
		N	1425	
	2008	Pearson's R	.020	.470
		Spearman Correlation	.015	.569
		N	1369	
Denmark	1981	Pearson's R	-.149	.000
		Spearman Correlation	-.171	.000
		N	657	
	1990	Pearson's R	-.015	.676
		Spearman Correlation	-.010	.794
		N	751	
	1999	Pearson's R	-.039	.297
		Spearman Correlation	-.031	.414
		N	706	
	2008	Pearson's R	.010	.724
		Spearman Correlation	.002	.942
		N	1167	

France	1981	Pearson's R	-.134	.000
		Spearman Correlation	-.137	.000
			908	
	1990	Pearson's R	-.038	.298
		Spearman Correlation	-.034	.354
			739	
	1999	Pearson's R	-.010	.729
		Spearman Correlation	-.005	.850
			1245	
	2008	Pearson's R	-.004	.885
		Spearman Correlation	-.004	.878
			1329	
Germany	1981	Pearson's R	-.087	.019
		Spearman Correlation	-.090	.015
			728	
	1990	Pearson's R	-.067	.004
		Spearman Correlation	-.066	.004
			1906	
	1999	Pearson's R	-.100	.000
		Spearman Correlation	-.107	.000
			1456	
	2008	Pearson's R	-.066	.011
		Spearman Correlation	-.064	.014
			1494	
Iceland	1981	Pearson's R	-.005	.894
		Spearman Correlation	.016	.656
			734	
	1990	Pearson's R	.026	.553
		Spearman Correlation	.037	.406
			511	
	1999	Pearson's R	.030	.433
		Spearman Correlation	.039	.309
			698	
	2008	Pearson's R	.028	.489
		Spearman Correlation	.029	.476
			599	
Ireland	1981	Pearson's R	.032	.324
		Spearman Correlation	.000	.992
			982	
	1990	Pearson's R	-.044	.190
		Spearman Correlation	-.044	.195
			876	
1999	Pearson's R	.052	.153	

		Spearman Correlation	.059	.103	
			759		
	2008	Pearson's R	.046	.285	
		Spearman Correlation	.025	.564	
			544		
Italy	1981	Pearson's R	.048	.156	
		Spearman Correlation	.082	.016	
				876	
	1990	Pearson's R	-.027	.321	
		Spearman Correlation	-.007	.801	
				1375	
	1999	Pearson's R	.057	.029	
		Spearman Correlation	.057	.027	
				1490	
	2008	Pearson's R	.009	.773	
		Spearman Correlation	-.005	.881	
				955	
Malta	1981	Pearson's R	-.104	.041	
		Spearman Correlation	-.054	.286	
				391	
	1990	Pearson's R	-.038	.500	
		Spearman Correlation	-.065	.241	
				324	
	1999	Pearson's R	.081	.017	
		Spearman Correlation	.073	.030	
				879	
	2008	Pearson's R	.082	.004	
		Spearman Correlation	.115	.000	
				1238	
Netherlands	1981	Pearson's R	-.004	.901	
		Spearman Correlation	-.001	.979	
				822	
	1990	Pearson's R	.107	.004	
		Spearman Correlation	.096	.009	
				737	
	1999	Pearson's R	.024	.472	
		Spearman Correlation	.018	.600	
				877	
	2008	Pearson's R	.095	.001	
		Spearman Correlation	.096	.001	
				1251	
Norway	1981	Pearson's R	.009	.819	
		Spearman Correlation	.008	.832	

			720	
	1990	Pearson's R	-.006	.868
		Spearman Correlation	-.021	.537
			841	
	2008	Pearson's R	.000	.988
		Spearman Correlation	-.017	.594
			990	
Poland	1990	Pearson's R	.037	.317
		Spearman Correlation	.052	.163
			722	
	1999	Pearson's R	.028	.407
		Spearman Correlation	.033	.343
			853	
	2008	Pearson's R	.017	.551
		Spearman Correlation	.043	.134
			1201	
Slovak Republic	1990	Pearson's R	.011	.761
		Spearman Correlation	-.013	.714
			753	
	1999	Pearson's R	-.005	.871
		Spearman Correlation	-.007	.827
			896	
	2008	Pearson's R	-.123	.000
		Spearman Correlation	-.145	.000
			1060	
Spain	1981	Pearson's R	-.002	.947
		Spearman Correlation	-.001	.956
			1549	
	1990	Pearson's R	.027	.255
		Spearman Correlation	.030	.197
			1832	
	1999	Pearson's R	.007	.849
		Spearman Correlation	.013	.720
			826	
	2008	Pearson's R	-.116	.000
		Spearman Correlation	-.109	.000
			1087	
Sweden	1981	Pearson's R	-.111	.007
		Spearman Correlation	-.126	.002
			586	
	1990	Pearson's R	-.003	.933
		Spearman Correlation	-.024	.538
			680	

	1999	Pearson's R	-.083	.028
		Spearman Correlation	-.096	.012
			696	
	2008	Pearson's R	.099	.012
		Spearman Correlation	.067	.091
			634	
Great Britain	1981	Pearson's R	-.007	.848
		Spearman Correlation	-.010	.786
			803	
	1990	Pearson's R	-.047	.125
		Spearman Correlation	-.032	.301
			1056	
	1999	Pearson's R	-.033	.412
		Spearman Correlation	-.024	.546
			619	
	2008	Pearson's R	-.014	.625
		Spearman Correlation	-.024	.412
			1147	
Northern Ireland	1981	Pearson's R	-.080	.225
		Spearman Correlation	-.086	.190
			234	
	1990	Pearson's R	.022	.722
		Spearman Correlation	.035	.578
			256	
	1999	Pearson's R	-.081	.032
		Spearman Correlation	-.134	.000
			702	
	2008	Pearson's R	.105	.056
		Spearman Correlation	.074	.182
			329	

Appendix 29: H2 DV6 Pooled sample correlations

Correlations: Pooled sample		Value	Sig.
1981	Pearson's R	.000	.989
	Spearman Correlation	.000	.984
	N	10606	
1990	Pearson's R	-.038	.000
	Spearman Correlation	-.044	.000
	N	15306	
1999	Pearson's R	.098	.000
	Spearman Correlation	.097	.000
	N	14142	
2008	Pearson's R	.103	.000
	Spearman Correlation	.102	.000
	N	16214	

Appendix 30: H2 DV6 Cross-national correlations

Country	Wave	Correlation	Value	Sig.
Belgium	1981	Pearson's R	.048	.216
		Spearman Correlation	.043	.266
		N	672	
	1990	Pearson's R	-.022	.325
		Spearman Correlation	-.019	.393
		N	1964	
	1999	Pearson's R	.027	.303
		Spearman Correlation	.032	.226
		N	1412	
	2008	Pearson's R	.002	.950
		Spearman Correlation	-.002	.950
		N	1380	
Denmark	1981	Pearson's R	-.151	.000
		Spearman Correlation	-.167	.000
		N	656	
	1990	Pearson's R	-.036	.319
		Spearman Correlation	-.002	.947
		N	751	
	1999	Pearson's R	.034	.373
		Spearman Correlation	.029	.444
		N	706	
	2008	Pearson's R	.035	.227
		Spearman Correlation	.020	.487
		N	1173	

France	1981	Pearson's R	.012	.724
		Spearman Correlation	.025	.441
			919	
	1990	Pearson's R	.040	.274
		Spearman Correlation	.031	.398
			739	
	1999	Pearson's R	.011	.689
		Spearman Correlation	.014	.608
			1257	
	2008	Pearson's R	-.056	.041
		Spearman Correlation	-.052	.057
			1343	
Germany	1981	Pearson's R	-.011	.774
		Spearman Correlation	-.012	.745
			731	
	1990	Pearson's R	-.049	.033
		Spearman Correlation	-.049	.033
			1888	
	1999	Pearson's R	.020	.453
		Spearman Correlation	.035	.187
			1447	
	2008	Pearson's R	-.007	.793
		Spearman Correlation	-.011	.666
			1486	
Iceland	1981	Pearson's R	-.078	.036
		Spearman Correlation	-.070	.058
			729	
	1990	Pearson's R	.052	.240
		Spearman Correlation	.054	.225
			511	
	1999	Pearson's R	.008	.836
		Spearman Correlation	.013	.726
			698	
	2008	Pearson's R	.034	.403
		Spearman Correlation	.031	.445
			600	
Ireland	1981	Pearson's R	-.004	.899
		Spearman Correlation	-.025	.442
			985	
	1990	Pearson's R	-.019	.578
		Spearman Correlation	-.005	.881
			876	
	1999	Pearson's R	.023	.532

		Spearman Correlation	.035	.336	
			768		
	2008	Pearson's R	.108	.011	
		Spearman Correlation	.085	.045	
			556		
Italy	1981	Pearson's R	-.014	.679	
		Spearman Correlation	-.028	.412	
				887	
	1990	Pearson's R	-.016	.560	
		Spearman Correlation	-.029	.278	
				1371	
	1999	Pearson's R	.026	.325	
		Spearman Correlation	.031	.228	
				1490	
	2008	Pearson's R	.087	.007	
		Spearman Correlation	.076	.019	
				953	
Malta	1981	Pearson's R	-.048	.339	
		Spearman Correlation	.005	.926	
				391	
	1990	Pearson's R	-.028	.613	
		Spearman Correlation	-.099	.075	
				323	
	1999	Pearson's R	.029	.391	
		Spearman Correlation	.024	.475	
				880	
	2008	Pearson's R	.056	.052	
		Spearman Correlation	.148	.000	
				1224	
Netherlands	1981	Pearson's R	.007	.831	
		Spearman Correlation	-.003	.931	
				821	
	1990	Pearson's R	.073	.046	
		Spearman Correlation	.078	.033	
				742	
	1999	Pearson's R	-.018	.584	
		Spearman Correlation	-.023	.500	
				883	
	2008	Pearson's R	-.045	.112	
		Spearman Correlation	-.033	.236	
				1264	
Norway	1981	Pearson's R	.003	.930	
		Spearman Correlation	.004	.919	

			720	
	1990	Pearson's R	-.002	.953
		Spearman Correlation	-.009	.796
			841	
	2008	Pearson's R	.050	.113
		Spearman Correlation	.033	.303
			999	
Poland	1990	Pearson's R	.024	.528
		Spearman Correlation	.031	.400
			722	
	1999	Pearson's R	-.042	.226
		Spearman Correlation	-.029	.391
			850	
	2008	Pearson's R	.026	.381
		Spearman Correlation	.054	.063
			1181	
Slovak Republic	1990	Pearson's R	-.101	.006
		Spearman Correlation	-.116	.001
			753	
	1999	Pearson's R	-.016	.643
		Spearman Correlation	-.037	.271
			894	
	2008	Pearson's R	.006	.850
		Spearman Correlation	-.031	.315
			1079	
Spain	1981	Pearson's R	.050	.050
		Spearman Correlation	.045	.074
			1552	
	1990	Pearson's R	.075	.001
		Spearman Correlation	.067	.004
			1846	
	1999	Pearson's R	.037	.289
		Spearman Correlation	.044	.203
			826	
	2008	Pearson's R	-.005	.857
		Spearman Correlation	-.017	.580
			1094	
Sweden	1981	Pearson's R	-.107	.009
		Spearman Correlation	-.106	.010
			586	
	1990	Pearson's R	-.005	.897
		Spearman Correlation	-.017	.664
			680	

	1999	Pearson's R	-.042	.268	
		Spearman Correlation	-.056	.138	
			704		
	2008	Pearson's R	.099	.012	
		Spearman Correlation	.084	.034	
			638		
Great Britain	1981	Pearson's R	.033	.342	
		Spearman Correlation	.043	.225	
				812	
	1990	Pearson's R	.018	.557	
		Spearman Correlation	.020	.513	
				1040	
	1999	Pearson's R	.004	.922	
		Spearman Correlation	.002	.964	
				627	
	2008	Pearson's R	.046	.122	
		Spearman Correlation	.045	.126	
				1147	
Northern Ireland	1981	Pearson's R	.036	.588	
		Spearman Correlation	.061	.353	
				235	
	1990	Pearson's R	.019	.757	
		Spearman Correlation	.023	.718	
				256	
	1999	Pearson's R	-.013	.733	
		Spearman Correlation	-.051	.180	
				701	
	2008	Pearson's R	.201	.000	
		Spearman Correlation	.205	.000	
				320	

Appendix 31: H2 DV7 Pooled sample correlations

Correlations: Pooled sample		Value	Sig.
1981	Pearson's R	.330	.000
	Spearman Correlation	.349	.000
	N	10313	
1990	Pearson's R	.327	.000
	Spearman Correlation	.340	.000
	N	15050	
1999	Pearson's R	.337	.000
	Spearman Correlation	.353	.000
	N	13782	
2008	Pearson's R	.331	.000
	Spearman Correlation	.339	.000
	N	16130	

Appendix 32: H2 DV7 Cross-national correlations

Country	Wave	Correlation	Value	Sig.
Belgium	1981	Pearson's R	.329	.000
		Spearman Correlation	.348	.000
		N	622	
	1990	Pearson's R	.307	.000
		Spearman Correlation	.305	.000
		N	1941	
	1999	Pearson's R	.276	.000
		Spearman Correlation	.261	.000
		N	1376	
	2008	Pearson's R	.263	.000
		Spearman Correlation	.278	.000
		N	1371	
Denmark	1981	Pearson's R	.277	.000
		Spearman Correlation	.236	.000
		N	631	
	1990	Pearson's R	.262	.000
		Spearman Correlation	.231	.000
		N	730	
	1999	Pearson's R	.158	.000
		Spearman Correlation	.165	.000
		N	680	
	2008	Pearson's R	.160	.000
		Spearman Correlation	.166	.000
		N	1124	

France	1981	Pearson's R	.303	.000
		Spearman Correlation	.296	.000
			887	
	1990	Pearson's R	.270	.000
		Spearman Correlation	.256	.000
			707	
	1999	Pearson's R	.202	.000
		Spearman Correlation	.199	.000
			1216	
	2008	Pearson's R	.196	.000
		Spearman Correlation	.203	.000
			1333	
Germany	1981	Pearson's R	.337	.000
		Spearman Correlation	.356	.000
			706	
	1990	Pearson's R	.322	.000
		Spearman Correlation	.328	.000
			1892	
	1999	Pearson's R	.304	.000
		Spearman Correlation	.298	.000
			1541	
	2008	Pearson's R	.293	.000
		Spearman Correlation	.283	.000
			1421	
Iceland	1981	Pearson's R	.309	.000
		Spearman Correlation	.315	.000
			719	
	1990	Pearson's R	.302	.000
		Spearman Correlation	.332	.000
			505	
	1999	Pearson's R	.218	.000
		Spearman Correlation	.232	.000
			691	
	2008	Pearson's R	.188	.000
		Spearman Correlation	.203	.000
			585	
Ireland	1981	Pearson's R	.246	.000
		Spearman Correlation	.293	.000
			961	
	1990	Pearson's R	.282	.000
		Spearman Correlation	.316	.000
			863	
1999	Pearson's R	.263	.000	

		Spearman Correlation	.287	.000
			731	
	2008	Pearson's R	.201	.000
		Spearman Correlation	.250	.000
			645	
Italy	1981	Pearson's R	.291	.000
		Spearman Correlation	.304	.000
			856	
	1990	Pearson's R	.270	.000
		Spearman Correlation	.304	.000
			1352	
	1999	Pearson's R	.233	.000
		Spearman Correlation	.275	.000
			1437	
	2008	Pearson's R	.219	.000
		Spearman Correlation	.266	.000
			930	
Malta	1981	Pearson's R	.180	.001
		Spearman Correlation	.172	.001
			367	
	1990	Pearson's R	.183	.001
		Spearman Correlation	.150	.008
			313	
	1999	Pearson's R	.167	.000
		Spearman Correlation	.186	.000
			868	
	2008	Pearson's R	.235	.000
		Spearman Correlation	.234	.000
			1295	
Netherlands	1981	Pearson's R	.320	.000
		Spearman Correlation	.330	.000
			793	
	1990	Pearson's R	.351	.000
		Spearman Correlation	.328	.000
			735	
	1999	Pearson's R	.328	.000
		Spearman Correlation	.280	.000
			870	
	2008	Pearson's R	.273	.000
		Spearman Correlation	.238	.000
			1262	
Norway	1981	Pearson's R	.297	.000
		Spearman Correlation	.301	.000

			714	
	1990	Pearson's R	.310	.000
		Spearman Correlation	.309	.000
			830	
	2008	Pearson's R	.181	.000
		Spearman Correlation	.186	.000
			990	
Poland	1990	Pearson's R	.267	.000
		Spearman Correlation	.268	.000
			669	
	1999	Pearson's R	.201	.000
		Spearman Correlation	.226	.000
			796	
	2008	Pearson's R	.098	.001
		Spearman Correlation	.091	.002
			1196	
Slovak Republic	1990	Pearson's R	.419	.000
		Spearman Correlation	.426	.000
			748	
	1999	Pearson's R	.362	.000
		Spearman Correlation	.415	.000
			860	
	2008	Pearson's R	.273	.000
		Spearman Correlation	.298	.000
			1095	
Spain	1981	Pearson's R	.284	.000
		Spearman Correlation	.302	.000
			1509	
	1990	Pearson's R	.302	.000
		Spearman Correlation	.322	.000
			1821	
	1999	Pearson's R	.339	.000
		Spearman Correlation	.351	.000
			779	
	2008	Pearson's R	.260	.000
		Spearman Correlation	.259	.000
			1047	
Sweden	1981	Pearson's R	.277	.000
		Spearman Correlation	.263	.000
			584	
	1990	Pearson's R	.227	.000
		Spearman Correlation	.212	.000
			672	

	1999	Pearson's R	.162	.000
		Spearman Correlation	.155	.000
			678	
	2008	Pearson's R	.261	.000
		Spearman Correlation	.194	.000
			568	
Great Britain	1981	Pearson's R	.272	.000
		Spearman Correlation	.284	.000
			792	
	1990	Pearson's R	.281	.000
		Spearman Correlation	.293	.000
			1038	
	1999	Pearson's R	.276	.000
		Spearman Correlation	.300	.000
			592	
	2008	Pearson's R	.253	.000
		Spearman Correlation	.257	.000
			1117	
Northern Ireland	1981	Pearson's R	.411	.000
		Spearman Correlation	.493	.000
			234	
	1990	Pearson's R	.335	.000
		Spearman Correlation	.352	.000
			255	
	1999	Pearson's R	.272	.000
		Spearman Correlation	.312	.000
			679	
	2008	Pearson's R	.191	.000
		Spearman Correlation	.152	.004
			353	

Appendix 33: H2 DV8 Pooled sample correlations

Correlations: Pooled sample		Value	Sig.
1981	Pearson's R	.101	.000
	Spearman Correlation	.099	.000
	N	10444	
1990	Pearson's R	.070	.000
	Spearman Correlation	.069	.000
	N	15234	
1999	Pearson's R	.093	.000
	Spearman Correlation	.096	.000
	N	14117	
2008	Pearson's R	.102	.000
	Spearman Correlation	.103	.000
	N	16578	

Appendix 34: H2 DV8 Cross-national correlations

Country	Wave	Correlation	Value	Sig.
Belgium	1981	Pearson's R	.067	.091
		Spearman Correlation	.061	.123
		N	645	
	1990	Pearson's R	.078	.001
		Spearman Correlation	.078	.001
		N	1950	
	1999	Pearson's R	.083	.002
		Spearman Correlation	.068	.011
		N	1410	
	2008	Pearson's R	.010	.703
		Spearman Correlation	.011	.691
		N	1368	
Denmark	1981	Pearson's R	.069	.080
		Spearman Correlation	.049	.218
		N	638	
	1990	Pearson's R	.070	.055
		Spearman Correlation	.073	.047
		N	745	
	1999	Pearson's R	.000	.994
		Spearman Correlation	.006	.866
		N	700	
	2008	Pearson's R	.069	.019
		Spearman Correlation	.054	.065
		N	1176	

France	1981	Pearson's R	.032	.329
		Spearman Correlation	.029	.391
			903	
	1990	Pearson's R	.037	.311
		Spearman Correlation	.040	.276
			736	
	1999	Pearson's R	.056	.049
		Spearman Correlation	.058	.043
			1236	
	2008	Pearson's R	.063	.022
		Spearman Correlation	.052	.056
			1339	
Germany	1981	Pearson's R	-.031	.412
		Spearman Correlation	-.035	.355
			714	
	1990	Pearson's R	-.066	.004
		Spearman Correlation	-.062	.007
			1902	
	1999	Pearson's R	-.030	.236
		Spearman Correlation	-.039	.125
			1556	
	2008	Pearson's R	.036	.164
		Spearman Correlation	.044	.091
			1500	
Iceland	1981	Pearson's R	.199	.000
		Spearman Correlation	.185	.000
			730	
	1990	Pearson's R	.118	.008
		Spearman Correlation	.146	.001
			507	
	1999	Pearson's R	.178	.000
		Spearman Correlation	.174	.000
			697	
	2008	Pearson's R	.119	.004
		Spearman Correlation	.130	.001
			597	
Ireland	1981	Pearson's R	.114	.000
		Spearman Correlation	.096	.003
			968	
	1990	Pearson's R	.081	.017
		Spearman Correlation	.052	.122
			870	
	1999	Pearson's R	.130	.000

		Spearman Correlation	.135	.000
			752	
	2008	Pearson's R	.158	.000
		Spearman Correlation	.161	.000
			655	
Italy	1981	Pearson's R	-.005	.888
		Spearman Correlation	.000	.994
			875	
	1990	Pearson's R	.030	.269
		Spearman Correlation	.030	.266
			1375	
	1999	Pearson's R	.044	.093
		Spearman Correlation	.050	.057
			1475	
	2008	Pearson's R	.042	.196
		Spearman Correlation	.065	.044
			951	
Malta	1981	Pearson's R	-.083	.108
		Spearman Correlation	-.065	.209
			378	
	1990	Pearson's R	-.049	.387
		Spearman Correlation	-.031	.582
			314	
	1999	Pearson's R	-.093	.006
		Spearman Correlation	-.107	.002
			878	
	2008	Pearson's R	.089	.001
		Spearman Correlation	.135	.000
			1311	
Netherlands	1981	Pearson's R	.062	.079
		Spearman Correlation	.066	.061
			803	
	1990	Pearson's R	.114	.002
		Spearman Correlation	.133	.000
			731	
	1999	Pearson's R	.069	.044
		Spearman Correlation	.077	.023
			866	
	2008	Pearson's R	.018	.526
		Spearman Correlation	.013	.643
			1282	
Norway	1981	Pearson's R	.082	.029
		Spearman Correlation	.079	.035

