
# "The perceptions of Irish school personnel of critical incident training and critical incident response from school psychological services and other services: an appreciative inquiry."

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## Abstract

**Background:** The National Educational Psychological Service (NEPS) defines a Critical Incident (CI) as: "any incident or sequence of events which overwhelms the normal coping mechanisms of the school" (Department of Educational and Skills (DES), 2016, p.16). Schools are environments which aim to foster students learning, exploration, and self-development (Sokol et al., 2021). However, the unexpected and uncontrollable nature of CIs can disrupt school-based efforts to establish a predictable and consistent routine and can significantly impact pupils' learning and perceived sense of safety and security (Greenway, 2005). In Ireland, NEPS play a crucial role in helping schools prepare and respond to CIs.

**Aims:** To date, there has been no empirical examination of the perceived impact of school personnel on the CI response provided by NEPS and other services. This study aimed to explore the perceptions of school personnel on the effectiveness of the CI preparation provided by NEPS and the efficacy of the CI response provided by NEPS and other services following a CI. It was hoped that this piece of research would provide helpful information that might be used to inform the development of a CI response that best meets the needs of schools in Ireland.

**Sample:** The sample included school personnel from primary, post-primary and special schools who received a CI response from NEPS before March 2020. A total of 51 participants completed an online questionnaire which included both quantitative and qualitative questions.

**Method:** The research questions in this study were investigated using a mixed methods approach. A triangulation design: validating quantitative data model to address the research questions. Appreciative Inquiry was employed as a theoretical framework to explore what aspects of NEPS CI response are currently being received well and what the ideal CI response might look like.

**Results:** A total of 51 participants completed an online questionnaire which included both quantitative and qualitative questions from primary, post-primary and special schools who received a CI response from the NEPS before March 2020. Descriptive statistics (e.g., frequencies and percentages) were used to summarise quantitative information generated from the questionnaire and thematic analysis was employed to analyse participant responses to open-ended questions. Key findings emerging from the study included suggestions as to what the ideal CI training from NEPS, the ideal CI response, and the ideal coordinated CI response might look like. It was suggested that the provision of whole-school training would equip a wider body of staff with the skills needed to respond to a CI. The format of in-person CI training could be improved by including increasing opportunities for interaction during training. This study found that the format of NEPS response to CIs could be improved by introducing an out-of-hours support service, increasing the follow-up support provided to schools post-CI, providing additional support to staff as well as students and increasing staffing availability to ensure there are enough NEPS psychologists available to respond to a CI if one occurs. This study found that the ideal coordinated CI response would be one in which there is a streamlined organised response with effective communication amongst each of the services involved along with a clear understanding of respective roles and responsibilities. It was also suggested that it would be helpful if there was adequate staffing availability in other services involved in the CI response to ensure that prompt support is available to those affected in the school community.

**Conclusions:** Implications of this study for the practice of educational psychology include the potential value of providing additional CI training at a whole school level, increasing staffing levels, introducing an out-of-hours CI support service and the importance of increased follow-up support to schools post-CI. Policy implications include the importance of increasing staffing levels to ensure that adequate and prompt support can be provided to schools following a CI. Finally, implications for future research include the use of focus to explore this topic at a deeper level, the impact of increased interaction during CI training on the perceived self-efficacy of school personnel to respond to a CI, and further exploration of the perceptions of special school personnel on the efficacy of NEPS response to CIs.

**Key Words:** *Critical Incident, The National Educational Psychological Service, School Personnel perceptions, Appreciative Inquiry*

**Declaration**

I hereby declare that this thesis is entirely my own work and has not been submitted for any other awards at this or any other academic establishment. Where use has been made of the work of other people, it has been fully acknowledged and referenced.