			712	
	1990	Pearson's R	.089	.010
		Spearman Correlation	.092	.008
			838	
	2008	Pearson's R	.064	.046
		Spearman Correlation	.079	.014
			985	
Poland	1990	Pearson's R	.075	.044
		Spearman Correlation	.086	.022
			714	
	1999	Pearson's R	-.035	.309
		Spearman Correlation	-.019	.576
			844	
	2008	Pearson's R	-.051	.078
		Spearman Correlation	-.040	.158
			1218	
Slovak Republic	1990	Pearson's R	.143	.000
		Spearman Correlation	.129	.000
			752	
	1999	Pearson's R	-.069	.038
		Spearman Correlation	-.062	.064
			892	
	2008	Pearson's R	-.213	.000
		Spearman Correlation	-.243	.000
			1124	
Spain	1981	Pearson's R	.075	.004
		Spearman Correlation	.082	.001
			1519	
	1990	Pearson's R	.069	.003
		Spearman Correlation	.070	.003
			1818	
	1999	Pearson's R	.103	.003
		Spearman Correlation	.101	.004
			817	
	2008	Pearson's R	-.011	.728
		Spearman Correlation	-.005	.862
			1088	
Sweden	1981	Pearson's R	.039	.344
		Spearman Correlation	.054	.196
			584	
	1990	Pearson's R	-.013	.731
		Spearman Correlation	-.007	.845
			679	

	1999	Pearson's R	.051	.177	
		Spearman Correlation	.061	.107	
			702		
	2008	Pearson's R	.025	.535	
		Spearman Correlation	.035	.389	
			614		
Great Britain	1981	Pearson's R	.036	.317	
		Spearman Correlation	.022	.546	
				792	
	1990	Pearson's R	.017	.587	
		Spearman Correlation	.007	.831	
				1044	
	1999	Pearson's R	-.010	.812	
		Spearman Correlation	.003	.934	
				607	
	2008	Pearson's R	.075	.011	
		Spearman Correlation	.074	.012	
				1146	
Northern Ireland	1981	Pearson's R	.018	.788	
		Spearman Correlation	-.031	.634	
				234	
	1990	Pearson's R	.025	.689	
		Spearman Correlation	.065	.301	
				256	
	1999	Pearson's R	-.007	.862	
		Spearman Correlation	-.018	.627	
				695	
	2008	Pearson's R	.097	.065	
		Spearman Correlation	-.025	.637	
				359	

Appendix 35: H2 DV9 Pooled sample correlations

Correlations: Pooled sample		Value	Sig.
1999	Pearson's R	.113	.000
	Spearman Correlation	.127	.000
	N	12595	
2008	Pearson's R	.193	.000
	Spearman Correlation	.201	.000
	N	15598	

Appendix 36: H2 DV9 Cross-national correlations

Country	Wave	Correlation	Value	Sig.
Belgium	1999	Pearson's R	.236	.000
		Spearman Correlation	.215	.000
		N	1350	
	2008	Pearson's R	.271	.000
		Spearman Correlation	.266	.000
		N	1370	
Denmark	1999	Pearson's R	.118	.003
		Spearman Correlation	.106	.009
		N	609	
	2008	Pearson's R	.075	.014
		Spearman Correlation	.100	.001
		N	1074	
France	1999	Pearson's R	.143	.000
		Spearman Correlation	.155	.000
		N	1190	
	2008	Pearson's R	.188	.000
		Spearman Correlation	.201	.000
		N	1307	
Germany	1999	Pearson's R	.053	.044
		Spearman Correlation	.066	.013
		N	1430	
	2008	Pearson's R	.237	.000
		Spearman Correlation	.244	.000
		N	1328	
Iceland	1999	Pearson's R	.079	.043
		Spearman Correlation	.088	.024
		N	653	
	2008	Pearson's R	.078	.061
		Spearman Correlation	.048	.253
		N	575	

Ireland	1999	Pearson's R	.201	.000
		Spearman Correlation	.216	.000
			686	
	2008	Pearson's R	.166	.000
		Spearman Correlation	.183	.000
			585	
Italy	1999	Pearson's R	.175	.000
		Spearman Correlation	.171	.000
			1402	
	2008	Pearson's R	.250	.000
		Spearman Correlation	.258	.000
			891	
Malta	1999	Pearson's R	-.010	.763
		Spearman Correlation	-.014	.680
			873	
	2008	Pearson's R	.075	.009
		Spearman Correlation	.077	.007
			1210	
Netherlands	1999	Pearson's R	.163	.000
		Spearman Correlation	.152	.000
			874	
	2008	Pearson's R	.191	.000
		Spearman Correlation	.155	.000
			1255	
Norway	2008	Pearson's R	.102	.002
		Spearman Correlation	.112	.000
			962	
Poland	1999	Pearson's R	.121	.001
		Spearman Correlation	.151	.000
			802	
	2008	Pearson's R	.155	.000
		Spearman Correlation	.167	.000
			1147	
Slovak Republic	1999	Pearson's R	.204	.000
		Spearman Correlation	.206	.000
			839	
	2008	Pearson's R	.154	.000
		Spearman Correlation	.162	.000
			1081	
Spain	1999	Pearson's R	.341	.000
		Spearman Correlation	.330	.000
			738	
	2008	Pearson's R	.362	.000

		Spearman Correlation	.357	.000
			1027	
Sweden	2008	Pearson's R	.206	.000
		Spearman Correlation	.129	.002
			577	
Great Britain	1999	Pearson's R	.107	.012
		Spearman Correlation	.105	.014
			555	
	2008	Pearson's R	.153	.000
		Spearman Correlation	.153	.000
			1055	
Northern Ireland	1999	Pearson's R	.028	.497
		Spearman Correlation	.048	.236
			611	
	2008	Pearson's R	.082	.136
		Spearman Correlation	.153	.005
			335	

Appendix 37: H3 DV1 Pooled sample correlations

Correlations: Pooled sample		Value	Sig.
1981	Pearson's R	.474	.000
	Spearman Correlation	.495	.000
	N	9375	
1990	Pearson's R	.476	.000
	Spearman Correlation	.488	.000
	N	13594	
1999	Pearson's R	.432	.000
	Spearman Correlation	.439	.000
	N	13354	
2008	Pearson's R	.398	.000
	Spearman Correlation	.388	.000
	N	14464	

Appendix 38: H3 DV1 Cross-national correlations

Country	Wave		Value	Sig.
Belgium	1981	Pearson's R	.373	.000
		Spearman Correlation	.381	.000
		N	621	
	1990	Pearson's R	.351	.000
		Spearman Correlation	.350	.000
		N	1599	
	1999	Pearson's R	.384	.000
		Spearman Correlation	.370	.000
		N	1353	
	2008	Pearson's R	.370	.000
		Spearman Correlation	.348	.000
		N	1367	
Denmark	1981	Pearson's R	.401	.000
		Spearman Correlation	.391	.000
		N	621	
	1999	Pearson's R	.153	.000
		Spearman Correlation	.152	.000
		N	561	
	2008	Pearson's R	.214	.000
		Spearman Correlation	.180	.000
		N	1116	
France	1981	Pearson's R	.408	.000
		Spearman Correlation	.413	.000
		N	870	

	1990	Pearson's R	.340	.000
		Spearman Correlation	.322	.000
			754	
	1999	Pearson's R	.192	.000
		Spearman Correlation	.169	.000
			1245	
	2008	Pearson's R	.243	.000
		Spearman Correlation	.206	.000
			1329	
Germany	1981	Pearson's R	.510	.000
		Spearman Correlation	.538	.000
			849	
	1990	Pearson's R	.430	.000
		Spearman Correlation	.445	.000
			1843	
	1999	Pearson's R	.339	.000
		Spearman Correlation	.330	.000
			1559	
	2008	Pearson's R	.300	.000
		Spearman Correlation	.286	.000
			1536	
Iceland	1981	Pearson's R	.342	.000
		Spearman Correlation	.336	.000
			696	
	1990	Pearson's R	.257	.000
		Spearman Correlation	.253	.000
			441	
	1999	Pearson's R	.306	.000
		Spearman Correlation	.303	.000
			565	
	2008	Pearson's R	.260	.000
		Spearman Correlation	.259	.000
			490	
Ireland	1981	Pearson's R	.464	.000
		Spearman Correlation	.483	.000
			844	
	1990	Pearson's R	.412	.000
		Spearman Correlation	.399	.000
			887	
	1999	Pearson's R	.420	.000
		Spearman Correlation	.424	.000
			734	
	2008	Pearson's R	.414	.000

		Spearman Correlation	.399	.000
			649	
Italy	1981	Pearson's R	.499	.000
		Spearman Correlation	.490	.000
			819	
	1990	Pearson's R	.578	.000
		Spearman Correlation	.591	.000
			1449	
1999	Pearson's R	.409	.000	
	Spearman Correlation	.431	.000	
		1536		
Malta	1990	Pearson's R	.357	.000
		Spearman Correlation	.203	.001
			291	
	1999	Pearson's R	.411	.000
		Spearman Correlation	.440	.000
			890	
2008	Pearson's R	.383	.000	
	Spearman Correlation	.412	.000	
		1018		
Netherlands	1981	Pearson's R	.435	.000
		Spearman Correlation	.434	.000
			541	
	1990	Pearson's R	.455	.000
		Spearman Correlation	.443	.000
			550	
1999	Pearson's R	.361	.000	
	Spearman Correlation	.342	.000	
		687		
2008	Pearson's R	.394	.000	
	Spearman Correlation	.384	.000	
		1004		
Norway	1981	Pearson's R	.441	.000
		Spearman Correlation	.457	.000
			651	
	1990	Pearson's R	.449	.000
		Spearman Correlation	.454	.000
			815	
2008	Pearson's R	.320	.000	
	Spearman Correlation	.303	.000	
		999		
Poland	1990	Pearson's R	.314	.000
		Spearman Correlation	.329	.000

			717	
	1999	Pearson's R	.565	.000
		Spearman Correlation	.567	.000
			722	
	2008	Pearson's R	.357	.000
		Spearman Correlation	.391	.000
			1214	
Slovak Republic	1990	Pearson's R	.405	.000
		Spearman Correlation	.429	.000
			650	
	1999	Pearson's R	.425	.000
		Spearman Correlation	.466	.000
			837	
	2008	Pearson's R	.214	.000
		Spearman Correlation	.262	.000
			1080	
Spain	1981	Pearson's R	.549	.000
		Spearman Correlation	.594	.000
			1546	
	1990	Pearson's R	.544	.000
		Spearman Correlation	.560	.000
			1801	
	1999	Pearson's R	.532	.000
		Spearman Correlation	.541	.000
			778	
	2008	Pearson's R	.514	.000
		Spearman Correlation	.517	.000
			1107	
Sweden	1981	Pearson's R	.317	.000
		Spearman Correlation	.308	.000
			443	
	1990	Pearson's R	.287	.000
		Spearman Correlation	.291	.000
			549	
	1999	Pearson's R	.312	.000
		Spearman Correlation	.293	.000
			573	
	2008	Pearson's R	.329	.000
		Spearman Correlation	.248	.000
			456	
Great Britain	1981	Pearson's R	.319	.000
		Spearman Correlation	.322	.000
			712	

	1990	Pearson's R	.287	.000
		Spearman Correlation	.275	.000
			998	
	1999	Pearson's R	.220	.000
		Spearman Correlation	.194	.000
			690	
	2008	Pearson's R	.259	.000
		Spearman Correlation	.256	.000
			995	
Northern Ireland	1981	Pearson's R	.403	.000
		Spearman Correlation	.425	.000
			218	
	1990	Pearson's R	.323	.000
		Spearman Correlation	.331	.000
			250	
	1999	Pearson's R	.346	.000
		Spearman Correlation	.376	.000
			634	
	2008	Pearson's R	.180	.001
		Spearman Correlation	.167	.002
			336	

Appendix 39: H3 DV2 Pooled sample correlations

Correlations: Pooled sample		Value	Sig.
1981	Pearson's R	.248	.000
	Spearman Correlation	.277	.000
	N	10153	
1990	Pearson's R	.213	.000
	Spearman Correlation	.232	.000
	N	15362	
1999	Pearson's R	.172	.000
	Spearman Correlation	.200	.000
	N	14313	
2008	Pearson's R	.116	.000
	Spearman Correlation	.159	.000
	N	16547	

Appendix 40: H3 DV2 Cross-national correlations

Country	Wave		Value	Sig.
Belgium	1981	Pearson's R	.250	.000
		Spearman Correlation	.293	.000
		N	629	
	1990	Pearson's R	.163	.000
		Spearman Correlation	.179	.000
		N	1684	
	1999	Pearson's R	.108	.000
		Spearman Correlation	.106	.000
		N	1417	
	2008	Pearson's R	.129	.000
		Spearman Correlation	.120	.000
		N	1379	
Denmark	1981	Pearson's R	.236	.000
		Spearman Correlation	.256	.000
		N	646	
	1990	Pearson's R	.169	.000
		Spearman Correlation	.162	.000
		N	755	
	1999	Pearson's R	.142	.000
		Spearman Correlation	.176	.000
		N	648	
	2008	Pearson's R	.111	.000
		Spearman Correlation	.087	.003
		N	1145	

France	1981	Pearson's R	.284	.000	
		Spearman Correlation	.278	.000	
				879	
	1990	Pearson's R	.182	.000	
		Spearman Correlation	.191	.000	
				782	
	1999	Pearson's R	.158	.000	
		Spearman Correlation	.159	.000	
				1325	
	2008	Pearson's R	.043	.110	
		Spearman Correlation	.040	.142	
				1359	
Germany	1981	Pearson's R	.399	.000	
		Spearman Correlation	.431	.000	
				858	
	1990	Pearson's R	.330	.000	
		Spearman Correlation	.333	.000	
				2163	
	1999	Pearson's R	.139	.000	
		Spearman Correlation	.141	.000	
				1686	
	2008	Pearson's R	.130	.000	
		Spearman Correlation	.102	.000	
				1641	
Iceland	1981	Pearson's R	.177	.000	
		Spearman Correlation	.185	.000	
				731	
	1990	Pearson's R	.215	.000	
		Spearman Correlation	.234	.000	
				470	
	1999	Pearson's R	.194	.000	
		Spearman Correlation	.224	.000	
				616	
	2008	Pearson's R	.121	.006	
		Spearman Correlation	.132	.002	
				523	
Ireland	1981	Pearson's R	.256	.000	
		Spearman Correlation	.300	.000	
				919	
	1990	Pearson's R	.266	.000	
		Spearman Correlation	.265	.000	
				921	
1999	Pearson's R	.130	.000		

		Spearman Correlation	.152	.000
			803	
	2008	Pearson's R	.190	.000
		Spearman Correlation	.225	.000
			724	
Italy	1981	Pearson's R	.179	.000
		Spearman Correlation	.198	.000
			879	
	1990	Pearson's R	.188	.000
		Spearman Correlation	.211	.000
			1528	
	1999	Pearson's R	.188	.000
		Spearman Correlation	.210	.000
			1612	
	2008	Pearson's R	.116	.000
		Spearman Correlation	.115	.000
			1104	
Malta	1981	Pearson's R	.120	.028
		Spearman Correlation	.166	.002
			334	
	1990	Pearson's R	.202	.000
		Spearman Correlation	.134	.014
			334	
	1999	Pearson's R	.197	.000
		Spearman Correlation	.214	.000
			892	
	2008	Pearson's R	.051	.077
		Spearman Correlation	.105	.000
			1196	
Netherlands	1981	Pearson's R	.302	.000
		Spearman Correlation	.320	.000
			575	
	1990	Pearson's R	.237	.000
		Spearman Correlation	.260	.000
			561	
	1999	Pearson's R	.178	.000
		Spearman Correlation	.178	.000
			696	
	2008	Pearson's R	.099	.002
		Spearman Correlation	.113	.000
			1027	
Norway	1981	Pearson's R	.299	.000
		Spearman Correlation	.326	.000

			691	
	1990	Pearson's R	.254	.000
		Spearman Correlation	.288	.000
			882	
	2008	Pearson's R	.122	.000
		Spearman Correlation	.128	.000
			998	
Poland	1990	Pearson's R	.074	.044
		Spearman Correlation	.060	.107
			732	
	1999	Pearson's R	.138	.000
		Spearman Correlation	.138	.000
			787	
	2008	Pearson's R	.175	.000
		Spearman Correlation	.215	.000
			1255	
Slovak Republic	1990	Pearson's R	.167	.000
		Spearman Correlation	.186	.000
			726	
	1999	Pearson's R	.195	.000
		Spearman Correlation	.189	.000
			937	
	2008	Pearson's R	.163	.000
		Spearman Correlation	.168	.000
			1192	
Spain	1981	Pearson's R	.304	.000
		Spearman Correlation	.319	.000
			1601	
	1990	Pearson's R	.232	.000
		Spearman Correlation	.222	.000
			1910	
	1999	Pearson's R	.204	.000
		Spearman Correlation	.233	.000
			843	
	2008	Pearson's R	.129	.000
		Spearman Correlation	.167	.000
			1175	
Sweden	1981	Pearson's R	.094	.033
		Spearman Correlation	.135	.002
			517	
	1990	Pearson's R	.186	.000
		Spearman Correlation	.183	.000
			607	

	1999	Pearson's R	.168	.000
		Spearman Correlation	.171	.000
			635	
	2008	Pearson's R	.108	.014
		Spearman Correlation	.104	.019
			515	
Great Britain	1981	Pearson's R	.188	.000
		Spearman Correlation	.215	.000
			751	
	1990	Pearson's R	.192	.000
		Spearman Correlation	.201	.000
			1058	
	1999	Pearson's R	.122	.001
		Spearman Correlation	.134	.000
			697	
	2008	Pearson's R	.168	.000
		Spearman Correlation	.178	.000
			1067	
Northern Ireland	1981	Pearson's R	.381	.000
		Spearman Correlation	.479	.000
			241	
	1990	Pearson's R	.223	.000
		Spearman Correlation	.307	.000
			260	
	1999	Pearson's R	.165	.000
		Spearman Correlation	.190	.000
			734	
	2008	Pearson's R	-.087	.105
		Spearman Correlation	.029	.589
			353	

Appendix 41: H3 DV3 Pooled sample correlations

Correlations: Pooled sample		Value	Sig.
1990	Pearson's R	.026	.002
	Spearman Correlation	.026	.002
	N	14303	
1999	Pearson's R	.032	.003
	Spearman Correlation	.032	.003
	N	8441	
2008	Pearson's R	.047	.000
	Spearman Correlation	.049	.000
	N	15755	

Appendix 42: H3 DV3 Cross-national correlations

Country	Wave		Value	Sig.
Belgium	1990	Pearson's R	.088	.001
		Spearman Correlation	.089	.000
		N	1539	
	2008	Pearson's R	-.022	.415
		Spearman Correlation	-.018	.498
		N	1363	
Denmark	1990	Pearson's R	.069	.060
		Spearman Correlation	.075	.043
		N	731	
	2008	Pearson's R	.044	.142
		Spearman Correlation	.040	.182
		N	1129	
France	1990	Pearson's R	.153	.000
		Spearman Correlation	.155	.000
		N	749	
	1999	Pearson's R	.143	.000
		Spearman Correlation	.134	.000
		N	1277	
	2008	Pearson's R	.167	.000
		Spearman Correlation	.168	.000
		N	1346	
Germany	1990	Pearson's R	.121	.000
		Spearman Correlation	.113	.000
		N	2005	
	1999	Pearson's R	.076	.003
		Spearman Correlation	.072	.004
		N	1579	

	2008	Pearson's R	.131	.000
		Spearman Correlation	.127	.000
			1586	
Iceland	1990	Pearson's R	.133	.004
		Spearman Correlation	.141	.002
			463	
	1999	Pearson's R	.008	.842
		Spearman Correlation	.020	.620
			597	
	2008	Pearson's R	-.037	.402
		Spearman Correlation	-.026	.564
			513	
Ireland	1990	Pearson's R	.043	.192
		Spearman Correlation	.032	.330
			927	
	1999	Pearson's R	.066	.070
		Spearman Correlation	.080	.029
			748	
	2008	Pearson's R	-.056	.150
		Spearman Correlation	-.050	.195
			669	
Italy	1990	Pearson's R	-.016	.542
		Spearman Correlation	-.009	.737
			1370	
	1999	Pearson's R	.047	.072
		Spearman Correlation	.042	.105
			1496	
	2008	Pearson's R	.052	.103
		Spearman Correlation	.046	.155
			972	
Malta	1990	Pearson's R	.111	.062
		Spearman Correlation	.098	.099
			283	
	2008	Pearson's R	.086	.006
		Spearman Correlation	.091	.003
			1038	
Netherlands	1990	Pearson's R	.126	.003
		Spearman Correlation	.143	.001
			537	
	1999	Pearson's R	.034	.372
		Spearman Correlation	.034	.369
			685	
	2008	Pearson's R	-.031	.325

		Spearman Correlation	-.032	.314
			1013	
Norway	1990	Pearson's R	.016	.640
		Spearman Correlation	.015	.665
			850	
	2008	Pearson's R	.015	.625
		Spearman Correlation	.010	.745
			1009	
Poland	1990	Pearson's R	-.035	.364
		Spearman Correlation	.014	.714
			689	
	1999	Pearson's R	-.058	.109
		Spearman Correlation	-.070	.053
			769	
	2008	Pearson's R	-.055	.053
		Spearman Correlation	-.053	.065
			1221	
	Slovak Republic	1990	Pearson's R	.061
Spearman Correlation			.048	.215
			659	
2008		Pearson's R	.006	.842
		Spearman Correlation	.000	.994
			1125	
Spain	1990	Pearson's R	.166	.000
		Spearman Correlation	.150	.000
			1628	
	2008	Pearson's R	.124	.000
		Spearman Correlation	.143	.000
			1115	
Sweden	1990	Pearson's R	-.044	.287
		Spearman Correlation	-.009	.831
			591	
	2008	Pearson's R	.045	.311
		Spearman Correlation	.052	.238
			516	
Great Britain	1990	Pearson's R	-.022	.473
		Spearman Correlation	-.028	.363
			1035	
	1999	Pearson's R	-.002	.960
		Spearman Correlation	-.006	.872
			663	
	2008	Pearson's R	.039	.214
		Spearman Correlation	.033	.288

			1023	
Northern Ireland	1990	Pearson's R	.155	.013
		Spearman Correlation	.176	.005
			255	
	1999	Pearson's R	.009	.808
		Spearman Correlation	.006	.882
			666	
2008	Pearson's R	.005	.923	
	Spearman Correlation	.011	.845	
		316		

Appendix 43: H3 DV4 Pooled sample correlations

Spearman Correlations: Pooled data		
1981	Spearman's rho	-.242**
1990	Spearman's rho	-.207**
1999	Spearman's rho	-.159**
2008	Spearman's rho	-.162**

** $p < .001$, * $p < .05$

Appendix 44: H3 DV4 Cross-national correlations

Correlations: Materialism-Postmaterialism					
			Value	Approx. Sig.	
Belgium	1981	Pearson's R	-.088	.036	
		Spearman Correlation	-.104	.013	
			575		
	1990	Pearson's R	-.149	.000	
		Spearman Correlation	-.159	.000	
			1726		
1999	Pearson's R	-.108	.000		
	Spearman Correlation	-.108	.000		
		1407			
2008	Pearson's R	-.088	.001		
	Spearman Correlation	-.099	.000		
		1374			
Denmark	1981	Pearson's R	-.274	.000	
		Spearman Correlation	-.254	.000	
			591		
	1990	Pearson's R	-.138	.000	
		Spearman Correlation	-.153	.000	
			738		
1999	Pearson's R	.007	.866		
	Spearman Correlation	.007	.861		
		621			
2008	Pearson's R	-.039	.187		
	Spearman Correlation	-.043	.149		
		1130			
France	1981	Pearson's R	-.224	.000	
		Spearman Correlation	-.225	.000	

			852	
	1990	Pearson's R	-.193	.000
		Spearman Correlation	-.186	.000
			780	
	1999	Pearson's R	-.073	.007
		Spearman Correlation	-.064	.019
			1344	
	2008	Pearson's R	-.117	.000
		Spearman Correlation	-.111	.000
			1346	
Germany	1981	Pearson's R	-.256	.000
		Spearman Correlation	-.269	.000
			829	
	1990	Pearson's R	-.185	.000
		Spearman Correlation	-.187	.000
			2238	
	1999	Pearson's R	-.086	.000
		Spearman Correlation	-.086	.000
			1697	
	2008	Pearson's R	-.084	.001
		Spearman Correlation	-.080	.001
			1640	
Iceland	1981	Pearson's R	-.232	.000
		Spearman Correlation	-.236	.000
			701	
	1990	Pearson's R	-.126	.006
		Spearman Correlation	-.126	.006
			469	
	1999	Pearson's R	-.199	.000
		Spearman Correlation	-.202	.000
			614	
	2008	Pearson's R	-.160	.000
		Spearman Correlation	-.163	.000
			509	
Ireland	1981	Pearson's R	-.266	.000
		Spearman Correlation	-.268	.000
			947	
	1990	Pearson's R	-.165	.000
		Spearman Correlation	-.166	.000
			930	
	1999	Pearson's R	-.126	.000
		Spearman Correlation	-.125	.000
			791	

	2008	Pearson's R	-.163	.000
		Spearman Correlation	-.161	.000
			709	
Italy	1981	Pearson's R	-.234	.000
		Spearman Correlation	-.209	.000
			865	
	1990	Pearson's R	-.186	.000
		Spearman Correlation	-.186	.000
			1538	
	1999	Pearson's R	-.160	.000
		Spearman Correlation	-.153	.000
			1583	
	2008	Pearson's R	-.176	.000
		Spearman Correlation	-.175	.000
			1040	
Malta	1981	Pearson's R	.025	.651
		Spearman Correlation	.020	.727
			317	
	1990	Pearson's R	.084	.137
		Spearman Correlation	.042	.463
			315	
	1999	Pearson's R	-.093	.005
		Spearman Correlation	-.092	.006
			895	
	2008	Pearson's R	-.092	.002
		Spearman Correlation	-.110	.000
			1170	
Netherlands	1981	Pearson's R	-.122	.005
		Spearman Correlation	-.119	.006
			533	
	1990	Pearson's R	-.262	.000
		Spearman Correlation	-.254	.000
			567	
	1999	Pearson's R	-.170	.000
		Spearman Correlation	-.159	.000
			677	
	2008	Pearson's R	-.142	.000
		Spearman Correlation	-.144	.000
			1020	
Norway	1981	Pearson's R	-.151	.000
		Spearman Correlation	-.142	.000
			660	
	1990	Pearson's R	-.131	.000

		Spearman Correlation	-.126	.000
			875	
	2008	Pearson's R	-.118	.000
		Spearman Correlation	-.144	.000
			991	
Poland	1990	Pearson's R	-.080	.031
		Spearman Correlation	-.072	.052
			724	
	1999	Pearson's R	-.131	.000
		Spearman Correlation	-.133	.000
			799	
	2008	Pearson's R	-.167	.000
		Spearman Correlation	-.162	.000
			1251	
Slovak Republic	1990	Pearson's R	-.140	.000
		Spearman Correlation	-.143	.000
			710	
	1999	Pearson's R	-.070	.035
		Spearman Correlation	-.097	.003
			904	
	2008	Pearson's R	-.028	.340
		Spearman Correlation	-.027	.370
			1142	
Spain	1981	Pearson's R	-.389	.000
		Spearman Correlation	-.397	.000
			1608	
	1990	Pearson's R	-.286	.000
		Spearman Correlation	-.302	.000
			1857	
	1999	Pearson's R	-.249	.000
		Spearman Correlation	-.254	.000
			834	
	2008	Pearson's R	-.209	.000
		Spearman Correlation	-.214	.000
			1171	
Sweden	1981	Pearson's R	-.147	.001
		Spearman Correlation	-.151	.001
			504	
	1990	Pearson's R	-.159	.000
		Spearman Correlation	-.132	.001
			599	
	1999	Pearson's R	-.156	.000
		Spearman Correlation	-.155	.000

			628	
	2008	Pearson's R	-.066	.172
		Spearman Correlation	-.065	.176
			431	
Great Britain	1981	Pearson's R	-.070	.055
		Spearman Correlation	-.077	.036
			745	
	1990	Pearson's R	-.033	.286
		Spearman Correlation	-.040	.189
			1066	
	2008	Pearson's R	-.081	.009
		Spearman Correlation	-.085	.006
			1029	
Northern Ireland	1981	Pearson's R	.047	.474
		Spearman Correlation	.049	.453
			235	
	1990	Pearson's R	-.184	.003
		Spearman Correlation	-.187	.003
			259	
	1999	Pearson's R	.002	.954
		Spearman Correlation	-.015	.685
			753	
	2008	Pearson's R	-.029	.592
		Spearman Correlation	-.028	.595
			354	

Appendix 45: H3 DV5 Pooled sample correlations

Correlations: Pooled sample		Value	Sig.
1981	Pearson's R	-.001	.909
	Spearman Correlation	-.006	.549
	N	10555	
1990	Pearson's R	-.006	.435
	Spearman Correlation	-.005	.527
	N	15984	
1999	Pearson's R	.097	.000
	Spearman Correlation	.096	.000
	N	14651	
2008	Pearson's R	.117	.000
	Spearman Correlation	.111	.000
	N	16371	

Appendix 46: H3 DV5 Cross-national correlations

Country	Wave		Value	Sig.
Belgium	1981	Pearson's R	-.072	.062
		Spearman Correlation	-.087	.026
		N	663	
	1990	Pearson's R	-.080	.001
		Spearman Correlation	-.084	.000
		N	1817	
	1999	Pearson's R	.010	.711
		Spearman Correlation	-.007	.799
		N	1479	
	2008	Pearson's R	-.011	.670
		Spearman Correlation	-.004	.874
		N	1374	
Denmark	1981	Pearson's R	-.144	.000
		Spearman Correlation	-.153	.000
		N	643	
	1990	Pearson's R	-.046	.199
		Spearman Correlation	-.040	.267
		N	769	
	1999	Pearson's R	.014	.719
		Spearman Correlation	.007	.858
		N	654	
	2008	Pearson's R	-.016	.593
		Spearman Correlation	-.024	.413
		N	1151	

France	1981	Pearson's R	-.110	.001
		Spearman Correlation	-.109	.001
			882	
	1990	Pearson's R	-.080	.022
		Spearman Correlation	-.078	.028
			805	
	1999	Pearson's R	-.042	.120
		Spearman Correlation	-.037	.165
			1377	
	2008	Pearson's R	-.020	.459
		Spearman Correlation	-.016	.548
			1356	
Germany	1981	Pearson's R	-.078	.023
		Spearman Correlation	-.088	.010
			855	
	1990	Pearson's R	-.116	.000
		Spearman Correlation	-.113	.000
			2326	
	1999	Pearson's R	-.033	.189
		Spearman Correlation	-.039	.117
			1628	
	2008	Pearson's R	-.031	.205
		Spearman Correlation	-.030	.214
			1665	
Iceland	1981	Pearson's R	.077	.039
		Spearman Correlation	.073	.051
			722	
	1990	Pearson's R	.012	.801
		Spearman Correlation	.016	.730
			474	
	1999	Pearson's R	-.007	.859
		Spearman Correlation	-.002	.955
			621	
	2008	Pearson's R	.052	.232
		Spearman Correlation	.029	.505
			522	
Ireland	1981	Pearson's R	-.044	.174
		Spearman Correlation	-.048	.137
			974	
	1990	Pearson's R	.116	.000
		Spearman Correlation	.111	.001
			940	
1999	Pearson's R	.187	.000	

		Spearman Correlation	.184	.000
			813	
	2008	Pearson's R	.012	.773
		Spearman Correlation	.014	.729
			577	
Italy	1981	Pearson's R	.100	.003
		Spearman Correlation	.096	.004
			900	
	1990	Pearson's R	-.016	.521
		Spearman Correlation	-.010	.686
			1572	
	1999	Pearson's R	.018	.462
		Spearman Correlation	.019	.430
			1659	
	2008	Pearson's R	.082	.007
		Spearman Correlation	.085	.005
			1096	
Malta	1981	Pearson's R	.030	.566
		Spearman Correlation	.033	.536
			358	
	1990	Pearson's R	.028	.601
		Spearman Correlation	.013	.811
			346	
	1999	Pearson's R	.009	.789
		Spearman Correlation	-.004	.895
			899	
	2008	Pearson's R	-.028	.354
		Spearman Correlation	-.009	.750
			1135	
Netherlands	1981	Pearson's R	.031	.454
		Spearman Correlation	.036	.376
			601	
	1990	Pearson's R	.042	.311
		Spearman Correlation	.030	.469
			579	
	1999	Pearson's R	.030	.431
		Spearman Correlation	.026	.493
			689	
	2008	Pearson's R	.126	.000
		Spearman Correlation	.126	.000
			1010	
Norway	1981	Pearson's R	.091	.015
		Spearman Correlation	.084	.024

			717	
	1990	Pearson's R	-.015	.649
		Spearman Correlation	-.034	.302
			901	
	2008	Pearson's R	.030	.348
		Spearman Correlation	.053	.092
			1008	
Poland	1990	Pearson's R	-.013	.729
		Spearman Correlation	-.012	.734
			755	
	1999	Pearson's R	.127	.000
		Spearman Correlation	.120	.001
			829	
	2008	Pearson's R	-.048	.089
		Spearman Correlation	-.043	.129
			1245	
Slovak Republic	1990	Pearson's R	.012	.738
		Spearman Correlation	.012	.739
			749	
	1999	Pearson's R	.005	.872
		Spearman Correlation	.000	.992
			968	
	2008	Pearson's R	-.032	.284
		Spearman Correlation	-.025	.395
			1126	
Spain	1981	Pearson's R	-.028	.250
		Spearman Correlation	-.028	.246
			1720	
	1990	Pearson's R	.017	.439
		Spearman Correlation	.021	.348
			1996	
	1999	Pearson's R	-.090	.007
		Spearman Correlation	-.091	.006
			915	
	2008	Pearson's R	-.094	.001
		Spearman Correlation	-.082	.004
			1229	
Sweden	1981	Pearson's R	-.018	.677
		Spearman Correlation	-.011	.793
			535	
	1990	Pearson's R	.013	.754
		Spearman Correlation	.006	.876
			617	

	1999	Pearson's R	.018	.643
		Spearman Correlation	.002	.965
			643	
	2008	Pearson's R	-.010	.810
		Spearman Correlation	-.039	.358
			552	
Great Britain	1981	Pearson's R	-.036	.325
		Spearman Correlation	-.034	.354
			757	
	1990	Pearson's R	-.038	.211
		Spearman Correlation	-.022	.478
			1087	
	1999	Pearson's R	-.077	.042
		Spearman Correlation	-.079	.035
			708	
	2008	Pearson's R	-.008	.804
		Spearman Correlation	-.016	.604
			1053	
Northern Ireland	1981	Pearson's R	-.150	.019
		Spearman Correlation	-.160	.012
			244	
	1990	Pearson's R	-.013	.829
		Spearman Correlation	-.014	.825
			263	
	1999	Pearson's R	-.009	.805
		Spearman Correlation	-.010	.781
			785	
	2008	Pearson's R	.108	.052
		Spearman Correlation	.110	.048
			322	

Appendix 47: H3 DV6 Pooled sample correlations

Correlations: Pooled sample		Value	Sig.
1981	Pearson's R	-.014	.148
	Spearman Correlation	-.018	.063
	N	10559	
1990	Pearson's R	-.053	.000
	Spearman Correlation	-.056	.000
	N	15976	
1999	Pearson's R	.054	.000
	Spearman Correlation	.054	.000
	N	14669	
2008	Pearson's R	.087	.000
	Spearman Correlation	.088	.000
	N	16352	

Appendix 48: H3 DV6 Cross-national correlations

Country	Wave		Value	Sig.
Belgium	1981	Pearson's R	-.024	.536
		Spearman Correlation	-.049	.205
		N	663	
	1990	Pearson's R	-.038	.110
		Spearman Correlation	-.033	.163
		N	1816	
	1999	Pearson's R	.009	.729
		Spearman Correlation	.003	.915
		N	1475	
	2008	Pearson's R	-.004	.896
		Spearman Correlation	.004	.886
		N	1379	
Denmark	1981	Pearson's R	-.161	.000
		Spearman Correlation	-.134	.001
		N	648	
	1990	Pearson's R	-.093	.010
		Spearman Correlation	-.088	.015
		N	769	
	1999	Pearson's R	.053	.172
		Spearman Correlation	.042	.283
		N	654	
	2008	Pearson's R	.036	.219
		Spearman Correlation	.035	.231
		N	1149	

France	1981	Pearson's R	.017	.605
		Spearman Correlation	.024	.468
			885	
	1990	Pearson's R	-.004	.899
		Spearman Correlation	.003	.943
			805	
	1999	Pearson's R	.004	.869
		Spearman Correlation	.010	.714
			1376	
	2008	Pearson's R	.037	.169
		Spearman Correlation	.048	.079
			1355	
Germany	1981	Pearson's R	.043	.208
		Spearman Correlation	.023	.492
			859	
	1990	Pearson's R	-.013	.524
		Spearman Correlation	-.016	.452
			2318	
	1999	Pearson's R	.049	.046
		Spearman Correlation	.056	.023
			1636	
	2008	Pearson's R	-.002	.926
		Spearman Correlation	.000	.988
			1660	
Iceland	1981	Pearson's R	.002	.967
		Spearman Correlation	-.014	.706
			719	
	1990	Pearson's R	.015	.737
		Spearman Correlation	.021	.645
			474	
	1999	Pearson's R	-.056	.164
		Spearman Correlation	-.052	.194
			621	
	2008	Pearson's R	.034	.437
		Spearman Correlation	.028	.527
			529	
Ireland	1981	Pearson's R	-.071	.026
		Spearman Correlation	-.092	.004
			980	
	1990	Pearson's R	.030	.362
		Spearman Correlation	.010	.754
		940		
1999	Pearson's R	.120	.001	

		Spearman Correlation	.140	.000
			814	
	2008	Pearson's R	.062	.133
		Spearman Correlation	.070	.090
			592	
Italy	1981	Pearson's R	-.030	.375
		Spearman Correlation	-.056	.093
			894	
	1990	Pearson's R	-.077	.002
		Spearman Correlation	-.096	.000
			1565	
	1999	Pearson's R	.060	.015
		Spearman Correlation	.067	.006
			1659	
	2008	Pearson's R	.066	.030
		Spearman Correlation	.069	.024
			1082	
Malta	1981	Pearson's R	-.049	.359
		Spearman Correlation	-.074	.162
			358	
	1990	Pearson's R	.013	.809
		Spearman Correlation	.046	.394
			349	
	1999	Pearson's R	-.046	.170
		Spearman Correlation	-.061	.069
			895	
	2008	Pearson's R	-.132	.000
		Spearman Correlation	-.097	.001
			1135	
Netherlands	1981	Pearson's R	.079	.053
		Spearman Correlation	.067	.099
			601	
	1990	Pearson's R	-.022	.593
		Spearman Correlation	-.008	.856
			579	
	1999	Pearson's R	-.050	.185
		Spearman Correlation	-.026	.486
			697	
	2008	Pearson's R	.000	.991
		Spearman Correlation	.004	.892
			1018	
Norway	1981	Pearson's R	.085	.023
		Spearman Correlation	.092	.013

			717	
	1990	Pearson's R	-.044	.182
		Spearman Correlation	-.051	.130
			901	
	2008	Pearson's R	-.043	.178
		Spearman Correlation	-.044	.162
			1004	
Poland	1990	Pearson's R	-.015	.675
		Spearman Correlation	-.013	.724
			755	
	1999	Pearson's R	.095	.006
		Spearman Correlation	.083	.017
			825	
	2008	Pearson's R	-.037	.196
		Spearman Correlation	-.034	.229
			1233	
Slovak Republic	1990	Pearson's R	-.040	.276
		Spearman Correlation	-.067	.067
			749	
	1999	Pearson's R	-.032	.315
		Spearman Correlation	-.071	.028
			967	
	2008	Pearson's R	.144	.000
		Spearman Correlation	.134	.000
			1133	
Spain	1981	Pearson's R	-.046	.055
		Spearman Correlation	-.044	.066
			1720	
	1990	Pearson's R	-.004	.867
		Spearman Correlation	-.010	.662
			2000	
	1999	Pearson's R	-.078	.018
		Spearman Correlation	-.072	.029
			915	
	2008	Pearson's R	-.043	.131
		Spearman Correlation	-.046	.105
			1225	
Sweden	1981	Pearson's R	-.093	.031
		Spearman Correlation	-.077	.074
			535	
	1990	Pearson's R	.014	.732
		Spearman Correlation	.017	.671
			617	

	1999	Pearson's R	-.053	.177
		Spearman Correlation	-.069	.081
			645	
	2008	Pearson's R	.094	.027
		Spearman Correlation	.077	.070
			555	
Great Britain	1981	Pearson's R	-.045	.217
		Spearman Correlation	-.040	.277
			753	
	1990	Pearson's R	-.057	.062
		Spearman Correlation	-.057	.061
			1084	
	1999	Pearson's R	-.029	.440
		Spearman Correlation	-.028	.458
			710	
	2008	Pearson's R	.082	.008
		Spearman Correlation	.072	.019
			1057	
Northern Ireland	1981	Pearson's R	.131	.041
		Spearman Correlation	.118	.064
			245	
	1990	Pearson's R	.008	.903
		Spearman Correlation	-.021	.737
			263	
	1999	Pearson's R	-.009	.794
		Spearman Correlation	-.010	.769
			787	
	2008	Pearson's R	.070	.218
		Spearman Correlation	.077	.177
			310	

Appendix 49: H3 DV7 Pooled sample correlations

Correlations: Pooled sample		Value	Sig.
1981	Pearson's R	.354	.000
	Spearman Correlation	.360	.000
	N	10295	
1990	Pearson's R	.335	.000
	Spearman Correlation	.339	.000
	N	15726	
1999	Pearson's R	.324	.000
	Spearman Correlation	.328	.000
	N	14296	
2008	Pearson's R	.303	.000
	Spearman Correlation	.301	.000
	N	16373	

Appendix 50: H3 DV7 Cross-national correlations

Country	Wave		Value	Sig.
Belgium	1981	Pearson's R	.352	.000
		Spearman Correlation	.362	.000
		N	604	
	1990	Pearson's R	.306	.000
		Spearman Correlation	.298	.000
		N	1791	
	1999	Pearson's R	.279	.000
		Spearman Correlation	.256	.000
		N	1417	
	2008	Pearson's R	.281	.000
		Spearman Correlation	.265	.000
		N	1374	
Denmark	1981	Pearson's R	.218	.000
		Spearman Correlation	.136	.001
		N	626	
	1990	Pearson's R	.186	.000
		Spearman Correlation	.145	.000
		N	751	
	1999	Pearson's R	.186	.000
		Spearman Correlation	.161	.000
		N	627	
	2008	Pearson's R	.173	.000
		Spearman Correlation	.175	.000
		N	1111	

France	1981	Pearson's R	.365	.000
		Spearman Correlation	.358	.000
			873	
	1990	Pearson's R	.308	.000
		Spearman Correlation	.284	.000
			776	
	1999	Pearson's R	.236	.000
		Spearman Correlation	.218	.000
			1346	
	2008	Pearson's R	.253	.000
		Spearman Correlation	.247	.000
			1352	
Germany	1981	Pearson's R	.347	.000
		Spearman Correlation	.365	.000
			825	
	1990	Pearson's R	.314	.000
		Spearman Correlation	.325	.000
			2306	
	1999	Pearson's R	.324	.000
		Spearman Correlation	.330	.000
			1704	
	2008	Pearson's R	.284	.000
		Spearman Correlation	.266	.000
			1579	
Iceland	1981	Pearson's R	.305	.000
		Spearman Correlation	.306	.000
			707	
	1990	Pearson's R	.171	.000
		Spearman Correlation	.180	.000
			467	
	1999	Pearson's R	.221	.000
		Spearman Correlation	.234	.000
			617	
	2008	Pearson's R	.273	.000
		Spearman Correlation	.293	.000
			515	
Ireland	1981	Pearson's R	.410	.000
		Spearman Correlation	.435	.000
			964	
	1990	Pearson's R	.376	.000
		Spearman Correlation	.367	.000
			927	
1999	Pearson's R	.296	.000	