**Name:** Rachael Browne

**Signature**: 

**Date:** 29.8.2022

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## List of Abbreviations

| | |
|---|---|
| **AI** | Appreciative Inquiry |
| **AT** | Activity Theory |
| **BPS** | British Psychological Society |
| **CAMHS** | Child and Adolescent Mental Health Services |
| **CI** | Critical Incident |
| **CIMP** | Critical Incident Management Plan |
| **CIMT** | Critical Incident Management Team |
| **CISD** | Critical Incident Stress Debriefing |
| **CISM** | Critical Incident Stress Management |
| **DFE** | Department for Education (United Kingdom) |
| **DES** | Department of Education and Skills |
| **EP** | Educational Psychologist |
| **HSE** | Health Service Executive |
| **MIREC** | Mary Immaculate College Research Ethics Committee |
| **NCSE** | National Council for Special Education |
| **NCPTSD** | National Centre for Posttraumatic Stress Disorder |
| **NCTSN** | National Child Traumatic Stress Network |
| **NEPS** | The National Educational Psychological Service |
| **NICE** | National Institute for Clinical Excellence |
| **NOSP** | National Office for Suicide Prevention |
| **PFA** | Psychological First Aid |
| **PSI** | Psychological Society of Ireland |
| **PTSD** | Posttraumatic Stress Disorder |
| **SPHE** | Social, Personal and Health Education |
| **TA** | Thematic Analysis |
| **UK** | United Kingdom |
| **WHO** | World Health Organization |
| **WOE** | Weight of Evidence |

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# 1 Introduction

## 1.1 Research Area

A Critical Incident (CI), can be understood as an "unexpected event that is distressing to pupils and staff, it may involve violence against members of the school, a serious accident or the sudden death of a child or teacher" (Houghton, 1996, p. 59). This research aims to explore the perspectives of school personnel on the efficacy of the response provided by school psychological services and other services following a CI. A CI can undermine the safety and stability of the entire school as it exposes both staff and students to trauma which can threaten their sense of power, safety and security (Donnelly & Rowling, 2007). Schools are environments that foster students' learning, exploration, and self-development (Sokol et al., 2021). However, a CI can alter how a school operates (Johnson, 2000). The stress incurred following a CI can expose dysfunctional systems and impair judgement and the decision-making capacity of school management (Capewell, 1994). External professionals including educational psychologists (EPs) are often called upon to support school communities during these times to help mitigate distress (Holowenko, 2015). In Ireland, the Department of Education and Skills (DES) holds that following a CI, the National Educational Psychological Service (NEPS) is well-placed to provide support and advice to schools as psychologists working in the service are familiar with the principal and school staff and the running of a school (DES, 2016).

Depending on the magnitude of the CI, the school may require the support of several services to help manage the situation (Dunsmuir, 2018). In Ireland, this might include a response from services including but not limited to Primary Care Health Service Executive (HSE) psychological services, Child and Adolescent Mental Health Services (CAMHS), the National Office for Suicide Prevention (NOSP), or Tusla (The Child and Family Agency). Given the number of agencies involved in a CI response, multi-agency collaboration and

coordination are necessary to clarify roles and responsibilities (Silver, 2014). The DES (2016) holds that NEPS is well placed to support school management with the coordination of the various offers of support post-CI.

## 1.2 Research Aims

Supporting schools both prior to and following a CI has become a core function of the work of school psychological services (Farrell et al., 2006). Despite the importance of this topic, there remains a dearth of research which evaluates the effectiveness of CI interventions (MacNeil & Topping, 2007). Additionally, there is a paucity of research which investigates the perceived effectiveness of how EPs and other services intervene in the wake of a crisis (Silver, 2014). This research aims to explore the perceptions of school personnel of the effectiveness of the CI response provided by NEPS and other services post-CI. It is hoped that this research will highlight areas of NEPS CI response currently perceived to be working well and support the development of a CI response that best meets the needs of schools in Ireland.

## 1.3 Appreciative Inquiry

Appreciative Inquiry (AI) was employed as the theoretical framework in this study. AI consists of five stages, which are collectively known as the 5-D cycle (Cooperrider & Whitney, 2001). AI is a "strengths-based approach to goal visualisation and realisation, operationalised through structured, positively framed inquiry," (Delgadillo et al., p. 167). This use of AI was considered appropriate as the exploration of school personnel perceptions of the CI response from NEPS, and other services represented an under-researched and potentially sensitive area of inquiry.