		Spearman Correlation	.288	.000
			783	
	2008	Pearson's R	.329	.000
		Spearman Correlation	.321	.000
			708	
Italy	1981	Pearson's R	.370	.000
		Spearman Correlation	.369	.000
			875	
	1990	Pearson's R	.340	.000
		Spearman Correlation	.351	.000
			1549	
	1999	Pearson's R	.218	.000
		Spearman Correlation	.243	.000
			1603	
	2008	Pearson's R	.243	.000
		Spearman Correlation	.260	.000
			1079	
Malta	1981	Pearson's R	.118	.029
		Spearman Correlation	.115	.034
			339	
	1990	Pearson's R	.150	.006
		Spearman Correlation	.175	.001
			335	
	1999	Pearson's R	.280	.000
		Spearman Correlation	.284	.000
			886	
	2008	Pearson's R	.176	.000
		Spearman Correlation	.192	.000
			1193	
Netherlands	1981	Pearson's R	.368	.000
		Spearman Correlation	.392	.000
			590	
	1990	Pearson's R	.291	.000
		Spearman Correlation	.271	.000
			576	
	1999	Pearson's R	.264	.000
		Spearman Correlation	.239	.000
			692	
	2008	Pearson's R	.267	.000
		Spearman Correlation	.253	.000
			1022	
Norway	1981	Pearson's R	.308	.000
		Spearman Correlation	.308	.000

			713	
	1990	Pearson's R	.340	.000
		Spearman Correlation	.334	.000
			889	
	2008	Pearson's R	.157	.000
		Spearman Correlation	.137	.000
			999	
Poland	1990	Pearson's R	.263	.000
		Spearman Correlation	.278	.000
			703	
	1999	Pearson's R	.323	.000
		Spearman Correlation	.352	.000
			783	
	2008	Pearson's R	.143	.000
		Spearman Correlation	.159	.000
			1238	
Slovak Republic	1990	Pearson's R	.358	.000
		Spearman Correlation	.393	.000
			746	
	1999	Pearson's R	.369	.000
		Spearman Correlation	.437	.000
			936	
	2008	Pearson's R	.366	.000
		Spearman Correlation	.381	.000
			1168	
Spain	1981	Pearson's R	.283	.000
		Spearman Correlation	.292	.000
			1681	
	1990	Pearson's R	.339	.000
		Spearman Correlation	.362	.000
			1971	
	1999	Pearson's R	.364	.000
		Spearman Correlation	.368	.000
			857	
	2008	Pearson's R	.282	.000
		Spearman Correlation	.287	.000
			1195	
Sweden	1981	Pearson's R	.217	.000
		Spearman Correlation	.164	.000
			535	
	1990	Pearson's R	.192	.000
		Spearman Correlation	.152	.000
			612	

	1999	Pearson's R	.204	.000
		Spearman Correlation	.181	.000
			630	
	2008	Pearson's R	.167	.000
		Spearman Correlation	.151	.001
			510	
Great Britain	1981	Pearson's R	.300	.000
		Spearman Correlation	.297	.000
			744	
	1990	Pearson's R	.309	.000
		Spearman Correlation	.305	.000
			1066	
	1999	Pearson's R	.203	.000
		Spearman Correlation	.173	.000
			677	
	2008	Pearson's R	.236	.000
		Spearman Correlation	.228	.000
			1036	
Northern Ireland	1981	Pearson's R	.380	.000
		Spearman Correlation	.393	.000
			248	
	1990	Pearson's R	.302	.000
		Spearman Correlation	.326	.000
			261	
	1999	Pearson's R	.221	.000
		Spearman Correlation	.233	.000
			754	
	2008	Pearson's R	.323	.000
		Spearman Correlation	.338	.000
			356	

Appendix 51: H3 DV8 Pooled sample correlations

Correlations: Pooled sample		Value	Sig.
1981	Pearson's R	.111	.000
	Spearman Correlation	.112	.000
	N	10401	
1990	Pearson's R	.095	.000
	Spearman Correlation	.094	.000
	N	15907	
1999	Pearson's R	.076	.000
	Spearman Correlation	.073	.000
	N	14664	
2008	Pearson's R	.049	.000
	Spearman Correlation	.046	.000
	N	16736	

Appendix 52: H3 DV8 Cross-national correlations

Country	Wave		Value	Sig.
Belgium	1981	Pearson's R	.053	.184
		Spearman Correlation	.060	.134
		N	628	
	1990	Pearson's R	.044	.062
		Spearman Correlation	.046	.050
		N	1804	
	1999	Pearson's R	.038	.151
		Spearman Correlation	.024	.357
		N	1464	
	2008	Pearson's R	.006	.819
		Spearman Correlation	.008	.781
		N	1379	
Denmark	1981	Pearson's R	.064	.109
		Spearman Correlation	.030	.449
		N	635	
	1990	Pearson's R	.069	.056
		Spearman Correlation	.069	.056
		N	762	
	1999	Pearson's R	.005	.893
		Spearman Correlation	-.013	.737
		N	647	
	2008	Pearson's R	.019	.529
		Spearman Correlation	.006	.838
		N	1161	

France	1981	Pearson's R	.104	.002	
		Spearman Correlation	.091	.007	
				876	
	1990	Pearson's R	.066	.061	
		Spearman Correlation	.058	.102	
				799	
	1999	Pearson's R	.042	.121	
		Spearman Correlation	.035	.198	
				1373	
	2008	Pearson's R	.030	.277	
		Spearman Correlation	.018	.511	
				1358	
Germany	1981	Pearson's R	-.030	.382	
		Spearman Correlation	-.022	.529	
				841	
	1990	Pearson's R	-.036	.083	
		Spearman Correlation	-.039	.061	
				2309	
	1999	Pearson's R	-.039	.108	
		Spearman Correlation	-.031	.192	
				1722	
	2008	Pearson's R	-.014	.557	
		Spearman Correlation	-.015	.547	
				1663	
Iceland	1981	Pearson's R	.174	.000	
		Spearman Correlation	.188	.000	
				725	
	1990	Pearson's R	.119	.010	
		Spearman Correlation	.114	.013	
				472	
	1999	Pearson's R	.152	.000	
		Spearman Correlation	.158	.000	
				620	
	2008	Pearson's R	.142	.001	
		Spearman Correlation	.152	.000	
				525	
Ireland	1981	Pearson's R	.133	.000	
		Spearman Correlation	.135	.000	
				973	
	1990	Pearson's R	.121	.000	
		Spearman Correlation	.127	.000	
				935	
	1999	Pearson's R	.218	.000	

		Spearman Correlation	.204	.000
			810	
	2008	Pearson's R	.081	.029
		Spearman Correlation	.075	.045
			720	
Italy	1981	Pearson's R	.047	.167
		Spearman Correlation	.043	.200
			879	
	1990	Pearson's R	.062	.014
		Spearman Correlation	.053	.037
			1566	
	1999	Pearson's R	.058	.019
		Spearman Correlation	.056	.022
			1645	
	2008	Pearson's R	.115	.000
		Spearman Correlation	.126	.000
			1095	
Malta	1981	Pearson's R	.016	.765
		Spearman Correlation	.034	.531
			346	
	1990	Pearson's R	-.058	.285
		Spearman Correlation	-.087	.110
			342	
	1999	Pearson's R	.029	.387
		Spearman Correlation	.023	.491
			895	
	2008	Pearson's R	-.017	.564
		Spearman Correlation	.012	.672
			1210	
Netherlands	1981	Pearson's R	.044	.280
		Spearman Correlation	.043	.292
			602	
	1990	Pearson's R	.136	.001
		Spearman Correlation	.141	.001
			577	
	1999	Pearson's R	.087	.023
		Spearman Correlation	.081	.033
			689	
	2008	Pearson's R	-.009	.782
		Spearman Correlation	-.011	.735
			1023	
Norway	1981	Pearson's R	.119	.002
		Spearman Correlation	.121	.001

			710	
	1990	Pearson's R	.131	.000
		Spearman Correlation	.142	.000
			897	
	2008	Pearson's R	.065	.040
		Spearman Correlation	.066	.036
			1006	
Poland	1990	Pearson's R	.144	.000
		Spearman Correlation	.119	.001
			748	
	1999	Pearson's R	.077	.027
		Spearman Correlation	.077	.027
			827	
	2008	Pearson's R	-.008	.762
		Spearman Correlation	-.031	.274
			1269	
Slovak Republic	1990	Pearson's R	.116	.001
		Spearman Correlation	.112	.002
			748	
	1999	Pearson's R	-.073	.024
		Spearman Correlation	-.057	.078
			964	
	2008	Pearson's R	-.076	.009
		Spearman Correlation	-.078	.007
			1191	
Spain	1981	Pearson's R	.057	.019
		Spearman Correlation	.057	.020
			1695	
	1990	Pearson's R	.100	.000
		Spearman Correlation	.104	.000
			1981	
	1999	Pearson's R	.082	.014
		Spearman Correlation	.083	.012
			902	
	2008	Pearson's R	.004	.889
		Spearman Correlation	.009	.746
			1227	
Sweden	1981	Pearson's R	.062	.150
		Spearman Correlation	.035	.419
			535	
	1990	Pearson's R	.065	.109
		Spearman Correlation	.084	.038
			617	

	1999	Pearson's R	.135	.001
		Spearman Correlation	.117	.003
			642	
	2008	Pearson's R	.003	.938
		Spearman Correlation	.002	.971
			527	
Great Britain	1981	Pearson's R	.097	.008
		Spearman Correlation	.085	.021
			749	
	1990	Pearson's R	.093	.002
		Spearman Correlation	.091	.003
			1079	
	1999	Pearson's R	.011	.769
		Spearman Correlation	-.020	.592
			698	
	2008	Pearson's R	.034	.269
		Spearman Correlation	.037	.228
			1058	
Northern Ireland	1981	Pearson's R	.034	.599
		Spearman Correlation	.013	.839
			244	
	1990	Pearson's R	.204	.001
		Spearman Correlation	.203	.001
			262	
	1999	Pearson's R	.050	.168
		Spearman Correlation	.044	.226
			774	
	2008	Pearson's R	.052	.323
		Spearman Correlation	.072	.174
			360	

Appendix 53: H3 DV9 Pooled sample correlations

Correlations: Pooled sample		Value	Sig.
1999	Pearson's R	.221	.000
	Spearman Correlation	.224	.000
	N	13122	
2008	Pearson's R	.239	.000
	Spearman Correlation	.239	.000
	N	15775	

Appendix 54: H3 DV9 Cross-national correlations

Country	Wave		Value	Sig.
Belgium	1999	Pearson's R	.245	.000
		Spearman Correlation	.228	.000
		N	1412	
	2008	Pearson's R	.320	.000
		Spearman Correlation	.310	.000
		N	1361	
Denmark	1999	Pearson's R	.110	.009
		Spearman Correlation	.080	.058
		N	564	
	2008	Pearson's R	.103	.001
		Spearman Correlation	.122	.000
		N	1069	
France	1999	Pearson's R	.187	.000
		Spearman Correlation	.184	.000
		N	1308	
	2008	Pearson's R	.171	.000
		Spearman Correlation	.162	.000
		N	1335	
Germany	1999	Pearson's R	.230	.000
		Spearman Correlation	.239	.000
		N	1592	
	2008	Pearson's R	.255	.000
		Spearman Correlation	.260	.000
		N	1487	
Iceland	1999	Pearson's R	.161	.000
		Spearman Correlation	.179	.000
		N	583	
	2008	Pearson's R	.113	.011
		Spearman Correlation	.121	.007
		N	501	

Ireland	1999	Pearson's R	.245	.000
		Spearman Correlation	.219	.000
			735	
	2008	Pearson's R	.207	.000
		Spearman Correlation	.231	.000
			645	
Italy	1999	Pearson's R	.208	.000
		Spearman Correlation	.206	.000
			1566	
	2008	Pearson's R	.335	.000
		Spearman Correlation	.337	.000
			1030	
Malta	1999	Pearson's R	.129	.000
		Spearman Correlation	.135	.000
			885	
	2008	Pearson's R	.060	.044
		Spearman Correlation	.067	.024
			1123	
Netherlands	1999	Pearson's R	.162	.000
		Spearman Correlation	.205	.000
			688	
	2008	Pearson's R	.171	.000
		Spearman Correlation	.176	.000
			1003	
Norway	2008	Pearson's R	.117	.000
		Spearman Correlation	.113	.000
			973	
Poland	1999	Pearson's R	.311	.000
		Spearman Correlation	.286	.000
			773	
	2008	Pearson's R	.321	.000
		Spearman Correlation	.341	.000
			1193	
Slovak Republic	1999	Pearson's R	.172	.000
		Spearman Correlation	.209	.000
			913	
	2008	Pearson's R	.219	.000
		Spearman Correlation	.232	.000
			1151	
Spain	1999	Pearson's R	.340	.000
		Spearman Correlation	.339	.000
			813	
	2008	Pearson's R	.365	.000

		Spearman Correlation	.362	.000
			1148	
Sweden	2008	Pearson's R	.159	.000
		Spearman Correlation	.104	.017
			519	
Great Britain	1999	Pearson's R	.152	.000
		Spearman Correlation	.123	.002
			617	
	2008	Pearson's R	.182	.000
		Spearman Correlation	.173	.000
			988	
Northern Ireland	1999	Pearson's R	.094	.013
		Spearman Correlation	.108	.004
			693	
	2008	Pearson's R	.114	.039
		Spearman Correlation	.122	.027
			329	

Appendix 55: H4 DV1 Pooled sample ANOVA

ANOVA: Pooled sample						
		Sum of Squares	df	Mean Square	F	Sig.
1981	Between Groups	12398	2	6199	1507.408	0.000
	Within Groups	55571	13513	4		
	Total	67969	13515			
1990	Between Groups	16847	2	8424	2247.153	0.000
	Within Groups	68326	18227	4		
	Total	85173	18229			
1999	Between Groups	21799	2	10899	2466.612	0.000
	Within Groups	74483	16856	4		
	Total	96281	16858			
2008	Between Groups	21571	2	10786	2469.945	0.000
	Within Groups	77786	17813	4		
	Total	99357	17815			

Appendix 56: H4 DV1 Cross-national ANOVA

ANOVA: Personal Morality							
			Sum of Squares	df	Mean Square	F	Sig.
Belgium	1981	Between Groups	115.242	2	57.621	17.573	.000
		Within Groups	3255.992	993	3.279		
		Total	3371.233	995			
	1990	Between Groups	1359.113	2	679.556	173.980	.000
		Within Groups	9120.392	2335	3.906		
		Total	10479.504	2337			
	1999	Between Groups	847.958	2	423.979	101.884	.000
		Within Groups	7332.365	1762	4.161		
		Total	8180.323	1764			
	2008	Between Groups	578.733	2	289.367	94.281	.000
		Within Groups	4496.393	1465	3.069		
		Total	5075.126	1467			
Denmark	1981	Between Groups	943.014	2	471.507	83.785	.000
		Within Groups	6241.005	1109	5.628		
		Total	7184.018	1111			

	1999	Between Groups	197.316	2	98.658	20.426	.000
		Within Groups	4081.304	845	4.830		
		Total	4278.619	847			
	2008	Between Groups	210.531	2	105.265	30.395	.000
		Within Groups	4845.142	1399	3.463		
		Total	5055.673	1401			
France	1981	Between Groups	592.226	2	296.113	71.965	.000
		Within Groups	4493.237	1092	4.115		
		Total	5085.463	1094			
	1990	Between Groups	407.801	2	203.901	52.208	.000
		Within Groups	3546.216	908	3.906		
		Total	3954.017	910			
	1999	Between Groups	486.478	2	243.239	59.521	.000
		Within Groups	5708.959	1397	4.087		
		Total	6195.437	1399			
	2008	Between Groups	395.448	2	197.724	46.222	.000
		Within Groups	6117.167	1430	4.278		
		Total	6512.615	1432			
Germany	1981	Between Groups	1194.420	2	597.210	165.616	.000
		Within Groups	4579.623	1270	3.606		
		Total	5774.044	1272			
	1990	Between Groups	1880.411	2	940.205	272.532	.000
		Within Groups	9042.170	2621	3.450		
		Total	10922.580	2623			
	1999	Between Groups	906.490	2	453.245	102.649	.000
		Within Groups	7824.237	1772	4.415		
		Total	8730.727	1774			
	2008	Between Groups	1058.725	2	529.363	126.582	.000
		Within Groups	7807.754	1867	4.182		
		Total	8866.479	1869			

Iceland	1981	Between Groups	189.110	2	94.555	30.070	.000
		Within Groups	2713.735	863	3.145		
		Total	2902.845	865			
	1990	Between Groups	106.284	2	53.142	18.544	.000
		Within Groups	1802.558	629	2.866		
		Total	1908.842	631			
	1999	Between Groups	158.932	2	79.466	25.512	.000
		Within Groups	2697.444	866	3.115		
		Total	2856.376	868			
	2008	Between Groups	68.458	2	34.229	14.211	.000
		Within Groups	1731.848	719	2.409		
		Total	1800.306	721			
Ireland	1981	Between Groups	330.454	2	165.227	79.032	.000
		Within Groups	2111.541	1010	2.091		
		Total	2441.995	1012			
	1990	Between Groups	249.058	2	124.529	50.815	.000
		Within Groups	2279.070	930	2.451		
		Total	2528.128	932			
	1999	Between Groups	476.132	2	238.066	67.173	.000
		Within Groups	3047.921	860	3.544		
		Total	3524.053	862			
	2008	Between Groups	421.103	2	210.552	54.456	.000
		Within Groups	3050.613	789	3.866		
		Total	3471.717	791			
Italy	1981	Between Groups	970.693	2	485.346	144.027	.000
		Within Groups	4070.760	1208	3.370		
		Total	5041.452	1210			
	1990	Between Groups	2167.382	2	1083.691	327.325	.000
		Within Groups	5879.888	1776	3.311		
		Total	8047.270	1778			

	1999	Between Groups	1302.908	2	651.454	179.179	.000	
		Within Groups	6508.046	1790	3.636			
		Total	7810.954	1792				
Malta	1990	Between Groups	26.317	2	13.158	11.926	.000	
		Within Groups	358.576	325	1.103			
		Total	384.893	327				
	1999	Between Groups	143.067	2	71.533	50.669	.000	
		Within Groups	1407.533	997	1.412			
		Total	1550.599	999				
	2008	Between Groups	343.743	2	171.872	63.352	.000	
		Within Groups	3223.011	1188	2.713			
		Total	3566.754	1190				
	Netherlands	1981	Between Groups	986.754	2	493.377	92.495	.000
			Within Groups	5323.451	998	5.334		
			Total	6310.205	1000			
1990		Between Groups	885.793	2	442.896	89.688	.000	
		Within Groups	4706.110	953	4.938			
		Total	5591.903	955				
1999		Between Groups	722.797	2	361.398	88.340	.000	
		Within Groups	3964.171	969	4.091			
		Total	4686.967	971				
2008		Between Groups	1597.600	2	798.800	195.405	.000	
		Within Groups	5952.027	1456	4.088			
		Total	7549.627	1458				
Norway		1981	Between Groups	314.852	2	157.426	45.333	.000
			Within Groups	3121.927	899	3.473		
			Total	3436.779	901			
	1990	Between Groups	588.902	2	294.451	77.455	.000	
		Within Groups	4071.507	1071	3.802			
		Total	4660.409	1073				

	2008	Between Groups	628.356	2	314.178	91.397	.000
		Within Groups	3616.268	1052	3.438		
		Total	4244.624	1054			
Poland	1990	Between Groups	93.916	2	46.958	17.207	.000
		Within Groups	2453.361	899	2.729		
		Total	2547.276	901			
	1999	Between Groups	726.255	2	363.128	87.624	.000
		Within Groups	3746.304	904	4.144		
		Total	4472.559	906			
	2008	Between Groups	429.406	2	214.703	54.228	.000
		Within Groups	5135.181	1297	3.959		
		Total	5564.587	1299			
Slovak Republic	1990	Between Groups	556.921	2	278.460	92.690	.000
		Within Groups	2793.904	930	3.004		
		Total	3350.825	932			
	1999	Between Groups	1283.077	2	641.538	149.223	.000
		Within Groups	4591.541	1068	4.299		
		Total	5874.618	1070			
	2008	Between Groups	511.042	2	255.521	55.480	.000
		Within Groups	5637.310	1224	4.606		
		Total	6148.352	1226			
Spain	1981	Between Groups	1943.560	2	971.780	293.046	.000
		Within Groups	6705.215	2022	3.316		
		Total	8648.775	2024			
	1990	Between Groups	2463.864	2	1231.932	326.161	.000
		Within Groups	8649.490	2290	3.777		
		Total	11113.354	2292			
	1999	Between Groups	1565.999	2	782.999	161.038	.000
		Within Groups	4833.040	994	4.862		
		Total	6399.039	996			

	2008	Between Groups	1445.536	2	722.768	170.277	.000
		Within Groups	5310.085	1251	4.245		
		Total	6755.621	1253			
Sweden	1981	Between Groups	198.423	2	99.212	21.819	.000
		Within Groups	3192.013	702	4.547		
		Total	3390.437	704			
	1990	Between Groups	230.265	2	115.133	26.462	.000
		Within Groups	3811.406	876	4.351		
		Total	4041.671	878			
	1999	Between Groups	260.238	2	130.119	39.063	.000
		Within Groups	2931.284	880	3.331		
		Total	3191.522	882			
	2008	Between Groups	408.344	2	204.172	54.877	.000
		Within Groups	3121.547	839	3.721		
		Total	3529.891	841			
Great Britain	1981	Between Groups	158.282	2	79.141	21.122	.000
		Within Groups	3889.297	1038	3.747		
		Total	4047.580	1040			
	1990	Between Groups	248.463	2	124.232	38.986	.000
		Within Groups	4327.375	1358	3.187		
		Total	4575.838	1360			
	1999	Between Groups	230.795	2	115.398	26.168	.000
		Within Groups	4065.851	922	4.410		
		Total	4296.646	924			
	2008	Between Groups	442.585	2	221.293	46.206	.000
		Within Groups	6566.114	1371	4.789		
		Total	7008.700	1373			
Northern Ireland	1981	Between Groups	49.763	2	24.882	12.806	.000
		Within Groups	520.718	268	1.943		
		Total	570.481	270			

1990	Between Groups	43.190	2	21.595	8.281	.000
	Within Groups	732.788	281	2.608		
	Total	775.979	283			
1999	Between Groups	442.452	2	221.226	60.325	.000
	Within Groups	2871.462	783	3.667		
	Total	3313.913	785			
2008	Between Groups	85.441	2	42.721	13.436	.000
	Within Groups	1325.901	417	3.180		
	Total	1411.342	419			

Appendix 57: H4 DV1 Pooled sample Welch test

Welch ANOVA: Pooled sample					
		Statistic	df1	df2	Sig.
1981	Welch	1603.468	2	8515.606	0.000
1990	Welch	2319.995	2	11500.966	0.000
1999	Welch	2539.946	2	10820.916	0.000

Appendix 58: H4 DV1 Cross-national Welch test

Welch's t-test: Personal Morality						
			Statistic	df1	df2	Sig.
Belgium	1990	Welch	178.494	2	1442.677	.000
Belgium	1999	Welch	114.200	2	1037.079	.000
Denmark	1981	Welch	91.292	2	389.448	.000
Denmark	1999	Welch	16.219	2	260.929	.000
Denmark	2008	Welch	22.683	2	330.664	.000
France	1981	Welch	79.472	2	500.374	.000
Germany	1981	Welch	170.348	2	681.772	.000
Germany	1990	Welch	304.146	2	1550.670	.000
Germany	1999	Welch	114.436	2	1092.532	.000
Great Britain	1999	Welch	27.338	2	427.440	.000
Iceland	1981	Welch	32.319	2	253.308	.000
Ireland	1981	Welch	36.926	2	78.922	.000
Ireland	1990	Welch	37.098	2	67.129	.000
Ireland	1999	Welch	58.636	2	167.263	.000
Italy	1981	Welch	121.114	2	535.043	.000
Italy	1990	Welch	289.818	2	637.372	.000
Italy	1999	Welch	162.253	2	611.399	.000

Malta	1990	Welch	3.095	2	20.219	.067
Malta	1999	Welch	26.884	2	78.815	.000
Malta	2008	Welch	33.279	2	144.876	.000
Netherlands	1981	Welch	93.439	2	508.583	.000
Netherlands	1990	Welch	84.385	2	590.361	.000
Netherlands	2008	Welch	179.430	2	796.812	.000
Norway	1981	Welch	52.210	2	386.428	.000
Norway	1990	Welch	114.947	2	441.594	.000
Poland	1990	Welch	13.091	2	66.657	.000
Poland	1999	Welch	70.050	2	98.978	.000
Slovak Republic	1990	Welch	89.849	2	563.215	.000
Spain	1981	Welch	225.980	2	789.935	.000
Spain	1990	Welch	304.168	2	1299.892	.000
Spain	1999	Welch	156.434	2	640.641	.000
Sweden	1999	Welch	30.195	2	215.715	.000
Sweden	2008	Welch	36.386	2	152.852	.000

Appendix 59: H4 DV1 Pooled Sample Post-hoc contrasts

Post-hoc comparisons: Pooled sample								
				Mean	Std.	Sig.	95% Confidence	
				Differenc	Error		Lower	Upper
				e (I-J)			Bound	Bound
1981	Games-Howell	Never	Less	-.86192*	.04756	.000	-.9734	-.7504
			Monthl y	-2.27263*	.04251	.000	-2.3723	-2.1730
	Less	Never	Less	.86192*	.04756	.000	.7504	.9734
			Monthl y	-1.41071*	.03980	.000	-1.5040	-1.3174
	Monthl y	Never	Less	2.27263*	.04251	.000	2.1730	2.3723
			Less	1.41071*	.03980	.000	1.3174	1.5040
1990	Games-Howell	Never	Less	-.80344*	.03876	.000	-.8943	-.7126
			Monthl y	-2.27398*	.03535	.000	-2.3568	-2.1911
	Less	Never	Less	.80344*	.03876	.000	.7126	.8943
			Monthl y	-1.47054*	.03324	.000	-1.5485	-1.3926
	Monthl y	Never	Less	2.27398*	.03535	.000	2.1911	2.3568
			Less	1.47054*	.03324	.000	1.3926	1.5485
1990	Games-Howell	Never	Less	-.61385*	.04259	.000	-.7137	-.5140

			Monthl	-2.58801*	.03924	.000	-2.6800	-2.4960
			y					
	Less		Never	.61385*	.04259	.000	.5140	.7137
			Monthl	-1.97416*	.03857	.000	-2.0646	-1.8838
			y					
	Monthl		Never	2.58801*	.03924	.000	2.4960	2.6800
	y		Less	1.97416*	.03857	.000	1.8838	2.0646
2008	Tukey	Never	Less	-.58974*	.03737	.000	-.6773	-.5022
	HSD		Monthl	-2.62648*	.03846	.000	-2.7166	-2.5363
			y					
	Less	Never	Never	.58974*	.03737	.000	.5022	.6773
			Monthl	-2.03675*	.03983	.000	-2.1301	-1.9434
			y					
	Monthl	Never	Never	2.62648*	.03846	.000	2.5363	2.7166
	y		Less	2.03675*	.03983	.000	1.9434	2.1301

*Mean difference is significant at $p < .05$

Appendix 60: H4 DV2 Pooled sample ANOVA

ANOVA: Pooled sample						
		Sum of Squares	df	Mean Square	F	Sig.
1981	Between Groups	705	2	353	238.633	.000
	Within Groups	21903	14824	1		
	Total	22609	14826			
1990	Between Groups	1188	2	594	391.309	.000
	Within Groups	31936	21040	2		
	Total	33124	21042			
1999	Between Groups	1018	2	509	330.069	.000
	Within Groups	28316	18366	2		
	Total	29334	18368			
2008	Between Groups	491	2	245	153.343	.000
	Within Groups	33297	20813	2		
	Total	33788	20815			

Appendix 61: H4 DV2 Cross-national ANOVA

ANOVA: Civic Morality							
			Sum of Squares	Df	Mean Square	F	Sig.
Belgium	1981	Between Groups	8.412	2	4.206	2.127	.120
		Within Groups	2021.022	1022	1.978		
		Total	2029.434	1024			
	1990	Between Groups	346.716	2	173.358	81.322	.000
		Within Groups	5403.999	2535	2.132		
		Total	5750.714	2537			
	1999	Between Groups	69.822	2	34.911	21.082	.000
		Within Groups	3008.826	1817	1.656		
		Total	3078.649	1819			
	2008	Between Groups	51.157	2	25.579	20.494	.000
		Within Groups	1857.161	1488	1.248		
		Total	1908.319	1490			
Denmark	1981	Between Groups	45.263	2	22.632	29.291	.000
		Within Groups	897.038	1161	.773		
		Total					

		Total	942.302	1163			
	1990	Between Groups	21.222	2	10.611	15.979	.000
		Within Groups	660.736	995	.664		
		Total	681.958	997			
	1999	Between Groups	10.786	2	5.393	10.036	.000
		Within Groups	535.203	996	.537		
		Total	545.989	998			
	2008	Between Groups	6.145	2	3.073	5.260	.005
		Within Groups	863.418	1478	.584		
		Total	869.563	1480			
France	1981	Between Groups	134.342	2	67.171	26.379	.000
		Within Groups	2856.992	1122	2.546		
		Total	2991.334	1124			
	1990	Between Groups	67.208	2	33.604	15.806	.000
		Within Groups	2038.818	959	2.126		
		Total	2106.027	961			
	1999	Between Groups	102.368	2	51.184	23.511	.000
		Within Groups	3313.473	1522	2.177		
		Total	3415.841	1524			
	2008	Between Groups	57.047	2	28.523	16.558	.000
		Within Groups	2552.891	1482	1.723		
		Total	2609.938	1484			
Germany	1981	Between Groups	138.294	2	69.147	44.991	.000
		Within Groups	1990.284	1295	1.537		
		Total	2128.578	1297			
	1990	Between Groups	220.585	2	110.292	75.033	.000
		Within Groups	4668.479	3176	1.470		
		Total	4889.064	3178			
	1999	Between Groups	56.337	2	28.169	18.251	.000
		Within Groups	3022.048	1958	1.543		
		Total					

		Total	3078.385	1960			
	2008	Between Groups	82.629	2	41.315	25.695	.000
		Within Groups	3209.380	1996	1.608		
		Total	3292.010	1998			
Iceland	1981	Between Groups	33.588	2	16.794	20.015	.000
		Within Groups	764.375	911	.839		
		Total	797.963	913			
	1990	Between Groups	21.951	2	10.976	9.568	.000
		Within Groups	788.072	687	1.147		
		Total	810.023	689			
	1999	Between Groups	23.008	2	11.504	15.341	.000
		Within Groups	713.161	951	.750		
		Total	736.169	953			
	2008	Between Groups	10.726	2	5.363	9.641	.000
		Within Groups	434.439	781	.556		
		Total	445.165	783			
Ireland	1981	Between Groups	71.579	2	35.790	25.712	.000
		Within Groups	1556.181	1118	1.392		
		Total	1627.760	1120			
	1990	Between Groups	30.812	2	15.406	15.550	.000
		Within Groups	962.979	972	.991		
		Total	993.791	974			
	1999	Between Groups	43.131	2	21.566	19.303	.000
		Within Groups	1074.760	962	1.117		
		Total	1117.891	964			
	2008	Between Groups	106.866	2	53.433	32.466	.000
		Within Groups	1520.736	924	1.646		
		Total	1627.602	926			
Italy	1981	Between Groups	30.478	2	15.239	16.298	.000
		Within Groups	1194.982	1278	.935		

		Total	1225.461	1280			
	1990	Between Groups	112.985	2	56.493	42.653	.000
		Within Groups	2532.362	1912	1.324		
		Total	2645.347	1914			
	1999	Between Groups	64.489	2	32.245	27.711	.000
		Within Groups	2217.853	1906	1.164		
		Total	2282.343	1908			
	2008	Between Groups	18.636	2	9.318	7.563	.001
		Within Groups	1755.674	1425	1.232		
		Total	1774.310	1427			
Malta	1981	Between Groups	1.650	2	.825	1.476	.230
		Within Groups	224.211	401	.559		
		Total	225.862	403			
	1990	Between Groups	5.227	2	2.614	5.225	.006
		Within Groups	185.565	371	.500		
		Total	190.792	373			
	1999	Between Groups	7.204	2	3.602	7.611	.001
		Within Groups	471.840	997	.473		
		Total	479.044	999			
	2008	Between Groups	3.579	2	1.790	1.803	.165
		Within Groups	1450.377	1461	.993		
		Total	1453.956	1463			
Netherlands	1981	Between Groups	68.040	2	34.020	27.971	.000
		Within Groups	1336.668	1099	1.216		
		Total	1404.707	1101			
	1990	Between Groups	53.369	2	26.685	22.058	.000
		Within Groups	1189.175	983	1.210		
		Total	1242.544	985			
	1999	Between Groups	41.792	2	20.896	19.921	.000
		Within Groups	1043.720	995	1.049		
		Total					

		Total	1085.512	997			
	2008	Between Groups	35.235	2	17.618	19.163	.000
		Within Groups	1400.159	1523	.919		
		Total	1435.394	1525			
Norway	1981	Between Groups	60.943	2	30.472	39.930	.000
		Within Groups	750.143	983	.763		
		Total	811.086	985			
	1990	Between Groups	64.176	2	32.088	37.063	.000
		Within Groups	1030.263	1190	.866		
		Total	1094.439	1192			
	2008	Between Groups	30.893	2	15.447	17.415	.000
		Within Groups	954.359	1076	.887		
		Total	985.253	1078			
Poland	1990	Between Groups	.481	2	.240	.224	.799
		Within Groups	1003.704	935	1.073		
		Total	1004.185	937			
	1999	Between Groups	5.856	2	2.928	2.564	.077
		Within Groups	1160.272	1016	1.142		
		Total	1166.128	1018			
	2008	Between Groups	26.488	2	13.244	5.388	.005
		Within Groups	3360.229	1367	2.458		
		Total	3386.717	1369			
Slovak Republic	1990	Between Groups	18.475	2	9.237	5.306	.005
		Within Groups	1850.585	1063	1.741		
		Total	1869.059	1065			
	1999	Between Groups	89.012	2	44.506	16.292	.000
		Within Groups	3447.442	1262	2.732		
		Total	3536.454	1264			
	2008	Between Groups	70.287	2	35.144	13.105	.000
		Within Groups	3794.669	1415	2.682		
		Total					

		Total	3864.956	1417			
Spain	1981	Between Groups	219.540	2	109.770	61.279	.000
		Within Groups	3750.979	2094	1.791		
		Total	3970.519	2096			
	1990	Between Groups	139.345	2	69.672	43.906	.000
		Within Groups	3908.448	2463	1.587		
		Total	4047.793	2465			
	1999	Between Groups	57.473	2	28.736	17.358	.000
		Within Groups	1801.205	1088	1.656		
		Total	1858.678	1090			
	2008	Between Groups	104.157	2	52.079	32.196	.000
		Within Groups	2220.890	1373	1.618		
		Total	2325.047	1375			
Sweden	1981	Between Groups	4.052	2	2.026	2.948	.053
		Within Groups	599.315	872	.687		
		Total	603.367	874			
	1990	Between Groups	21.399	2	10.700	12.077	.000
		Within Groups	889.467	1004	.886		
		Total	910.866	1006			
	1999	Between Groups	14.269	2	7.135	6.497	.002
		Within Groups	1078.310	982	1.098		
		Total	1092.580	984			
	2008	Between Groups	43.123	2	21.562	11.188	.000
		Within Groups	1919.564	996	1.927		
		Total	1962.687	998			
Great Britain	1981	Between Groups	75.973	2	37.986	26.303	.000
		Within Groups	1617.505	1120	1.444		
		Total	1693.477	1122			
	1990	Between Groups	100.029	2	50.014	46.582	.000
		Within Groups	1560.055	1453	1.074		
		Total					

		Total	1660.084	1455			
	1999	Between Groups	31.870	2	15.935	10.515	.000
		Within Groups	1445.762	954	1.515		
		Total	1477.632	956			
	2008	Between Groups	40.573	2	20.286	19.413	.000
		Within Groups	1576.914	1509	1.045		
		Total	1617.487	1511			
Northern Ireland	1981	Between Groups	24.896	2	12.448	11.164	.000
		Within Groups	338.953	304	1.115		
		Total	363.848	306			
	1990	Between Groups	7.441	2	3.721	3.946	.020
		Within Groups	277.168	294	.943		
		Total	284.609	296			
	1999	Between Groups	72.258	2	36.129	22.689	.000
		Within Groups	1453.788	913	1.592		
		Total	1526.046	915			
	2008	Between Groups	12.448	2	6.224	2.506	.083
		Within Groups	1157.334	466	2.484		
		Total	1169.782	468			

Appendix 62: H4 DV2 Pooled sample Welch test

Welch ANOVA: Pooled sample					
		Statistic	df1	df2	Sig.
1981	Welch	208.994	2	9369.466	.000
1990	Welch	401.467	2	13446.010	.000
1999	Welch	332.787	2	11642.132	.000
2008	Welch	151.276	2	13823.643	.000

Appendix 63: H4 DV2 Cross-national Welch test

Welch's t-test: Civic Morals						
			Statistic	df1	df2	Sig.
Belgium	1990	Welch	95.269	2	1565.416	.000
Belgium	1999	Welch	21.971	2	1084.914	.000
Belgium	2008	Welch	23.646	2	749.241	.000
Denmark	1981	Welch	47.038	2	575.182	.000
Denmark	1990	Welch	34.303	2	409.778	.000
Denmark	1999	Welch	8.479	2	308.904	.000
Denmark	2008	Welch	7.476	2	411.877	.001
France	1981	Welch	32.350	2	557.556	.000
France	1990	Welch	19.023	2	448.972	.000
France	1999	Welch	26.361	2	482.818	.000
France	2008	Welch	19.374	2	485.483	.000
Germany	1981	Welch	46.368	2	690.880	.000
Germany	1990	Welch	90.304	2	1840.611	.000
Germany	1999	Welch	22.738	2	1215.641	.000
Germany	2008	Welch	32.377	2	1176.645	.000
Great Britain	1981	Welch	29.176	2	687.773	.000
Great Britain	1990	Welch	50.503	2	894.964	.000
Great Britain	1999	Welch	10.386	2	417.728	.000
Great Britain	2008	Welch	23.357	2	716.228	.000
Iceland	1981	Welch	34.634	2	365.301	.000
Iceland	1990	Welch	12.677	2	210.271	.000
Iceland	1999	Welch	22.378	2	373.083	.000
Iceland	2008	Welch	17.005	2	319.405	.000
Ireland	1981	Welch	16.758	2	86.203	.000
Ireland	1990	Welch	8.761	2	67.508	.000
Ireland	1999	Welch	15.958	2	187.359	.000
Ireland	2008	Welch	31.080	2	341.017	.000
Italy	1981	Welch	15.362	2	565.418	.000
Italy	1990	Welch	40.662	2	722.406	.000
Italy	1999	Welch	26.273	2	663.294	.000
Italy	2008	Welch	7.225	2	569.351	.001
Malta	1999	Welch	4.768	2	80.009	.011
Netherlands	1981	Welch	30.532	2	494.458	.000
Netherlands	1990	Welch	26.143	2	612.384	.000
Northern Ireland	1981	Welch	4.586	2	69.007	.013
Northern Ireland	1990	Welch	3.409	2	74.956	.038
Northern Ireland	1999	Welch	19.718	2	278.457	.000
Norway	1981	Welch	63.735	2	506.907	.000
Norway	1990	Welch	74.809	2	556.517	.000

Norway	2008	Welch	29.281	2	464.552	.000
Poland	1999	Welch	2.340	2	119.799	.101
Poland	2008	Welch	4.684	2	205.160	.010
Slovak Republic	1990	Welch	5.271	2	654.349	.005
Slovak Republic	1999	Welch	14.520	2	613.259	.000
Spain	1981	Welch	49.541	2	947.029	.000
Spain	1990	Welch	41.007	2	1457.427	.000
Spain	1999	Welch	18.120	2	713.434	.000
Spain	2008	Welch	41.712	2	747.095	.000
Sweden	1990	Welch	11.989	2	301.567	.000
Sweden	2008	Welch	14.842	2	224.101	.000

Appendix 64: H4 DV3 Pooled sample Post-hoc contrasts

Post-hoc contrast tests: Pooled sample								
				Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Lower Bound	Upper Bound
1981	Games- Howell	Never	Less	-.35902*	.02686	.000	-.4220	-.2961
			monthly	-.51723*	.02530	.000	-.5765	-.4579
		less	Never	.35902*	.02686	.000	.2961	.4220
			monthly	-.15821*	.02223	.000	-.2103	-.1061
		monthly	Never	.51723*	.02530	.000	.4579	.5765
			Less	.15821*	.02223	.000	.1061	.2103
1990	Games- Howell	Never	Less	-.23712*	.02283	.000	-.2906	-.1836
			monthly	-.57387*	.02115	.000	-.6234	-.5243
		less	Never	.23712*	.02283	.000	.1836	.2906
			monthly	-.33675*	.01926	.000	-.3819	-.2916
		monthly	Never	.57387*	.02115	.000	.5243	.6234
			Less	.33675*	.01926	.000	.2916	.3819
1999	Games- Howell	Never	Less	-.21355*	.02458	.000	-.2712	-.1559
			monthly	-.55734*	.02261	.000	-.6103	-.5043
		less	Never	.21355*	.02458	.000	.1559	.2712
			monthly	-.34378*	.02119	.000	-.3935	-.2941
		monthly	Never	.55734*	.02261	.000	.5043	.6103
			Less	.34378*	.02119	.000	.2941	.3935
2008	Games- Howell	Never	Less	-.15358*	.02127	.000	-.2034	-.1037
			monthly	-.37380*	.02158	.000	-.4244	-.3232
		less	Never	.15358*	.02127	.000	.1037	.2034
			monthly	-.22022*	.02151	.000	-.2706	-.1698
		monthly	Never	.37380*	.02158	.000	.3232	.4244
			Less	.22022*	.02151	.000	.1698	.2706

*Mean difference is significant at $p < .05$

Appendix 65: H4 DV3 Pooled sample ANOVA

ANOVA: Pooled sample						
		Sum of Squares	df	Mean Square	F	Sig.
1990	Between Groups	178.149	2	89.074	30.528	.000
	Within Groups	56129.073	19237	2.918		
	Total	56307.221	19239			
1999	Between Groups	93.740	2	46.870	17.617	.000
	Within Groups	27725.341	10421	2.661		
	Total	27819.080	10423			
2008	Between Groups	168.122	2	84.061	32.697	.000
	Within Groups	50376.605	19595	2.571		
	Total	50544.727	19597			

Appendix 66: H4 DV3 Cross-national ANOVA

ANOVA: State vs. Personal Responsibility								
			Sum of Squares	df	Mean Square	F	Sig.	
Belgium	1990	Between Groups	14.937	2	7.468	2.451	.086	
		Within Groups	6804.789	2233	3.047			
		Total	6819.726	2235				
	2008	Between Groups	11.108	2	5.554	2.843	.059	
		Within Groups	2856.566	1462	1.954			
		Total	2867.673	1464				
	Denmark	1990	Between Groups	58.277	2	29.138	10.171	.000
			Within Groups	2704.320	944	2.865		
			Total	2762.597	946			
2008		Between Groups	2.800	2	1.400	.600	.549	
		Within Groups	3252.534	1395	2.332			
		Total	3255.334	1397				
France		1990	Between Groups	46.806	2	23.403	8.449	.000
			Within Groups	2479.186	895	2.770		
			Total	2525.992	897			
	1999	Between Groups	81.369	2	40.685	15.065	.000	
		Within Groups	3918.544	1451	2.701			
		Total						

		Total	3999.913	1453			
	2008	Between Groups	60.364	2	30.182	11.043	.000
		Within Groups	3987.571	1459	2.733		
		Total	4047.935	1461			
Germany	1990	Between Groups	138.673	2	69.336	27.490	.000
		Within Groups	7316.913	2901	2.522		
		Total	7455.585	2903			
	1999	Between Groups	28.983	2	14.491	5.152	.006
		Within Groups	5048.716	1795	2.813		
		Total	5077.699	1797			
	2008	Between Groups	179.969	2	89.985	39.743	.000
		Within Groups	4353.972	1923	2.264		
		Total	4533.941	1925			
Iceland	1990	Between Groups	.814	2	.407	.161	.852
		Within Groups	1689.758	666	2.537		
		Total	1690.573	668			
	1999	Between Groups	11.776	2	5.888	2.452	.087
		Within Groups	2178.317	907	2.402		
		Total	2190.093	909			
	2008	Between Groups	8.218	2	4.109	1.898	.151
		Within Groups	1636.832	756	2.165		
		Total	1645.050	758			
Ireland	1990	Between Groups	3.810	2	1.905	.638	.528
		Within Groups	2912.365	976	2.984		
		Total	2916.175	978			
	1999	Between Groups	22.966	2	11.483	4.107	.017
		Within Groups	2499.658	894	2.796		
		Total	2522.624	896			
	2008	Between Groups	10.769	2	5.385	1.860	.156
		Within Groups	2400.196	829	2.895		
		Total					