## 1.4 Epistemological Considerations

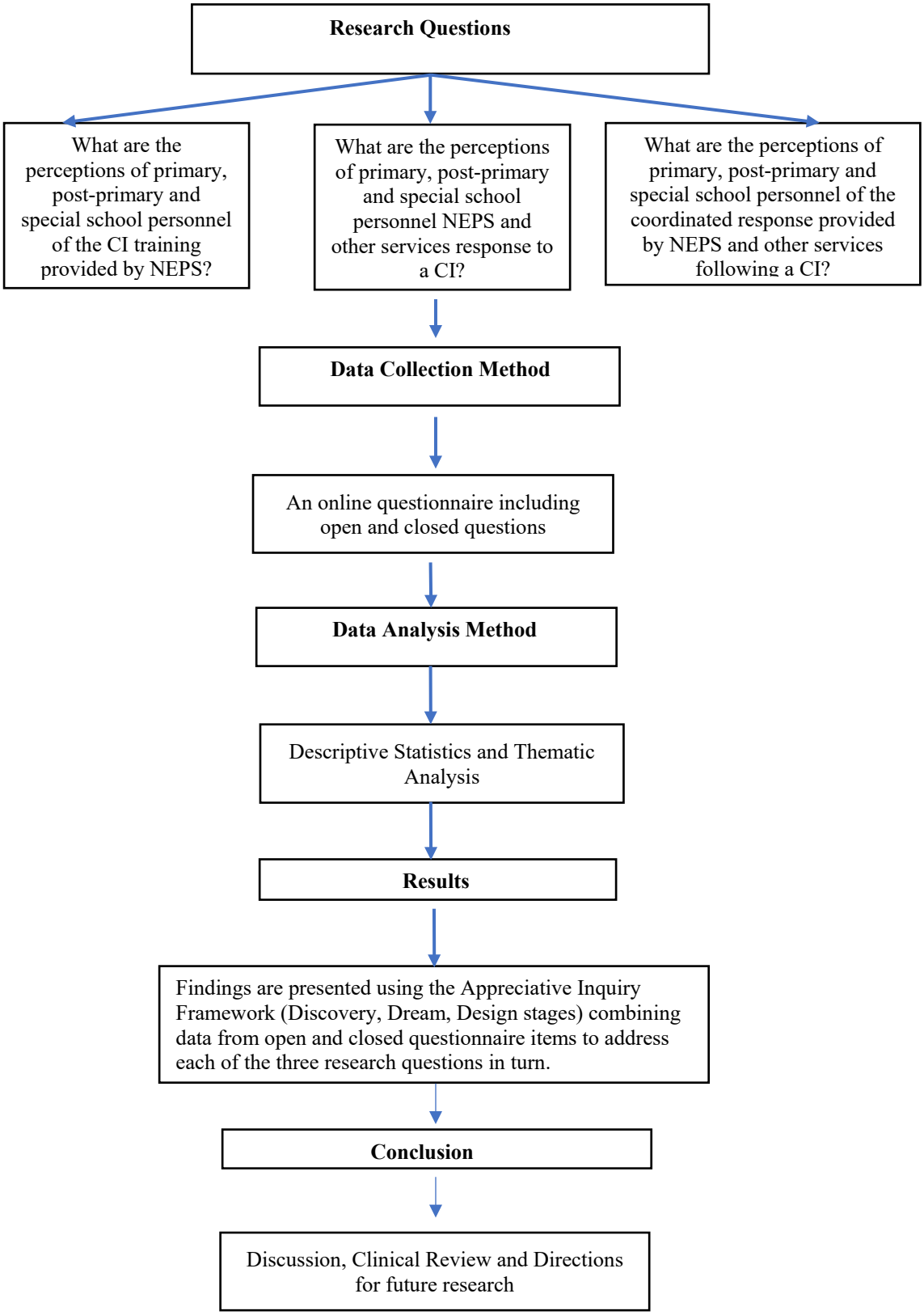
A pragmatic paradigm was utilised in this study. As a research paradigm, pragmatism advocates a non-singular reality ontology (Kivunja & Kuyini, 2017). Pragmatism emphasises the importance of the research problem and the researcher is encouraged to consider all methodological approaches available to better understand the problem (Creswell, 2009; Mackenzie & Knipe, 2006). This allowed the researcher to collect, analyse and synthesise quantitative and qualitative information pertaining to the research question. Pragmatism was also considered an appropriate paradigm given its shared objectives with AI. Goldkuhl (2012) asserts that a central objective of pragmatism is to uncover practical knowledge which can be used to exact meaningful differences in practice. This aligns with the goals of AI and with the overall aims of this research.

## 1.5 Overview of Thesis Structure

The following sections are divided into three main sections, the review paper, the empirical paper and the critical review. The review paper includes a comprehensive literature review to synthesise the present CI literature. This allowed the principal researcher to identify novel research questions pertaining to the field of school-based CIs. The empirical paper outlines the approach to methodology, data analysis and a discussion of the research findings. The final paper will include a reflection on ethical considerations encountered throughout the research process and a reflection on the strengths and limitations of the data collection method and data analysis. The relevance of the findings for the professional practice of educational and child psychology is outlined along with recommendations for future research. Finally, an impact statement is provided that outlines the significance of this study to the field of educational and child psychology. A visual map outlining the structure of the thesis is provided in Figure 1.