		Total	2410.966	831				
Italy	1990	Between Groups	16.698	2	8.349	2.618	.073	
		Within Groups	5395.442	1692	3.189			
		Total	5412.140	1694				
	1999	Between Groups	1.006	2	.503	.208	.812	
		Within Groups	4206.036	1739	2.419			
		Total	4207.042	1741				
	2008	Between Groups	3.119	2	1.560	.598	.550	
		Within Groups	3186.655	1221	2.610			
		Total	3189.774	1223				
Malta	1990	Between Groups	3.554	2	1.777	.463	.630	
		Within Groups	1193.923	311	3.839			
		Total	1197.477	313				
	2008	Between Groups	20.637	2	10.319	3.650	.026	
		Within Groups	3460.257	1224	2.827			
		Total	3480.894	1226				
	Netherlands	1990	Between Groups	17.070	2	8.535	4.682	.009
			Within Groups	1660.742	911	1.823		
			Total	1677.812	913			
1999		Between Groups	7.033	2	3.517	1.773	.170	
		Within Groups	1889.904	953	1.983			
		Total	1896.937	955				
2008		Between Groups	13.585	2	6.793	3.727	.024	
		Within Groups	2681.341	1471	1.823			
		Total	2694.927	1473				
Norway	1990	Between Groups	1.559	2	.779	.371	.690	
		Within Groups	2390.574	1138	2.101			
		Total	2392.133	1140				
	2008	Between Groups	9.559	2	4.779	2.316	.099	
		Within Groups	2212.589	1072	2.064			
		Total						

		Total	2222.147	1074				
Poland	1990	Between Groups	4.568	2	2.284	.795	.452	
		Within Groups	2503.417	871	2.874			
		Total	2507.985	873				
	1999	Between Groups	5.216	2	2.608	.967	.381	
		Within Groups	2636.118	977	2.698			
		Total	2641.334	979				
	2008	Between Groups	18.758	2	9.379	3.318	.037	
		Within Groups	3753.586	1328	2.826			
		Total	3772.343	1330				
Slovak Republic	1990	Between Groups	1.898	2	.949	.331	.718	
		Within Groups	2754.894	961	2.867			
		Total	2756.792	963				
	2008	Between Groups	1.036	2	.518	.222	.801	
		Within Groups	3069.210	1317	2.330			
		Total	3070.247	1319				
	Spain	1990	Between Groups	67.651	2	33.825	13.195	.000
			Within Groups	5214.310	2034	2.564		
			Total	5281.961	2036			
2008		Between Groups	54.606	2	27.303	13.204	.000	
		Within Groups	2671.455	1292	2.068			
		Total	2726.060	1294				
Sweden		1990	Between Groups	12.297	2	6.148	2.495	.083
			Within Groups	2382.979	967	2.464		
			Total	2395.276	969			
	2008	Between Groups	6.864	2	3.432	1.039	.354	
		Within Groups	3235.170	979	3.305			
		Total	3242.033	981				
	Great Britain	1990	Between Groups	23.220	2	11.610	3.383	.034
			Within Groups	4814.836	1403	3.432		
			Total					

		Total	4838.056	1405			
	1999	Between Groups	4.070	2	2.035	.739	.478
		Within Groups	2386.165	867	2.752		
		Total	2390.235	869			
	2008	Between Groups	5.129	2	2.565	.981	.375
		Within Groups	3669.292	1404	2.613		
		Total	3674.421	1406			
Northern Ireland	1990	Between Groups	7.744	2	3.872	1.317	.269
		Within Groups	840.654	286	2.939		
		Total	848.398	288			
	1999	Between Groups	36.388	2	18.194	7.744	.000
		Within Groups	1907.811	812	2.350		
		Total	1944.199	814			
	2008	Between Groups	2.234	2	1.117	.465	.628
		Within Groups	980.178	408	2.402		
		Total	982.412	410			

Appendix 67: H4 DV3 Pooled sample Welch test

Welch ANOVA: Pooled sample					
		Statistic ^a	df1	df2	Sig.
1990	Welch	30.363	2	12683.942	.000
1999	Welch	17.805	2	6732.452	.000
2008	Welch	32.170	2	12933.336	.000

Appendix 68: H4 DV3 Cross-national Welch test

Welch's t-test						
			Statistic	df1	df2	Sig.
Belgium	1990	Welch	2.651	2	1387.385	.071
Belgium	2008	Welch	2.824	2	727.021	.060
Denmark	1990	Welch	12.498	2	287.936	.000
Denmark	2008	Welch	.607	2	354.244	.546
Germany	1990	Welch	25.801	2	1663.932	.000
Germany	1999	Welch	4.546	2	1091.774	.011

Germany	2008	Welch	37.258	2	1075.285	.000
Great Britain	1990	Welch	3.520	2	805.567	.030
Great Britain	2008	Welch	.989	2	657.074	.372
Italy	1990	Welch	2.394	2	662.674	.092
Italy	1999	Welch	.186	2	644.707	.831
Netherlands	1990	Welch	5.205	2	582.579	.006
Poland	2008	Welch	3.252	2	205.675	.041
Spain	1990	Welch	12.191	2	1258.622	.000
Spain	2008	Welch	12.326	2	676.617	.000

Appendix 69: H4 DV3 Pooled sample Post-hoc contrasts

Post-hoc contrasts tests: Pooled sample								
				Mean	Std.	Sig.	95% Confidence Interval	
				Difference (I-J)	Error		Lower Bound	Upper Bound
1990	Games-Howell	Never	Less	-.23212*	.03115	.000	-.3051	-.1591
			Monthly	-.06914	.03062	.062	-.1409	.0026
		Less	Never	.23212*	.03115	.000	.1591	.3051
			Monthly	.16299*	.02908	.000	.0948	.2311
		Monthly	Never	.06914	.03062	.062	-.0026	.1409
			Less	-.16299*	.02908	.000	-.2311	-.0948
1999	Games-Howell	Never	Less	-.22913*	.04108	.000	-.3254	-.1328
			Monthly	-.05092	.03914	.395	-.1427	.0408
		Less	Never	.22913*	.04108	.000	.1328	.3254
			Monthly	.17821*	.03805	.000	.0890	.2674
		Monthly	Never	.05092	.03914	.395	-.0408	.1427
			Less	-.17821*	.03805	.000	-.2674	-.0890
2008	Games-Howell	Never	Less	-.20925*	.02740	.000	-.2735	-.1450
			Monthly	-.16756*	.02852	.000	-.2344	-.1007
		Less	Never	.20925*	.02740	.000	.1450	.2735
			Monthly	.04169	.02828	.304	-.0246	.1080
		Monthly	Never	.16756*	.02852	.000	.1007	.2344
			Less	-.04169	.02828	.304	-.1080	.0246

Appendix 70: H4 DV4 Pooled sample Chi-square test

Chi-square test of association		Post-materialist	mixed	materialist	N	Pearson Chi-Square	Asymp. Sig. (2-sided)
1981	Never	20.7%	54.5%	24.8%			
	Less	13.7%	55.5%	30.8%			
	Monthly	8.2%	49.1%	42.8%			
	Total	13.8%	52.7%	33.5%	14524	565.142 ^a	.000
1990	Never	25.2%	56.9%	17.9%			
	Less	20.2%	59.7%	20.1%			
	Monthly	16.0%	56.4%	27.6%			
	Total	20.2%	57.6%	22.2%	21038	324.880 ^b	.000
1999	Never	21.6%	58.4%	19.9%			
	Less	16.3%	62.1%	21.6%			
	Monthly	13.5%	58.1%	28.4%			
	Total	16.8%	59.4%	23.8%	17266	230.330 ^c	.000
2008	Never	19.9%	62.6%	17.5%			
	Less	16.2%	65.0%	18.7%			
	Monthly	10.1%	59.3%	30.6%			
	Total	15.6%	62.3%	22.1%	20486	550.227 ^d	.000

Appendix 71: H4 DV4 Cross-national Chi-square test

Pearson Chi-Square Test: Materialism -Postmaterialism					
		Value	df	Asymp. Sig. (2-sided)	N
Belgium	1981	4.707 ^a	4	.319	936
	1990	5.535 ^b	4	.237	2596
	1999	14.506 ^c	4	.006	1797
	2008	8.342 ^d	4	.080	1498
Denmark	1981	22.021 ^e	4	.000	1057
	1990	15.937 ^f	4	.003	973
	1999	3.878 ^g	4	.423	936
	2008	7.054 ^h	4	.133	1449
France	1981	24.840 ⁱ	4	.000	1139
	1990	5.619 ^j	4	.229	956
	1999	29.945 ^k	4	.000	1565
	2008	12.787 ^l	4	.012	1486
Germany	1981	85.959 ^m	4	.000	1244
	1990	86.592 ⁿ	4	.000	3290

	1999	4.020 ^o	4	.403	1953
	2008	31.075 ^p	4	.000	1958
Iceland	1981	20.759 ^q	4	.000	890
	1990	9.258 ^r	4	.055	679
	1999	2.275 ^s	4	.685	946
	2008	4.989 ^t	4	.288	765
Ireland	1981	49.936 ^u	4	.000	1176
	1990	12.652 ^v	4	.013	985
	1999	24.946 ^w	4	.000	971
	2008	42.980 ^x	4	.000	934
Italy	1981	28.951 ^y	4	.000	1283
	1990	39.459 ^z	4	.000	1930
	1999	15.943 ^{aa}	4	.003	1876
	2008	42.206 ^{ab}	4	.000	1375
Malta	1981	5.147 ^{ac}	4	.273	382
	1990	2.276 ^{ad}	4	.685	349
	1999	4.343 ^{ae}	4	.362	997
	2008	25.113 ^{af}	4	.000	1442
Netherlands	1981	18.295 ^{ag}	4	.001	1065
	1990	25.445 ^{ah}	4	.000	984
	1999	14.754 ^{ai}	4	.005	989
	2008	33.263 ^{aj}	4	.000	1514
Norway	1981	14.821 ^{ak}	4	.005	942
	1990	2.468 ^{al}	4	.650	1190
	2008	9.297 ^{am}	4	.054	1079
Poland	1990	5.308 ^{an}	4	.257	928
	1999	13.967 ^{ao}	4	.007	1044
	2008	24.751 ^{ap}	4	.000	1407
Slovak Republic	1990	24.927 ^{aq}	4	.000	1051
	1999	5.349 ^{ar}	4	.253	1211
	2008	12.212 ^{as}	4	.016	1382
Spain	1981	250.447 ^{at}	4	.000	2121
	1990	146.726 ^{au}	4	.000	2397
	1999	70.433 ^{av}	4	.000	1068

	2008	35.054 ^{aw}	4	.000	1398
Sweden	1981	10.477 ^{ax}	4	.033	853
	1990	3.364 ^{ay}	4	.499	1000
	1999	2.469 ^{az}	4	.650	983
	2008	.394 ^{ba}	4	.983	830
Great Britain	1981	2.762 ^{bb}	4	.598	1134
	1990	11.525 ^{bc}	4	.021	1433
	2008	9.844 ^{bd}	4	.043	1485
Northern Ireland	1981	3.624 ^{be}	4	.459	304
	1990	3.711 ^{bf}	4	.446	294
	1999	3.201 ^{bg}	4	.525	933
	2008	3.267 ^{bh}	4	.514	481

Appendix 72: H4 DV5 Pooled sample ANOVA

ANOVA: Pooled sample						
		Sum of Squares	Df	Mean Square	F	Sig.
1981	Between Groups	0.17	2	0.09	.895	.408
	Within Groups	1526	15742	0.10		
	Total	1526	15744			
1990	Between Groups	0.30	2	0.15	1.655	.191
	Within Groups	2009	22118	0.09		
	Total	2010	22120			
1999	Between Groups	32	2	16.10	173.217	.000
	Within Groups	1757	18906	0.09		
	Total	1790	18908			
2008	Between Groups	57	2	28.38	310.769	.000
	Within Groups	1901	20809	0.09		
	Total	1957	20811			

Appendix 73: H4 DV5 Cross-national ANOVA

ANOVA: Intrinsic work values							
			Sum of Squares	df	Mean Square	F	Sig.
Belgium	1981	Between Groups	.774	2	.387	3.944	.020
		Within Groups	112.023	1142	.098		
		Total	112.797	1144			
	1990	Between Groups	.042	2	.021	.232	.793
		Within Groups	252.258	2781	.091		
		Total	252.300	2783			
	1999	Between Groups	.424	2	.212	2.024	.132
		Within Groups	198.241	1892	.105		
		Total	198.665	1894			
	2008	Between Groups	.173	2	.087	1.315	.269
		Within Groups	98.444	1495	.066		
		Total	98.617	1497			
Denmark	1981	Between Groups	2.574	2	1.287	14.122	.000
		Within Groups	107.377	1178	.091		
		Total	109.952	1180			

	1990	Between Groups	.519	2	.259	3.690	.025
		Within Groups	72.059	1025	.070		
		Total	72.578	1027			
	1999	Between Groups	.664	2	.332	4.992	.007
		Within Groups	67.215	1011	.066		
		Total	67.879	1013			
	2008	Between Groups	.299	2	.149	2.107	.122
		Within Groups	104.923	1479	.071		
		Total	105.222	1481			
France	1981	Between Groups	.992	2	.496	7.746	.000
		Within Groups	76.668	1197	.064		
		Total	77.661	1199			
	1990	Between Groups	.206	2	.103	1.859	.156
		Within Groups	55.025	991	.056		
		Total	55.231	993			
	1999	Between Groups	.510	2	.255	3.562	.029
		Within Groups	114.807	1604	.072		
		Total	115.317	1606			
	2008	Between Groups	.241	2	.120	2.518	.081
		Within Groups	71.248	1490	.048		
		Total	71.489	1492			
Germany	1981	Between Groups	1.491	2	.746	7.345	.001
		Within Groups	132.061	1301	.102		
		Total	133.552	1303			
	1990	Between Groups	4.042	2	2.021	22.247	.000
		Within Groups	311.043	3424	.091		
		Total	315.085	3426			
	1999	Between Groups	2.069	2	1.035	14.493	.000
		Within Groups	131.717	1845	.071		
		Total	133.786	1847			

	2008	Between Groups	.403	2	.202	3.441	.032
		Within Groups	117.501	2006	.059		
		Total	117.904	2008			
Iceland	1981	Between Groups	.065	2	.032	.408	.665
		Within Groups	73.057	924	.079		
		Total	73.122	926			
	1990	Between Groups	.175	2	.088	1.161	.314
		Within Groups	52.518	696	.075		
		Total	52.694	698			
	1999	Between Groups	.288	2	.144	1.743	.175
		Within Groups	79.512	962	.083		
		Total	79.800	964			
	2008	Between Groups	.239	2	.120	1.832	.161
		Within Groups	51.502	789	.065		
		Total	51.741	791			
Ireland	1981	Between Groups	.204	2	.102	1.154	.316
		Within Groups	107.280	1214	.088		
		Total	107.484	1216			
	1990	Between Groups	.222	2	.111	1.242	.289
		Within Groups	88.943	994	.089		
		Total	89.165	996			
	1999	Between Groups	.980	2	.490	5.134	.006
		Within Groups	95.614	1002	.095		
		Total	96.593	1004			
	2008	Between Groups	.334	2	.167	1.835	.160
		Within Groups	68.659	755	.091		
		Total	68.992	757			
Italy	1981	Between Groups	.270	2	.135	1.793	.167
		Within Groups	101.066	1344	.075		
		Total	101.336	1346			

	1990	Between Groups	.599	2	.299	3.585	.028
		Within Groups	166.063	1989	.083		
		Total	166.661	1991			
	1999	Between Groups	1.956	2	.978	11.117	.000
		Within Groups	174.078	1979	.088		
		Total	176.033	1981			
	2008	Between Groups	.288	2	.144	1.565	.209
		Within Groups	133.252	1451	.092		
		Total	133.540	1453			
Malta	1981	Between Groups	.541	2	.270	2.308	.101
		Within Groups	53.433	456	.117		
		Total	53.974	458			
	1990	Between Groups	.064	2	.032	.258	.772
		Within Groups	47.854	389	.123		
		Total	47.917	391			
	1999	Between Groups	.004	2	.002	.024	.977
		Within Groups	85.162	997	.085		
		Total	85.166	999			
	2008	Between Groups	.316	2	.158	2.166	.115
		Within Groups	102.057	1399	.073		
		Total	102.373	1401			
Netherlands	1981	Between Groups	.361	2	.181	1.705	.182
		Within Groups	128.985	1217	.106		
		Total	129.346	1219			
	1990	Between Groups	.223	2	.112	1.064	.345
		Within Groups	105.882	1009	.105		
		Total	106.105	1011			
	1999	Between Groups	.048	2	.024	.270	.764
		Within Groups	88.441	998	.089		
		Total	88.489	1000			

	2008	Between Groups	.236	2	.118	1.156	.315
		Within Groups	151.964	1491	.102		
		Total	152.200	1493			
Norway	1981	Between Groups	.188	2	.094	1.099	.334
		Within Groups	88.981	1042	.085		
		Total	89.168	1044			
	1990	Between Groups	1.011	2	.506	7.989	.000
		Within Groups	77.547	1225	.063		
		Total	78.558	1227			
	2008	Between Groups	.110	2	.055	.891	.411
		Within Groups	66.864	1085	.062		
		Total	66.974	1087			
Poland	1990	Between Groups	.033	2	.017	.225	.799
		Within Groups	71.902	979	.073		
		Total	71.935	981			
	1999	Between Groups	.347	2	.174	2.316	.099
		Within Groups	81.544	1088	.075		
		Total	81.891	1090			
	2008	Between Groups	.544	2	.272	3.798	.023
		Within Groups	98.647	1378	.072		
		Total	99.191	1380			
Slovak Republic	1990	Between Groups	.024	2	.012	.126	.881
		Within Groups	106.467	1131	.094		
		Total	106.491	1133			
	1999	Between Groups	.176	2	.088	1.624	.198
		Within Groups	71.456	1320	.054		
		Total	71.632	1322			
	2008	Between Groups	.428	2	.214	2.328	.098
		Within Groups	124.933	1359	.092		
		Total	125.361	1361			

Spain	1981	Between Groups	.748	2	.374	3.570	.028
		Within Groups	240.946	2300	.105		
		Total	241.694	2302			
	1990	Between Groups	.122	2	.061	.635	.530
		Within Groups	251.701	2626	.096		
		Total	251.823	2628			
	1999	Between Groups	.799	2	.399	4.451	.012
		Within Groups	106.517	1187	.090		
		Total	107.315	1189			
	2008	Between Groups	.951	2	.476	6.665	.001
		Within Groups	105.734	1482	.071		
		Total	106.685	1484			
Sweden	1981	Between Groups	1.802	2	.901	10.738	.000
		Within Groups	76.435	911	.084		
		Total	78.237	913			
	1990	Between Groups	.138	2	.069	.661	.517
		Within Groups	107.642	1032	.104		
		Total	107.779	1034			
	1999	Between Groups	.733	2	.366	3.985	.019
		Within Groups	92.772	1009	.092		
		Total	93.505	1011			
	2008	Between Groups	.542	2	.271	3.101	.045
		Within Groups	99.787	1141	.087		
		Total	100.330	1143			
Great Britain	1981	Between Groups	.686	2	.343	3.464	.032
		Within Groups	115.148	1163	.099		
		Total	115.834	1165			
	1990	Between Groups	1.434	2	.717	8.893	.000
		Within Groups	119.338	1480	.081		
		Total	120.772	1482			

	1999	Between Groups	.658	2	.329	3.733	.024
		Within Groups	86.414	980	.088		
		Total	87.072	982			
	2008	Between Groups	.151	2	.076	.870	.419
		Within Groups	132.125	1519	.087		
		Total	132.276	1521			
Northern Ireland	1981	Between Groups	.368	2	.184	2.010	.136
		Within Groups	28.181	308	.091		
		Total	28.549	310			
	1990	Between Groups	.051	2	.026	.306	.737
		Within Groups	25.123	299	.084		
		Total	25.174	301			
	1999	Between Groups	.556	2	.278	3.205	.041
		Within Groups	85.528	987	.087		
		Total	86.084	989			
	2008	Between Groups	.592	2	.296	3.475	.032
		Within Groups	37.336	438	.085		
		Total	37.928	440			

Appendix 74: H4 DV5 Pooled sample Welch test

Welch ANOVA: Pooled sample					
		Statistic	df1	df2	Sig.
1999	Welch	171.730	2	12345.033	.000
2008	Welch	299.081	2	13666.748	.000

Appendix 75: H4 DV5 Cross-national Welch test

Welch's t-test: Intrinsic work values						
			Statistic	df1	df2	Sig.
Germany	1990	Welch	22.898	2	2025.222	.000
Germany	1999	Welch	15.053	2	1166.981	.000
Great Britain	1990	Welch	8.892	2	855.182	.000
Ireland	1999	Welch	5.367	2	230.313	.005

Ireland	2008	Welch	1.501	2	281.682	.225
Italy	1981	Welch	1.958	2	674.653	.142
Italy	1990	Welch	3.423	2	780.690	.033
Malta	2008	Welch	2.069	2	204.169	.129
Norway	1990	Welch	7.885	2	419.000	.000
Spain	1981	Welch	3.295	2	1093.349	.037
Spain	1990	Welch	.619	2	1590.300	.538
Spain	2008	Welch	7.168	2	816.239	.001

Appendix 76: H4 DV5 Pooled sample Post-hoc contrasts

Post-hoc contrasts test: Pooled sample								
				Mean	Std.	Sig.	95% Confidence Interval	
				Difference (I-J)	Error		Lower Bound	Upper Bound
1999	Games-Howell	Never	Less	-.02776*	.00559	.000	-.0409	-.0147
			Monthly	-.09544*	.00534	.000	-.1079	-.0829
	Less	Never	.02776*	.00559	.000	.0147	.0409	
		Monthly	-.06767*	.00541	.000	-.0804	-.0550	
	Monthly	Never	.09544*	.00534	.000	.0829	.1079	
		Less	.06767*	.00541	.000	.0550	.0804	
2008	Games-Howell	Never	Less	-.02035*	.00496	.000	-.0320	-.0087
			Monthly	-.12120*	.00519	.000	-.1334	-.1090
	Less	Never	.02035*	.00496	.000	.0087	.0320	
		Monthly	-.10086*	.00532	.000	-.1133	-.0884	
	Monthly	Never	.12120*	.00519	.000	.1090	.1334	
		Less	.10086*	.00532	.000	.0884	.1133	

*Mean difference is significant at $p < .05$

Appendix 77: H4 DV6 Pooled sample ANOVA

ANOVA: Pooled sample						
		Sum of Squares	df	Mean Square	F	Sig.
1981	Between Groups	0.44	2	.220	2.179	.113
	Within Groups	1588	15742	.101		
	Total	1589	15744			
1990	Between Groups	7	2	3.550	36.833	.000
	Within Groups	2133	22118	.096		
	Total	2140	22120			
1999	Between Groups	20	2	9.870	96.465	.000
	Within Groups	1938	18923	.102		
	Total	1958	18925			
2008	Between Groups	25	2	12.640	121.550	.000
	Within Groups	2159	20760	.104		
	Total	2184	20762			

Appendix 78: H4 DV6 Cross-national ANOVA

ANOVA: Extrinsic work values							
			Sum of Squares	df	Mean Square	F	Sig.
Belgium	1981	Between Groups	.983	2	.492	4.393	.013
		Within Groups	127.778	1142	.112		
		Total	128.761	1144			
	1990	Between Groups	.122	2	.061	.651	.522
		Within Groups	261.358	2781	.094		
		Total	261.480	2783			
	1999	Between Groups	2.291	2	1.146	11.307	.000
		Within Groups	191.689	1892	.101		
		Total	193.980	1894			
	2008	Between Groups	.189	2	.095	1.282	.278
		Within Groups	110.389	1495	.074		
		Total	110.578	1497			
Denmark	1981	Between Groups	1.499	2	.750	7.365	.001
		Within Groups	119.897	1178	.102		
		Total	121.396	1180			

	1990	Between Groups	.149	2	.074	.971	.379
		Within Groups	78.418	1025	.077		
		Total	78.566	1027			
	1999	Between Groups	.248	2	.124	1.660	.191
		Within Groups	75.648	1011	.075		
		Total	75.897	1013			
	2008	Between Groups	.211	2	.106	1.391	.249
		Within Groups	112.252	1479	.076		
		Total	112.463	1481			
France	1981	Between Groups	.282	2	.141	1.864	.155
		Within Groups	90.625	1197	.076		
		Total	90.907	1199			
	1990	Between Groups	.143	2	.071	.969	.380
		Within Groups	73.089	991	.074		
		Total	73.232	993			
	1999	Between Groups	.037	2	.019	.218	.804
		Within Groups	136.828	1604	.085		
		Total	136.865	1606			
	2008	Between Groups	.188	2	.094	1.153	.316
		Within Groups	121.365	1490	.081		
		Total	121.553	1492			
Germany	1981	Between Groups	.334	2	.167	1.891	.151
		Within Groups	114.838	1301	.088		
		Total	115.171	1303			
	1990	Between Groups	.731	2	.365	4.284	.014
		Within Groups	292.002	3424	.085		
		Total	292.732	3426			
	1999	Between Groups	.126	2	.063	.700	.497
		Within Groups	168.216	1861	.090		
		Total	168.342	1863			

	2008	Between Groups	.478	2	.239	2.688	.068
		Within Groups	178.381	2006	.089		
		Total	178.859	2008			
Iceland	1981	Between Groups	.262	2	.131	1.680	.187
		Within Groups	72.184	924	.078		
		Total	72.446	926			
	1990	Between Groups	.025	2	.012	.146	.864
		Within Groups	58.457	696	.084		
		Total	58.482	698			
	1999	Between Groups	.589	2	.294	3.027	.049
		Within Groups	93.547	962	.097		
		Total	94.136	964			
	2008	Between Groups	.253	2	.126	1.587	.205
		Within Groups	62.790	789	.080		
		Total	63.042	791			
Ireland	1981	Between Groups	.223	2	.112	1.329	.265
		Within Groups	102.005	1214	.084		
		Total	102.229	1216			
	1990	Between Groups	.200	2	.100	1.099	.334
		Within Groups	90.238	994	.091		
		Total	90.438	996			
	1999	Between Groups	1.211	2	.606	5.427	.005
		Within Groups	111.925	1003	.112		
		Total	113.136	1005			
	2008	Between Groups	.554	2	.277	2.348	.096
		Within Groups	90.240	765	.118		
		Total	90.794	767			
Italy	1981	Between Groups	.721	2	.361	4.219	.015
		Within Groups	114.920	1344	.086		
		Total	115.641	1346			

	1990	Between Groups	.002	2	.001	.009	.991
		Within Groups	184.790	1989	.093		
		Total	184.792	1991			
	1999	Between Groups	2.418	2	1.209	12.522	.000
		Within Groups	191.049	1979	.097		
		Total	193.467	1981			
	2008	Between Groups	.522	2	.261	2.327	.098
		Within Groups	160.476	1430	.112		
		Total	160.998	1432			
Malta	1981	Between Groups	1.294	2	.647	5.894	.003
		Within Groups	50.068	456	.110		
		Total	51.362	458			
	1990	Between Groups	.221	2	.110	.848	.429
		Within Groups	50.643	389	.130		
		Total	50.863	391			
	1999	Between Groups	1.011	2	.506	5.888	.003
		Within Groups	85.594	997	.086		
		Total	86.605	999			
	2008	Between Groups	.322	2	.161	1.331	.265
		Within Groups	167.681	1388	.121		
		Total	168.003	1390			
Netherlands	1981	Between Groups	.017	2	.009	.085	.919
		Within Groups	123.797	1217	.102		
		Total	123.814	1219			
	1990	Between Groups	1.414	2	.707	7.785	.000
		Within Groups	91.646	1009	.091		
		Total	93.061	1011			
	1999	Between Groups	.346	2	.173	2.100	.123
		Within Groups	82.209	998	.082		
		Total	82.555	1000			

	2008	Between Groups	.540	2	.270	3.226	.040
		Within Groups	126.080	1506	.084		
		Total	126.621	1508			
Norway	1981	Between Groups	.265	2	.133	1.262	.284
		Within Groups	109.484	1042	.105		
		Total	109.749	1044			
	1990	Between Groups	.150	2	.075	.867	.420
		Within Groups	105.772	1225	.086		
		Total	105.922	1227			
	2008	Between Groups	.920	2	.460	6.112	.002
		Within Groups	81.694	1085	.075		
		Total	82.614	1087			
Poland	1990	Between Groups	.153	2	.076	.930	.395
		Within Groups	80.289	979	.082		
		Total	80.442	981			
	1999	Between Groups	.364	2	.182	1.547	.213
		Within Groups	128.049	1087	.118		
		Total	128.414	1089			
	2008	Between Groups	.023	2	.011	.109	.897
		Within Groups	141.742	1361	.104		
		Total	141.765	1363			
Slovak Republic	1990	Between Groups	.454	2	.227	2.243	.107
		Within Groups	114.573	1131	.101		
		Total	115.028	1133			
	1999	Between Groups	.202	2	.101	1.586	.205
		Within Groups	84.151	1320	.064		
		Total	84.353	1322			
	2008	Between Groups	1.235	2	.617	4.843	.008
		Within Groups	173.119	1358	.127		
		Total	174.354	1360			

Spain	1981	Between Groups	.811	2	.405	3.603	.027
		Within Groups	258.752	2300	.113		
		Total	259.563	2302			
	1990	Between Groups	.025	2	.012	.116	.891
		Within Groups	281.417	2626	.107		
		Total	281.442	2628			
	1999	Between Groups	.712	2	.356	2.743	.065
		Within Groups	153.939	1187	.130		
		Total	154.651	1189			
	2008	Between Groups	.616	2	.308	5.275	.005
		Within Groups	86.560	1482	.058		
		Total	87.176	1484			
Sweden	1981	Between Groups	.241	2	.121	1.325	.266
		Within Groups	82.954	911	.091		
		Total	83.195	913			
	1990	Between Groups	.769	2	.384	4.486	.011
		Within Groups	88.449	1032	.086		
		Total	89.218	1034			
	1999	Between Groups	.250	2	.125	1.664	.190
		Within Groups	75.841	1009	.075		
		Total	76.092	1011			
	2008	Between Groups	.068	2	.034	.479	.619
		Within Groups	81.354	1141	.071		
		Total	81.422	1143			
Great Britain	1981	Between Groups	.370	2	.185	2.088	.124
		Within Groups	102.971	1163	.089		
		Total	103.341	1165			
	1990	Between Groups	.765	2	.383	4.495	.011
		Within Groups	126.030	1480	.085		
		Total	126.796	1482			

	1999	Between Groups	.091	2	.046	.506	.603
		Within Groups	88.273	980	.090		
		Total	88.365	982			
	2008	Between Groups	1.239	2	.619	6.497	.002
		Within Groups	144.907	1520	.095		
		Total	146.146	1522			
Northern Ireland	1981	Between Groups	.656	2	.328	3.565	.029
		Within Groups	28.356	308	.092		
		Total	29.013	310			
	1990	Between Groups	.210	2	.105	1.531	.218
		Within Groups	20.504	299	.069		
		Total	20.714	301			
	1999	Between Groups	.050	2	.025	.223	.800
		Within Groups	111.371	987	.113		
		Total	111.422	989			
	2008	Between Groups	.595	2	.298	2.613	.075
		Within Groups	47.289	415	.114		
		Total	47.884	417			

Appendix 79: H4 DV6 Pooled sample Welch test

Welch ANOVA: Pooled sample					
		Statistic	df1	df2	Sig.
1999	Welch	95.400	2	12423.413	.000
2008	Welch	114.710	2	13588.794	.000

Appendix 80: H4 DV6 Cross-national Welch test

Welch's t-test: Extrinsic work values						
			Statistic	df1	df2	Sig.
Belgium	1999	Welch	11.640	2	1078.540	.000
Denmark	1999	Welch	1.571	2	322.143	.209
Denmark	2008	Welch	1.351	2	366.599	.260
France	1999	Welch	.232	2	513.732	.793
France	2008	Welch	1.189	2	468.668	.305

Germany	1990	Welch	4.209	2	1992.580	.015
Germany	1999	Welch	.726	2	1157.624	.484
Italy	1981	Welch	4.527	2	687.406	.011
Italy	1999	Welch	11.911	2	728.190	.000
Malta	1981	Welch	15.936	2	16.063	.000
Malta	1999	Welch	6.493	2	85.317	.002
Poland	1999	Welch	1.887	2	138.716	.155
Spain	1981	Welch	3.692	2	1114.766	.025
Spain	1999	Welch	2.790	2	782.605	.062
Spain	2008	Welch	5.694	2	780.156	.004
Sweden	1981	Welch	1.277	2	363.990	.280

Appendix 81: H4 DV6 Pooled sample Post-hoc contrasts

Post-hoc contrasts tests: Pooled sample								
				Mean	Std.	Sig.	95% Confidence Interval	
				Difference (I-J)	Error		Lower Bound	Upper Bound
1990	Tukey HSD	Never	Less	-.02024*	.00524	.000	-.0325	-.0080
			Monthly	.02293*	.00509	.000	.0110	.0349
		Less	Never	.02024*	.00524	.000	.0080	.0325
			Monthly	.04317*	.00504	.000	.0314	.0550
		Monthly	Never	-.02293*	.00509	.000	-.0349	-.0110
			Less	-.04317*	.00504	.000	-.0550	-.0314
1999	Games-Howell	Never	Less	-.03694*	.00576	.000	-.0505	-.0234
			Monthly	-.07746*	.00561	.000	-.0906	-.0643
		Less	Never	.03694*	.00576	.000	.0234	.0505
			Monthly	-.04051*	.00569	.000	-.0539	-.0272
		Monthly	Never	.07746*	.00561	.000	.0643	.0906
			Less	.04051*	.00569	.000	.0272	.0539
2008	Games-Howell	Never	Less	-.02480*	.00523	.000	-.0371	-.0125
			Monthly	-.08399*	.00560	.000	-.0971	-.0709
		Less	Never	.02480*	.00523	.000	.0125	.0371
			Monthly	-.05919*	.00571	.000	-.0726	-.0458
		Monthly	Never	.08399*	.00560	.000	.0709	.0971
			Less	.05919*	.00571	.000	.0458	.0726

*Mean difference is significant at $p < .05$

Appendix 82: H4 DV7 Pooled sample ANOVA

ANOVA: Pooled sample						
		Sum of Squares	Df	Mean Square	F	Sig.
1981	Between Groups	382	2	191	620.679	.000
	Within Groups	4680	15224	.307		
	Total	5061	15226			
1990	Between Groups	520	2	260	934.296	0.000
	Within Groups	6034	21696	.278		
	Total	6554	21698			
1999	Between Groups	613	2	306	1129.082	0.000
	Within Groups	4958	18274	.271		
	Total	5571	18276			
2008	Between Groups	711	2	356	1333.495	0.000
	Within Groups	5478	20540	.267		
	Total	6189	20542			

Appendix 83: H4 DV7 Cross-national ANOVA

ANOVA: Cultural homogeneity							
			Sum of Squares	df	Mean Square	F	Sig.
Belgium	1981	Between Groups	34.490	2	17.245	52.252	.000
		Within Groups	345.544	1047	.330		
		Total	380.034	1049			
	1990	Between Groups	66.671	2	33.336	122.533	.000
		Within Groups	745.154	2739	.272		
		Total	811.825	2741			
	1999	Between Groups	46.877	2	23.439	93.736	.000
		Within Groups	455.593	1822	.250		
		Total	502.470	1824			
	2008	Between Groups	36.655	2	18.328	85.340	.000
		Within Groups	319.993	1490	.215		
		Total	356.648	1492			
Denmark	1981	Between Groups	12.313	2	6.157	23.913	.000
		Within Groups	290.673	1129	.257		
		Total	302.986	1131			

	1990	Between Groups	7.848	2	3.924	17.186	.000
		Within Groups	226.946	994	.228		
		Total	234.793	996			
	1999	Between Groups	5.166	2	2.583	15.689	.000
		Within Groups	156.090	948	.165		
		Total	161.256	950			
	2008	Between Groups	8.311	2	4.155	22.338	.000
		Within Groups	262.853	1413	.186		
		Total	271.164	1415			
France	1981	Between Groups	20.458	2	10.229	33.705	.000
		Within Groups	353.555	1165	.303		
		Total	374.013	1167			
	1990	Between Groups	16.064	2	8.032	29.024	.000
		Within Groups	261.243	944	.277		
		Total	277.307	946			
	1999	Between Groups	28.315	2	14.158	58.430	.000
		Within Groups	374.837	1547	.242		
		Total	403.153	1549			
	2008	Between Groups	15.940	2	7.970	33.563	.000
		Within Groups	352.149	1483	.237		
		Total	368.089	1485			
Germany	1981	Between Groups	22.119	2	11.060	43.611	.000
		Within Groups	313.189	1235	.254		
		Total	335.308	1237			
	1990	Between Groups	74.161	2	37.080	177.255	.000
		Within Groups	710.001	3394	.209		
		Total	784.162	3396			
	1999	Between Groups	34.214	2	17.107	63.647	.000
		Within Groups	526.811	1960	.269		
		Total	561.025	1962			

	2008	Between Groups	40.928	2	20.464	73.154	.000
		Within Groups	525.907	1880	.280		
		Total	566.835	1882			
Iceland	1981	Between Groups	15.116	2	7.558	33.685	.000
		Within Groups	202.605	903	.224		
		Total	217.721	905			
	1990	Between Groups	4.282	2	2.141	9.301	.000
		Within Groups	156.975	682	.230		
		Total	161.256	684			
	1999	Between Groups	3.035	2	1.517	9.184	.000
		Within Groups	156.134	945	.165		
		Total	159.168	947			
	2008	Between Groups	4.648	2	2.324	14.345	.000
		Within Groups	124.268	767	.162		
		Total	128.917	769			
Ireland	1981	Between Groups	17.441	2	8.720	31.593	.000
		Within Groups	329.295	1193	.276		
		Total	346.736	1195			
	1990	Between Groups	8.932	2	4.466	17.110	.000
		Within Groups	255.543	979	.261		
		Total	264.475	981			
	1999	Between Groups	16.643	2	8.322	26.845	.000
		Within Groups	295.731	954	.310		
		Total	312.374	956			
	2008	Between Groups	24.171	2	12.086	34.422	.000
		Within Groups	322.664	919	.351		
		Total	346.836	921			
Italy	1981	Between Groups	16.769	2	8.385	28.745	.000
		Within Groups	380.070	1303	.292		
		Total	396.840	1305			

	1990	Between Groups	44.401	2	22.201	76.097	.000
		Within Groups	572.104	1961	.292		
		Total	616.505	1963			
	1999	Between Groups	21.432	2	10.716	42.028	.000
		Within Groups	481.384	1888	.255		
		Total	502.816	1890			
	2008	Between Groups	13.903	2	6.951	27.590	.000
		Within Groups	355.765	1412	.252		
		Total	369.668	1414			
Malta	1981	Between Groups	.356	2	.178	.512	.600
		Within Groups	147.629	424	.348		
		Total	147.985	426			
	1990	Between Groups	2.966	2	1.483	4.159	.016
		Within Groups	134.417	377	.357		
		Total	137.383	379			
	1999	Between Groups	10.823	2	5.412	18.879	.000
		Within Groups	282.922	987	.287		
		Total	293.745	989			
	2008	Between Groups	18.578	2	9.289	33.144	.000
		Within Groups	407.488	1454	.280		
		Total	426.065	1456			
Netherlands	1981	Between Groups	26.637	2	13.319	43.013	.000
		Within Groups	359.805	1162	.310		
		Total	386.443	1164			
	1990	Between Groups	28.324	2	14.162	50.519	.000
		Within Groups	281.177	1003	.280		
		Total	309.501	1005			
	1999	Between Groups	35.456	2	17.728	96.297	.000
		Within Groups	182.623	992	.184		
		Total	218.078	994			

	2008	Between Groups	36.803	2	18.402	82.320	.000
		Within Groups	336.873	1507	.224		
		Total	373.676	1509			
Norway	1981	Between Groups	15.005	2	7.503	25.017	.000
		Within Groups	308.594	1029	.300		
		Total	323.599	1031			
	1990	Between Groups	20.268	2	10.134	38.815	.000
		Within Groups	315.396	1208	.261		
		Total	335.664	1210			
	2008	Between Groups	11.452	2	5.726	27.948	.000
		Within Groups	220.864	1078	.205		
		Total	232.316	1080			
Poland	1990	Between Groups	8.800	2	4.400	15.963	.000
		Within Groups	243.401	883	.276		
		Total	252.201	885			
	1999	Between Groups	14.944	2	7.472	23.557	.000
		Within Groups	318.782	1005	.317		
		Total	333.727	1007			
	2008	Between Groups	4.893	2	2.447	7.326	.001
		Within Groups	458.904	1374	.334		
		Total	463.797	1376			
Slovak Republic	1990	Between Groups	33.175	2	16.587	52.713	.000
		Within Groups	353.064	1122	.315		
		Total	386.238	1124			
	1999	Between Groups	41.377	2	20.689	74.804	.000
		Within Groups	344.883	1247	.277		
		Total	386.260	1249			
	2008	Between Groups	48.020	2	24.010	84.246	.000
		Within Groups	398.711	1399	.285		
		Total	446.731	1401			

Spain	1981	Between Groups	41.404	2	20.702	63.124	.000
		Within Groups	733.651	2237	.328		
		Total	775.055	2239			
	1990	Between Groups	71.932	2	35.966	114.921	.000
		Within Groups	809.951	2588	.313		
		Total	881.883	2590			
	1999	Between Groups	34.632	2	17.316	56.710	.000
		Within Groups	337.711	1106	.305		
		Total	372.343	1108			
	2008	Between Groups	25.327	2	12.664	50.639	.000
		Within Groups	348.860	1395	.250		
		Total	374.188	1397			
Sweden	1981	Between Groups	4.318	2	2.159	7.387	.001
		Within Groups	264.785	906	.292		
		Total	269.103	908			
	1990	Between Groups	9.568	2	4.784	17.592	.000
		Within Groups	277.651	1021	.272		
		Total	287.220	1023			
	1999	Between Groups	7.661	2	3.830	17.842	.000
		Within Groups	209.521	976	.215		
		Total	217.182	978			
	2008	Between Groups	6.299	2	3.149	15.992	.000
		Within Groups	192.204	976	.197		
		Total	198.503	978			
Great Britain	1981	Between Groups	13.946	2	6.973	22.951	.000
		Within Groups	346.048	1139	.304		
		Total	359.993	1141			
	1990	Between Groups	28.728	2	14.364	51.240	.000
		Within Groups	408.154	1456	.280		
		Total	436.881	1458			

	1999	Between Groups	14.736	2	7.368	29.823	.000
		Within Groups	227.537	921	.247		
		Total	242.273	923			
	2008	Between Groups	21.528	2	10.764	44.574	.000
		Within Groups	355.220	1471	.241		
		Total	376.748	1473			
Northern Ireland	1981	Between Groups	9.033	2	4.517	14.750	.000
		Within Groups	94.313	308	.306		
		Total	103.346	310			
	1990	Between Groups	3.607	2	1.803	5.389	.005
		Within Groups	99.393	297	.335		
		Total	103.000	299			
	1999	Between Groups	25.502	2	12.751	37.097	.000
		Within Groups	319.660	930	.344		
		Total	345.161	932			
	2008	Between Groups	14.765	2	7.383	19.046	.000
		Within Groups	181.413	468	.388		
		Total	196.178	470			

Appendix 84: H4 DV7 Pooled sample Welch test

Welch ANOVA: Pooled sample					
		Statistic	df1	df2	Sig.
1981	Welch	611.553	2	9944.382	.000
1990	Welch	913.058	2	14425.983	.000
1999	Welch	1066.810	2	12094.946	.000
2008	Welch	1228.451	2	13381.045	.000

Appendix 85: H4 DV7 Cross-national Welch test

Welch's t-test: Cultural homogeneity						
			Statistic	df1	df2	Sig.
Belgium	1990	Welch	116.794	2	1586.302	.000
Belgium	1999	Welch	82.752	2	1023.195	.000
Denmark	1999	Welch	13.342	2	304.451	.000
France	1990	Welch	27.587	2	386.702	.000
France	1999	Welch	52.869	2	457.150	.000
France	2008	Welch	29.144	2	433.175	.000
Germany	1990	Welch	163.957	2	2014.160	.000
Germany	1999	Welch	58.656	2	1215.306	.000
Germany	2008	Welch	66.080	2	1029.104	.000
Great Britain	1990	Welch	52.175	2	806.497	.000
Great Britain	2008	Welch	39.738	2	613.677	.000
Ireland	1999	Welch	31.878	2	222.211	.000
Ireland	2008	Welch	36.937	2	393.503	.000
Italy	1981	Welch	30.614	2	679.929	.000
Italy	1990	Welch	90.408	2	886.001	.000
Malta	1999	Welch	16.331	2	81.942	.000
Malta	2008	Welch	25.438	2	200.222	.000
Netherlands	1990	Welch	44.735	2	600.988	.000
Netherlands	1999	Welch	70.942	2	507.295	.000
Netherlands	2008	Welch	68.753	2	823.996	.000
Slovak Republic	1999	Welch	80.295	2	688.918	.000
Slovak Republic	2008	Welch	85.477	2	879.820	.000
Spain	1981	Welch	63.460	2	1042.452	.000
Spain	1990	Welch	121.286	2	1600.835	.000
Spain	1999	Welch	58.983	2	733.927	.000
Spain	2008	Welch	47.967	2	684.799	.000