**Figure 1**

*Overview of Thesis Structure*



# 2 Review Paper

## 2.1 Overview of Paper

This paper begins by introducing the terminology of Critical Incidents (CI)s which are typically experienced in Irish schools. The impact of CIs on the school community is outlined. The role of Educational Psychologists (EPs) and relevant support services in helping schools prepare and respond to CIs is discussed with reference to the Irish context. International and national practice in relation to CI planning and CI intervention are then discussed. The literature is critiqued using Gough's Weight of Evidence framework (Gough, 2007) and a narrative synthesis is also used to discuss the results more broadly. Finally, findings from the review are synthesised and implications for research are then addressed.

## 2.2 Critical Incidents

### *2.2.1 What is a CI?*

Within the school-based CI literature, there appears to be variation in definitions of a CI, and several terms including 'crisis', 'traumatic event', 'crisis incident', and 'school crisis' have been used interchangeably (Morgan, 2020). The terminology used to describe such an event varies from country to country (Dunne, 2021). Houghton (1996, p. 59) offered a broad definition of a CI as "a sudden, unexpected event that is distressing to pupils and/or staff." Johnson (2000, p. 18) asserted that such an event "brings chaos," that "undermines the safety and stability of the entire school". The consequences of a CI can have "profound effects upon children and young people, and upon the adults who work with and care for them" (p. 243) (Lockhart & Woods, 2017, p.243). Beeke (2013; 2011) defined a CI within the school context as follows:

> "a sudden and unexpected event that has the potential to overwhelm the coping mechanisms of a whole school or members of the school community.

> A serious and significant event, it is likely to be outside the range of normal human experience and would be markedly distressing to anyone in or directly involved with the school community". (Beeke, 2013; 2011, p.13)

The National Educational Psychological Service (NEPS) define a CI as "any incident or sequence of events which overwhelms the normal coping mechanisms of the school" (Department of Educational and Skills [DES], 2016, p.16). In this instance, the definitions offered by NEPS (DES, 2016) and Beeke (2013; 2011) are similar. However, Beeke's (2013; 2011) definition will be used to define CIs within this paper because of its description of a CI being outside the range of typical experience and its acknowledgement of the far-reaching impact of the CI on the school community.

The kinds of events that may constitute a CI are diverse (Beeke, 2021). In Ireland, the types of CIs typically experienced by schools include the death of an individual within the school community through suicide, accident, illness, or physical assault (DES.2016).

### *2.2.2 The Impact of CIs on Students*

The purpose of schools is to encourage students' learning, exploration, and personal growth (Sokol et al., 2021). The abrupt and uncontrollable nature of CIs, however, can impede school-based efforts to establish a consistent routine and can have a profoundly negative impact on students' education and sense of safety. (Greenway, 2005).

The unpredictable and abrupt nature of the CI can contribute to the emotional and psychological impact felt by the school principal, teachers, staff, parents, family members and the wider school community (Donnelly & Rowling, 2007). The negative effects of a CI can be far-reaching. Brock (2000) states that the acute distress caused by a CI can adversely affect cognitive functioning which can result in students being unable to access learning. In school, daydreaming, distractibility, impaired memory and comprehension, and difficulty paying attention and concentrating can be symptomatic of the impact on cognitive

functioning (Cohen & Mannarino, 2011). Short-term problems following a CI often include hyperarousal and sleep disturbances (McClatchey & Vonk, 2005), challenges with emotional regulation and social relationships (Ramirez et al., 2013), psychosomatic complaints (Cohen & Mannarino, 2011) and maladaptive behaviour (Masten & Osofsky, 2010).

In the majority of cases, children's grief reactions abate over time (Melhem et al., 2011). However, in some instances, children continue to present with serious emotional difficulties and a few may develop post-traumatic stress disorder (PTSD) or other persistent problems (Boelen et al., 2017). If left untreated, these difficulties can persist for long periods, and can adversely impact the child's functioning and development into adulthood (Holowenko, 2015).

Students with developmental disabilities may find it especially difficult to adjust to loss or trauma, due to limited receptive and expressive communication skills and cognitive impairment (Sormanti & Ballan, 2011). Limited verbal communication and diagnostic overshadowing, where behavioural symptoms are attributed to the individual's diagnosis, can mean that sometimes grief within this cohort can go unrecognised (Gentile & Hubner, 2005). Grief responses can include but are not limited to, social withdrawal, increases in compulsivity, self-injurious behaviour, perseveration, and ritualisation of familiar patterns in daily activities (Kauffman, 2017; Sormanti & Ballan, 2011).

### *2.2.3 The Role of Teachers Following a CI*

Given their familiarity and proximity to their students, current best practice holds that teachers and school personnel are well-placed to support students following a CI (Little & Akin-Little, 2011; Seyle et al., 2013; Wolmer et al., 2003). Teachers and school personnel remain with students when support services, such as school psychological services, withdraw from school and provide long-term support following a CI (DES, 2016). They may be the first to recognise subtle changes in students' behaviour, socialisation, academic performance

and/or other symptoms which may indicate the need for onward referral to mental health services (Cohen & Mannarino, 2011). Following a CI, one role of supporting adults is to normalise things as promptly as possible to provide the emotional structures and routines which are integral to emotional stability (Dunsmuir et al., 2018).

According to Schonfeld and Quackenbush (2010), given their familiarity with their students' learning styles, special education teachers (SETs) are well placed to observe behavioural changes following a bereavement. Furthermore, SETs are often able to interpret the behaviours of students with limited communicative ability (Ducy & Stough, 2018). Following a bereavement, SETs are often tasked with distinguishing whether maladaptive behavioural changes should be conceptualised as expressions of grief or rather interpreted as symptoms associated with an individual's intellectual disability (O'Brien & Gomes, 2021).

Teachers can play a significant role in supporting students following a traumatic event. However, they sometimes report lacking confidence in their ability to do so competently (Alisic, 2012), and can feel unprepared to assume such a role (Papadatou et el., 2002).

### *2.2.4 The Impact of CIs on Teachers*

As previously mentioned, CIs have the potential to overwhelm the entire school community (Houghton, 1996). Teachers may find it difficult to effectively support students while simultaneously managing their own grief and loss (Le Brocque et al., 2017). Some authors have posited that the stress that teachers experience following a CI can be intensified by their sense of obligation to postpone their own grieving as they attempt to provide support to grieving students (Blackwelder, 1995; Ducy & Stough, 2018). Given the potential of CIs to severely disrupt the welfare of a school community, steps must be taken to mitigate potential outcomes and minimise distress (Olinger Steeves et al., 2017). This may lead to external professionals such as EPs, supporting the school community (Dunne, 2021).

### *2.2.5 The Role of the Educational Psychologist in CIs*

A core function of the EPs role within the education system is to improve student mental health and overall well-being (Nickerson & Zhe, 2004). Given their understanding of school systems and their established relationships with school staff, EPs are well-placed to offer psychological support to school communities following a CI (Farrell et al., 2006; McCaffrey, 2004; Posada, 2006). The following section provides an overview of NEPS in Ireland and outlines the role of NEPS in CIs.

#### *2.2.5.1.1 The National Educational Psychological Service CI Support.*

NEPS was formally established as an executive agency of the DES, in September 1999 (National Council for Special Education [NCSE], 2019). NEPS offer a school-based service to both primary, post-primary and special schools and referrals are prioritised through a consultative process at the school level (NCSE, 2019, Nugent et al., 2014). The mission statement of NEPS is as follows: "Our mission is to work with others to support the personal, social and educational development of all children through the application of psychological theory and practice in education, having particular regard for children with special educational needs," (NCSE, 2019).

NEPS is organised into eight regions throughout the Republic of Ireland (NCSE, 2019). Each region is led by a Regional Director (RD) assisted by a Regional Management Group (RMG) of Senior EPs (Hindley, 2015). Each Senior EP leads a team of EPs and NEPS assigns several schools to each EP and Senior EP (Hindley, 2015). NEPS employs a time-allocation model and each full-time psychologist is assigned to approximately 27 schools (Hoyne & Cunningham, 2019).

NEPS have published the Continuum of Support Guidelines (DES, 2007; 2017) which recognise that the educational needs of children occur on a continuum (Cull & Travers, 2018). The Continuum of Support encompasses a graduated framework of responding to the

needs of all pupils through a three-stage approach: Whole School & Classroom Support (support for all) School Support (support for some) and School Support Plus (support for few) (Cull & Travers, 2018). NEPS encourages schools to employ the continuum of support to ensure that "interventions are incremental, moving from class-based interventions to more intensive and individualised support" (DES, 2017, p.6).