Appendix 86: H4 DV7 Pooled sample Post-hoc contrasts

Post-hoc contrasts tests: Pooled sample								
				Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
1981	Games- Howell	Never	Less	-.08039*	.01124	.000	-.1067	-.0540
			Monthly	-.35776*	.01074	.000	-.3829	-.3326
	Less	Never	.08039*	.01124	.000	.0540	.1067	
		Monthly	-.27737*	.01107	.000	-.3033	-.2514	
	Monthly	Never	.35776*	.01074	.000	.3326	.3829	
		Less	.27737*	.01107	.000	.2514	.3033	
1990	Games- Howell	Never	Less	-.07998*	.00866	.000	-.1003	-.0597
			Monthly	-.35574*	.00865	.000	-.3760	-.3355
	Less	Never	.07998*	.00866	.000	.0597	.1003	
		Monthly	-.27576*	.00888	.000	-.2966	-.2550	
	Monthly	Never	.35574*	.00865	.000	.3355	.3760	
		Less	.27576*	.00888	.000	.2550	.2966	
1999	Games- Howell	Never	Less	-.08410*	.00912	.000	-.1055	-.0627
			Monthly	-.41204*	.00925	.000	-.4337	-.3904
	Less	Never	.08410*	.00912	.000	.0627	.1055	
		Monthly	-.32794*	.00962	.000	-.3505	-.3054	
	Monthly	Never	.41204*	.00925	.000	.3904	.4337	
		Less	.32794*	.00962	.000	.3054	.3505	
2008	Games- Howell	Never	Less	-.10319*	.00829	.000	-.1226	-.0838
			Monthly	-.43832*	.00896	.000	-.4593	-.4173
	Less	Never	.10319*	.00829	.000	.0838	.1226	
		Monthly	-.33513*	.00942	.000	-.3572	-.3130	
	Monthly	Never	.43832*	.00896	.000	.4173	.4593	
		Less	.33513*	.00942	.000	.3130	.3572	

Appendix 87: H4 DV8 Pooled sample ANOVA

ANOVA: Pooled sample						
		Sum of Squares	df	Mean Square	F	Sig.
1981	Between Groups	11	2	5.361	16.487	.000
	Within Groups	5028	15463	.325		
	Total	5038	15465			
1990	Between Groups	19	2	9.387	29.717	.000
	Within Groups	6942	21975	.316		
	Total	6960	21977			
1999	Between Groups	37	2	18.651	57.483	.000
	Within Groups	6132	18898	.324		
	Total	6169	18900			
2008	Between Groups	48	2	24.037	72.703	.000
	Within Groups	7032	21268	.331		
	Total	7080	21270			

Appendix 88: H4 DV8 Cross-national ANOVA

ANOVA: Material marriage							
			Sum of Squares	df	Mean Square	F	Sig.
Belgium	1981	Between Groups	1.857	2	.928	3.187	.042
		Within Groups	315.159	1082	.291		
		Total	317.016	1084			
	1990	Between Groups	.563	2	.281	.930	.395
		Within Groups	835.223	2761	.303		
		Total	835.786	2763			
	1999	Between Groups	.593	2	.297	.964	.382
		Within Groups	576.919	1874	.308		
		Total	577.512	1876			
	2008	Between Groups	.752	2	.376	1.633	.196
		Within Groups	346.315	1503	.230		
		Total	347.067	1505			
Denmark	1981	Between Groups	2.805	2	1.403	4.991	.007
		Within Groups	324.858	1156	.281		
		Total	327.663	1158			

	1990	Between Groups	.532	2	.266	.968	.380
		Within Groups	278.478	1013	.275		
		Total	279.010	1015			
	1999	Between Groups	.392	2	.196	.808	.446
		Within Groups	241.384	996	.242		
		Total	241.775	998			
	2008	Between Groups	.050	2	.025	.104	.901
		Within Groups	362.202	1488	.243		
		Total	362.253	1490			
France	1981	Between Groups	.961	2	.481	1.608	.201
		Within Groups	353.335	1182	.299		
		Total	354.296	1184			
	1990	Between Groups	.059	2	.030	.100	.905
		Within Groups	289.932	983	.295		
		Total	289.991	985			
	1999	Between Groups	1.704	2	.852	2.625	.073
		Within Groups	517.795	1595	.325		
		Total	519.499	1597			
	2008	Between Groups	.962	2	.481	1.681	.186
		Within Groups	427.875	1496	.286		
		Total	428.837	1498			
Germany	1981	Between Groups	.325	2	.162	.526	.591
		Within Groups	392.902	1272	.309		
		Total	393.227	1274			
	1990	Between Groups	1.044	2	.522	1.891	.151
		Within Groups	942.096	3411	.276		
		Total	943.140	3413			
	1999	Between Groups	1.146	2	.573	1.999	.136
		Within Groups	573.956	2002	.287		
		Total	575.102	2004			

	2008	Between Groups	1.673	2	.836	3.074	.046
		Within Groups	543.288	1997	.272		
		Total	544.961	1999			
Iceland	1981	Between Groups	1.013	2	.507	1.751	.174
		Within Groups	265.901	919	.289		
		Total	266.914	921			
	1990	Between Groups	.503	2	.251	.918	.400
		Within Groups	189.048	691	.274		
		Total	189.551	693			
	1999	Between Groups	.235	2	.118	.450	.638
		Within Groups	250.930	960	.261		
		Total	251.166	962			
	2008	Between Groups	3.778	2	1.889	6.903	.001
		Within Groups	214.033	782	.274		
		Total	217.811	784			
Ireland	1981	Between Groups	5.264	2	2.632	10.274	.000
		Within Groups	308.185	1203	.256		
		Total	313.450	1205			
	1990	Between Groups	1.197	2	.598	2.343	.097
		Within Groups	252.086	987	.255		
		Total	253.283	989			
	1999	Between Groups	8.967	2	4.483	14.275	.000
		Within Groups	311.557	992	.314		
		Total	320.524	994			
	2008	Between Groups	10.530	2	5.265	16.126	.000
		Within Groups	306.569	939	.326		
		Total	317.098	941			
Italy	1981	Between Groups	1.390	2	.695	1.942	.144
		Within Groups	472.941	1322	.358		
		Total	474.330	1324			

	1990	Between Groups	2.945	2	1.472	4.293	.014
		Within Groups	680.399	1984	.343		
		Total	683.344	1986			
	1999	Between Groups	.741	2	.371	1.151	.317
		Within Groups	629.031	1953	.322		
		Total	629.772	1955			
	2008	Between Groups	.515	2	.258	.712	.491
		Within Groups	524.663	1451	.362		
		Total	525.178	1453			
Malta	1981	Between Groups	1.223	2	.611	1.680	.188
		Within Groups	159.329	438	.364		
		Total	160.551	440			
	1990	Between Groups	.350	2	.175	.425	.654
		Within Groups	156.181	380	.411		
		Total	156.531	382			
	1999	Between Groups	.478	2	.239	.770	.463
		Within Groups	308.875	995	.310		
		Total	309.353	997			
	2008	Between Groups	1.609	2	.805	2.335	.097
		Within Groups	512.469	1487	.345		
		Total	514.078	1489			
Netherlands	1981	Between Groups	.187	2	.094	.287	.751
		Within Groups	387.027	1185	.327		
		Total	387.214	1187			
	1990	Between Groups	1.090	2	.545	1.750	.174
		Within Groups	313.952	1008	.311		
		Total	315.042	1010			
	1999	Between Groups	5.970	2	2.985	9.823	.000
		Within Groups	303.281	998	.304		
		Total	309.251	1000			

	2008	Between Groups	.613	2	.307	1.127	.324
		Within Groups	417.806	1536	.272		
		Total	418.419	1538			
Norway	1981	Between Groups	.592	2	.296	1.022	.360
		Within Groups	298.857	1031	.290		
		Total	299.449	1033			
	1990	Between Groups	1.725	2	.862	3.153	.043
		Within Groups	333.127	1218	.274		
		Total	334.852	1220			
	2008	Between Groups	1.742	2	.871	3.040	.048
		Within Groups	310.364	1083	.287		
		Total	312.106	1085			
Poland	1990	Between Groups	3.366	2	1.683	5.602	.004
		Within Groups	289.045	962	.300		
		Total	292.411	964			
	1999	Between Groups	.640	2	.320	1.217	.296
		Within Groups	283.096	1076	.263		
		Total	283.736	1078			
	2008	Between Groups	.197	2	.098	.343	.710
		Within Groups	407.503	1419	.287		
		Total	407.700	1421			
Slovak Republic	1990	Between Groups	2.992	2	1.496	5.603	.004
		Within Groups	301.163	1128	.267		
		Total	304.155	1130			
	1999	Between Groups	2.956	2	1.478	5.464	.004
		Within Groups	354.583	1311	.270		
		Total	357.539	1313			
	2008	Between Groups	3.497	2	1.749	6.808	.001
		Within Groups	376.019	1464	.257		
		Total	379.517	1466			

Spain	1981	Between Groups	.861	2	.431	1.219	.296
		Within Groups	797.679	2258	.353		
		Total	798.540	2260			
	1990	Between Groups	4.464	2	2.232	6.911	.001
		Within Groups	841.603	2606	.323		
		Total	846.067	2608			
	1999	Between Groups	.379	2	.189	.560	.572
		Within Groups	393.657	1164	.338		
		Total	394.035	1166			
	2008	Between Groups	1.619	2	.810	3.228	.040
		Within Groups	371.114	1480	.251		
		Total	372.733	1482			
Sweden	1981	Between Groups	.124	2	.062	.214	.807
		Within Groups	263.270	909	.290		
		Total	263.394	911			
	1990	Between Groups	.825	2	.413	1.509	.222
		Within Groups	281.925	1031	.273		
		Total	282.750	1033			
	1999	Between Groups	.120	2	.060	.250	.779
		Within Groups	241.665	1008	.240		
		Total	241.785	1010			
	2008	Between Groups	.733	2	.366	1.376	.253
		Within Groups	290.507	1091	.266		
		Total	291.240	1093			
Great Britain	1981	Between Groups	2.355	2	1.177	3.805	.023
		Within Groups	357.097	1154	.309		
		Total	359.452	1156			
	1990	Between Groups	.099	2	.049	.150	.861
		Within Groups	483.699	1467	.330		
		Total	483.798	1469			

	1999	Between Groups	.906	2	.453	1.366	.256
		Within Groups	317.865	959	.331		
		Total	318.770	961			
	2008	Between Groups	1.694	2	.847	2.654	.071
		Within Groups	484.803	1519	.319		
		Total	486.497	1521			
Northern Ireland	1981	Between Groups	.928	2	.464	1.690	.186
		Within Groups	84.558	308	.275		
		Total	85.486	310			
	1990	Between Groups	.979	2	.489	1.498	.225
		Within Groups	97.317	298	.327		
		Total	98.296	300			
	1999	Between Groups	.453	2	.226	.648	.523
		Within Groups	338.377	969	.349		
		Total	338.830	971			
	2008	Between Groups	3.055	2	1.528	4.395	.013
		Within Groups	166.477	479	.348		
		Total	169.532	481			

Appendix 89: H4 DV8 Pooled sample Welch test

Welch ANOVA: Pooled sample					
		Statistic	df1	df2	Sig.
1981	Welch	16.541	2	10072.536	.000
1990	Welch	29.539	2	14514.201	.000
1999	Welch	57.508	2	12330.112	.000
2008	Welch	72.038	2	14062.235	.000

Appendix 90: H4 DV8 Cross-national Welch test

Welch's t-test: Material marriage						
			Statistic ^a	df1	df2	Sig.
Ireland	2008	Welch	13.155	2	350.411	.000
Slovak Republic	2008	Welch	6.800	2	887.133	.001
France	1981	Welch	1.788	2	516.679	.168
Netherlands	1999	Welch	9.394	2	555.416	.000
Denmark	1990	Welch	.979	2	325.564	.377
Slovak Republic	1999	Welch	5.460	2	714.108	.004
Norway	1981	Welch	.996	2	432.470	.370
Great Britain	1990	Welch	.164	2	850.785	.849
Sweden	1999	Welch	.257	2	252.118	.773
Spain	1981	Welch	1.299	2	1082.149	.273
Belgium	1990	Welch	.956	2	1615.939	.385

Appendix 91: H4 DV8 Pooled sample Post-hoc comparisons

Post-hoc contrasts tests: Pooled sample								
				Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
1981	Games-Howell	Never	Less	.01289	.01162	.508	-.0143	.0401
			Monthly	-.04686*	.01111	.000	-.0729	-.0208
	Less	Never	Less	-.01289	.01162	.508	-.0401	.0143
			Monthly	-.05975*	.01107	.000	-.0857	-.0338
	Monthly	Never	Less	.04686*	.01111	.000	.0208	.0729
			Monthly	.05975*	.01107	.000	.0338	.0857
1990	Games-Howell	Never	Less	-.01845	.00949	.126	-.0407	.0038
			Monthly	-.06818*	.00928	.000	-.0899	-.0464
	Less	Never	Less	.01845	.00949	.126	-.0038	.0407
			Monthly	-.04973*	.00914	.000	-.0712	-.0283
	Monthly	Never	Less	.06818*	.00928	.000	.0464	.0899
			Monthly	.04973*	.00914	.000	.0283	.0712
1999	Games-Howell	Never	Less	.01612	.01050	.275	-.0085	.0407
			Monthly	-.08257*	.01005	.000	-.1061	-.0590
	Less	Never	Less	-.01612	.01050	.275	-.0407	.0085
			Monthly	-.09869*	.01001	.000	-.1222	-.0752
	Monthly	Never	Less	.08257*	.01005	.000	.0590	.1061
			Monthly	.09869*	.01001	.000	.0752	.1222
2008	Games-Howell	Never	Less	-.00492	.00951	.863	-.0272	.0174
			Monthly	-.10449*	.00961	.000	-.1270	-.0820

Less	Never	.00492	.00951	.863	-.0174	.0272
	Monthly	-.09957*	.00991	.000	-.1228	-.0763
Monthly	Never	.10449*	.00961	.000	.0820	.1270
	Less	.09957*	.00991	.000	.0763	.1228

*Mean difference is significant at $p < .05$

Appendix 92: H4 DV9 Pooled sample ANOVA

ANOVA: Pooled sample						
		Sum of Squares	Df	Mean Square	F	Sig.
1999	Between Groups	479	2	239.372	132.786	.000
	Within Groups	29854	16561	1.803		
	Total	30333	16563			
2008	Between Groups	1242	2	620.884	365.655	.000
	Within Groups	33581	19777	1.698		
	Total	34823	19779			

Appendix 93: H4 DV9 Cross-national ANOVA

ANOVA: Traditional family pattern							
			Sum of Squares	df	Mean Square	F	Sig.
Belgium	1999	Between Groups	51.925	2	25.963	13.857	.000
		Within Groups	3361.353	1794	1.874		
		Total	3413.279	1796			
	2008	Between Groups	57.473	2	28.736	17.891	.000
		Within Groups	2373.957	1478	1.606		
		Total	2431.430	1480			
Denmark	1999	Between Groups	9.113	2	4.556	3.655	.026
		Within Groups	1062.079	852	1.247		
		Total	1071.192	854			
	2008	Between Groups	8.847	2	4.424	3.468	.031
		Within Groups	1713.338	1343	1.276		
		Total	1722.185	1345			
France	1999	Between Groups	78.374	2	39.187	24.902	.000
		Within Groups	2377.749	1511	1.574		
		Total	2456.124	1513			
	2008	Between Groups	62.805	2	31.402	19.060	.000
		Within Groups	2385.623	1448	1.648		
		Total	2448.428	1450			
Germany	1999	Between Groups	37.235	2	18.618	10.095	.000

		Within Groups	3369.569	1827	1.844		
		Total	3406.804	1829			
	2008	Between Groups	114.661	2	57.331	32.976	.000
		Within Groups	3061.619	1761	1.739		
		Total	3176.281	1763			
Iceland	1999	Between Groups	9.170	2	4.585	2.725	.066
		Within Groups	1472.361	875	1.683		
		Total	1481.531	877			
	2008	Between Groups	.266	2	.133	.091	.913
		Within Groups	1083.294	740	1.464		
		Total	1083.560	742			
Ireland	1999	Between Groups	12.233	2	6.117	5.782	.003
		Within Groups	938.349	887	1.058		
		Total	950.582	889			
	2008	Between Groups	21.697	2	10.848	8.433	.000
		Within Groups	1060.060	824	1.286		
		Total	1081.756	826			
Italy	1999	Between Groups	78.644	2	39.322	25.665	.000
		Within Groups	2825.218	1844	1.532		
		Total	2903.862	1846			
	2008	Between Groups	101.050	2	50.525	34.579	.000
		Within Groups	1956.472	1339	1.461		
		Total	2057.522	1341			
Malta	1999	Between Groups	.960	2	.480	.333	.717
		Within Groups	1417.284	982	1.443		
		Total	1418.245	984			
	2008	Between Groups	1.969	2	.985	.652	.521
		Within Groups	2042.328	1353	1.509		
		Total	2044.297	1355			
Netherlands	1999	Between Groups	16.255	2	8.128	12.408	.000

		Within Groups	648.474	990	.655		
		Total	664.729	992			
	2008	Between Groups	37.823	2	18.912	31.110	.000
		Within Groups	911.240	1499	.608		
		Total	949.064	1501			
Norway	2008	Between Groups	7.214	2	3.607	2.794	.062
		Within Groups	1350.484	1046	1.291		
		Total	1357.698	1048			
Poland	1999	Between Groups	53.886	2	26.943	18.929	.000
		Within Groups	1412.003	992	1.423		
		Total	1465.889	994			
	2008	Between Groups	101.451	2	50.726	34.247	.000
		Within Groups	1946.272	1314	1.481		
		Total	2047.723	1316			
Slovak Republic	1999	Between Groups	104.857	2	52.429	35.089	.000
		Within Groups	1818.418	1217	1.494		
		Total	1923.275	1219			
	2008	Between Groups	32.877	2	16.439	11.234	.000
		Within Groups	2033.938	1390	1.463		
		Total	2066.815	1392			
Spain	1999	Between Groups	134.949	2	67.475	41.942	.000
		Within Groups	1676.340	1042	1.609		
		Total	1811.289	1044			
	2008	Between Groups	161.435	2	80.717	47.693	.000
		Within Groups	2318.631	1370	1.692		
		Total	2480.066	1372			
Sweden	2008	Between Groups	5.177	2	2.588	3.604	.028
		Within Groups	718.119	1000	.718		
		Total	723.296	1002			
Great Britain	1999	Between Groups	19.619	2	9.809	7.688	.000

		Within Groups	1072.996	841	1.276		
		Total	1092.615	843			
	2008	Between Groups	17.663	2	8.831	8.105	.000
		Within Groups	1515.733	1391	1.090		
		Total	1533.395	1393			
Northern Ireland	1999	Between Groups	6.891	2	3.445	3.101	.045
		Within Groups	957.560	862	1.111		
		Total	964.451	864			
	2008	Between Groups	4.539	2	2.269	2.454	.087
		Within Groups	396.733	429	.925		
		Total	401.272	431			

Appendix 94: H4 DV9 Pooled sample Welch test

Welch ANOVA: Pooled sample						
		Statistic	df1	df2		Sig.
1999	Welch	132.999	2	10558.347		.000
2008	Welch	369.805	2	13039.140		.000

Appendix 95: H4 DV9 Cross-national Welch test

Welch's t-test: Traditional family pattern						
			Statistic ^a	df1	df2	Sig.
Belgium	1999	Welch	13.264	2	1031.408	.000
France	1999	Welch	27.395	2	491.296	.000
France	2008	Welch	19.486	2	447.816	.000
Germany	1999	Welch	10.434	2	1167.280	.000
Great Britain	1999	Welch	7.005	2	368.638	.001
Great Britain	2008	Welch	6.943	2	593.588	.001
Iceland	1999	Welch	2.802	2	281.710	.062
Ireland	1999	Welch	7.192	2	196.862	.001
Ireland	2008	Welch	8.481	2	354.063	.000
Italy	2008	Welch	31.892	2	546.469	.000
Netherlands	1999	Welch	9.828	2	536.228	.000
Netherlands	2008	Welch	26.730	2	766.481	.000
Poland	1999	Welch	15.139	2	111.723	.000
Slovak Republic	1999	Welch	35.727	2	635.800	.000
Spain	1999	Welch	41.706	2	677.836	.000

Spain	2008	Welch	47.091	2	709.448	.000
Sweden	2008	Welch	3.226	2	194.178	.042

Appendix 96: H4 DV9 Pooled sample Post-hoc comparisons

Pots-hoc contrasts tests: Pooled sample								
				Mean	Std.	Sig.	95% Confidence Interval	
				Difference (I-J)	Error		Lower Bound	Upper Bound
1999	Games-Howell	Never	Less	-.22365*	.02704	.000	-.2870	-.1603
			Monthly	-.40818*	.02503	.000	-.4669	-.3495
	Less	Never	Less	.22365*	.02704	.000	.1603	.2870
			Monthly	-.18453*	.02535	.000	-.2440	-.1251
	Monthly	Never	Less	.40818*	.02503	.000	.3495	.4669
			Monthly	.18453*	.02535	.000	.1251	.2440
2008	Games-Howell	Never	Less	-.32417*	.02235	.000	-.3766	-.2718
			Monthly	-.60885*	.02249	.000	-.6616	-.5561
	Less	Never	Less	.32417*	.02235	.000	.2718	.3766
			Monthly	-.28468*	.02348	.000	-.3397	-.2296
	Monthly	Never	Less	.60885*	.02249	.000	.5561	.6616
			Monthly	.28468*	.02348	.000	.2296	.3397

*Mean difference is significant at $p < .05$