In line with international school psychological services and best practice, NEPS has adopted a consultative model of service (Leadbetter, 2000; NEPS, 2020; Nugent et al., 2014; Wagner, 2000). The consultative model aims to empower teachers to intervene effectively with pupils whose needs range from mild to severe and transient to enduring (NEPS, 2020). NEPS also offers schools a variety of other services and support including research, training, intervention and assessment (Hoyne & Cunningham, 2019).

Since its establishment in 1999, NEPS has been involved both in helping prepare schools in Ireland to respond to a CI along with providing support to schools that have experienced a CI (DES, 2016). For example, in the academic year 2018/19, NEPS psychologists responded to 306 CIs in Irish schools, attending on-site for 114 incidents (DES, 2019). The DES (2016) holds that following a CI, NEPS is in a unique position to provide support as they are familiar with the principal and school staff and the running of the school. This familiarity can offer comfort to school personnel at a time when all normality seems to disappear DES (2016). In the aftermath of a CI, in line with best practice "the primary role of NEPS is to advise and support the teachers and other adults who work daily with students and who know them well," (DES, 2016b, p.13) Furthermore, "NEPS does not provide counselling, but rather immediate, short-term support, information and advice to staff," (DES, 2016b, p.13). The typical CI response provided by NEPS is outlined in Table 1.

**Table 1**

*The Typical CI Response Provided by NEPS (DES, 2016)*

| Component of CI response | Example of what each component entails |
|---|---|
| Planning | This includes NEPS supporting school management to determine the scale and impact of the event, establish a plan, mobilising the school resources and accessing other support systems as needed. |
| Information and advice | This includes the provision of information and advice to management and staff as they come to terms with the situation. |
| Support | This includes NEPS being available for school staff as they support the students. This can include support meetings at the start or end of the school day. |
| Screening | This includes NEPS working alongside teachers to identify students most in need of support, developing procedures for reviewing their needs, and where necessary, supporting onward referral. |

In Ireland, while there is currently no legal requirement regarding CI planning "schools are strongly advised to develop a policy in relation to critical incident response" (DES, 2016, p.79). In addition, as part of inspections of Social, Personal and Health Education (SPHE) at post-primary level, and curriculum evaluations of SPHE at primary level, schools are asked about their CI management plan (CIMP) and CI management team (CIMT) (DES, 2018). Similar to the United Kingdom (UK), the DES has published a variety of CI guidelines which outline the role of NEPS as well as how schools can prepare and respond to a CI (DES, 2003; 2007; 2016). The goal of CI guidelines, provided by school psychological services such as NEPS, is to provide schools with clear information to help them respond to a CI in an effective manner (Morgan, 2020). The most recent set of CI guidelines published by NEPS is 'Responding to CIs, Guidelines and Resources for Schools' (DES, 2016). These guidelines set out the role of NEPS in a CI and outline how schools can plan for CIs and also set out preventative approaches which schools can consider utilising to foster a safe and supportive school environment (DES, 2016b). This document also provides practical guidance for teachers and principals regarding how to respond when a tragedy such

as a CI occurs (DES, 2016b). Within this guidance NEPS "encourages schools to develop a CIMP, outlining who will do what in the event of a tragedy," (DES, 2016, p.79). This document outlines the type of support offered by NEPS to schools around CI preparation. NEPS assist schools in preparing for a CI by providing CI training and supporting the development of a CIMP, CI management policy, and CIMT (DES, 2016b). To date, there has been no systematic evaluation of the perceived efficacy of CI interventions provided by NEPS within an Irish context (Hennessy, 2016). In addition, no study has been conducted which has ascertained the number of schools with a CIMP or CIMT in place.

Training in CI planning has been a focal point of the DES Action Plan for Education since 2016 (DES, 2016a. 2019a). The rollout of CI training to post-primary and primary schools began in 2019. (DES, 2019a; Government of Ireland, 2018). The completion of CI training for all post-primary schools was outlined as an action target in 2019 (DES, 2019a). However, the COVID-19 pandemic, which began in January 2020, resulted in an unprecedented global interruption of education (Szulevicz, 2021) and significantly disrupted the operational capacity of EPs worldwide (Reupert et al., 2022; Song et al., 2020). The working practice of NEPS was no different, and COVID is thought to have hampered nearly all action targets, including the delivery of CI training. Information provided by NEPS regarding the number of recipients of CI training at the end of 2019 included the following: post-primary Schools (N=619), post-primary school teachers (N=1048), primary Schools (N=188), primary school teachers (446) (M. Mullany, personal communication, August 8, 2022). To increase the reach of CI training to all schools, NEPS has developed an online training course 'Responding to Critical Incidents in Schools-eLearning Course' to accompany "Responding to Critical Incidents: NEPS Guidelines and Resource Materials for Schools' (DES, 2016b; Foley, 2021). The course will initially run from June-August 2022, with a second offering scheduled for Autumn 2022 (DES, 2022). The DES (2022) states that this

course is specifically geared toward a school's CIMT but is open to all interested staff. The format of the course facilitates self-paced, self-directed learning and the course incorporates the voice of schools that have previously experienced CIs (DES, 2022)

### *2.2.6 CI Preparation*

According to Jaques (2007, p. 152) "crisis prevention and crisis preparedness are just as much parts of the overall process as tactical steps to take once a crisis strikes." The following section will discuss the importance of developing a CIMP and will provide a brief overview of current international practice in relation to CIMPs.

Integral to the safety and well-being of both school staff and students is the preparation of a practical and workable CIMP, that outlines actions which address most, if not all possible CIs (Aspiranti et al., 2011; Smith et al., 2001). The importance of having a CIMP in place has been highlighted by Holowenko (2015), who asserted that schools that have previously developed a CIMP which is regularly reviewed, typically feel far more confident and competent when it comes to responding to a CI when compared to schools who not have a CI plan in place.

Poland (1994) asserts that a CI plan should be based on a theoretical model. One theoretical model that can be used to guide schools' efforts to develop a CI is Caplan's three-tiered model of crisis intervention (Caplan, 1964; Klingman, 1993). Schools can integrate this model to create a comprehensive CI plan which aims to prevent the occurrence of new problems, mitigate the escalation of current problems and implement long-term follow-up plans in the case of a traumatic event (Aspiranti et al., 2011). The three tiers are primary prevention, secondary intervention, and tertiary intervention (Aspiranti et al., 2011). A description of school-based efforts endorsed by NEPS in the prevention, preparation and response to CIs is provided in Table 2.

**Table 2**

*School-Based Efforts Endorsed by NEPS (DES, 2016)*

| Component of Crisis Intervention | Example of corresponding effort endorsed by NEPS |
|---|---|
| Primary prevention activities | • The promotion of well-being within schools through SPHE along with suicide prevention. For an overview of best practice schools are encouraged to refer to: 'Well-Being in Post-Primary Schools Guidelines for Mental Health Promotion and Suicide Prevention,'(DES, 2013) and 'Well-Being in Primary Schools Guidelines for Mental Health Promotion,' (DES, 2015).<br>• The creation of a psychologically and physically safe environment<br>• The provision of staff training and resources on issues affecting young people<br>• The creation of systems and procedures for the identification of students at risk, and for onward referral for screening and support as needed<br>• The development of links with external agencies which clear procedures for referring students onwards for additional support as needed<br>• The provision of support for school staff members and clear information on how to access external support where needed |
| Secondary intervention activities | • Convene a meeting with key staff/CIMT to share full details of the event, discuss issues relating to school routine, and decide how the news will be shared with the student body and wider school community |
| Tertiary intervention activities | • School management meeting with appropriate staff to review the list of affected staff and students and identify who will be responsible for follow-up.<br>• Make preparations for the bereaved student(s) to return to school<br>• Discuss what the school might do in memory of the bereaved student/staff member |

#### *2.2.6.1.1 International Practice in Relation to CI Management Planning.*

In the United States, education governance and policy vary among the 50 states, territories, and more than 13,000 public school districts and 4000 independent charter schools (Lindle, 2019; National Center for Education Statistics., 2020). The vastness of decentralised schooling structures across the United States means it is challenging to both establish and effectively implement universal educational and CI policies (Lindle, 2019). The United States Department of Education (2013) has provided guidance for schools to help prepare for and respond to a CI. This guidance outlines five mission areas of prevention (avoiding or stopping a threat), protection (securing against threats), mitigation (reducing threats' impact), response (saving lives and property, addressing health and safety needs), and recovery (restoring resources and services) (Schildkraut & Nickerson, 2020). In terms of statutory CI planning, several federal and state laws have mandated that schools be prepared for CIs (Council of State Governments Justice Center, 2014; Nickerson et al., 2019). Brock et al., (2011) reported that 85% of school districts require CI planning, and 95% of school districts (whether required or not) have CI plans in place). Despite these statistics, there are no legally binding requirements as regards what such plans should include (Ashby, 2007), and there appears to be inconsistency in relation to the adequacy of CIMPs. Consequently, the degree of quality and comprehensiveness in CI plans can vary dramatically (Crepeau-Hobson et al., 2020).

In the UK, there is national guidance from the UK government recommending that local authorities and schools develop CI plans but this has not yet been reflected in legislation (Rees, 2011). Similar to government publications in Ireland, the Department for Education in the UK has provided non-statutory guidance to help educational settings both prepare for and respond to a CI (United Kingdom Department for Education [DFE], 2014; 2022). While these documents do not directly involve an outside school psychological service such as NEPS in

Ireland, guidance is provided regarding external supports which are available to students deemed in need of more support than the school can internally provide (O'Flanagan, 2019a). Similar to CI guidelines published in Ireland (DES; 2016), these documents advise that schools have a CIMP and CIMT in place to support recovery following a tragedy (DFE, 2014; 2022). The importance of multiagency and well-coordinated response is also highlighted within these guidelines (DFE, 2014).

In an investigation of educational psychology services (N= 37) response to CIs in the UK, Beeke (2011) found that 81% of educational psychology services reported having a CI policy in place and a further 16% were currently in the process of creating one or had already completed a draft policy document. Only one service did not have a CI policy in place. These findings contrast significantly with results from earlier studies (Houghton, 1996; Rowling, & Holland, 2000). Houghton (1996), examined the practice of 123 local authority EPs and Emergency Planning Officers across the UK, Wales and Northern Ireland and found that just 10% of educational psychology services had CI plans in place. Houghton (1996) also reported that approximately half of the sample was in the process of drafting and discussing a CI plan and 45% of the sample had a draft CI plan in place. A comparative study by Rowling and Holland (2000) examined CI planning and practice in schools in both the UK and Australia. In this study, 94% (N=145) of participating Australian schools were found to have CI plans in place, compared to just 15% (N =200) of schools sampled within the UK (Rowling, & Holland, 2000). The difference in findings suggests that CI planning has gained significant momentum in the UK over the last two decades.

### *2.2.7 CI Intervention*

The primary goal of CI intervention is to intervene in such a way as to restore the affected individual(s) to a previous level of adaptive functioning and to prevent the formation of Post-Traumatic Stress Disorder (PTSD)(Sandoval et al., 2009). Recent decades have seen

the development of various CI interventions which aim to alleviate the effects of trauma and prevent the onset of PTSD (Morgan, 2020), with time trends advocating more heavily for some models of support (Dunne, 2021). The following section outlines interventions which have been used to support persons who have experienced trauma, with particular emphasis given to interventions which have informed the CI response provided by EPs to school communities.

#### *2.2.7.1.1 CI Stress Management (CISM) and CI Stress Debriefing (CISD).*

Mitchell (1983) first developed the CISM model to support emergency service personnel who had experienced a CI. Within the context of CISM, emergency service personnel are often referred to as secondary victims (Aucott & Soni, 2016; Szumilas et al., 2010). Secondary victims are considered persons who indirectly experience the CI as they experience the impact of the trauma on primary victims (Figley & Kleber, 1995). Primary victims are persons who directly experience the impact of the CI (Lewis, 1994).

Components of CISM include pre-incident training, incident assessment and strategic planning, risk and crisis communication, acute psychological assessment and triage, crisis intervention with large and small groups for persons who have experienced a CI, and the facilitation of access to appropriate levels of care as needed (Morrison, 2007b). CISD is the specific crisis intervention technique employed in CISM to support a homogeneous group of persons after exposure to a CI (Mitchell, 2003). The goal of CISD is to alleviate initial distress and to try to prevent the development of more severe psychological responses, including PTSD (Aucott & Soni, 2016). CISD aims to do this by facilitating emotional expression and ventilation (Everly et al., 2000), providing reassurance that enables the normalisation of these reactions, preparing individuals for possible experiences in the future and identifying persons who may require more intensive intervention (Morrison, 2007b; Tusla, n.d.).

Since its introduction in the 1980s, CISM and CISD have been used extensively to support military populations, law enforcement and emergency service personnel following a CI (Greenberg et al., 2010; Malcolm et al., 2005, Tucky & Scott, 2014). CISM and CISD are widely endorsed by school districts throughout the USA and Canada and are seen as a central component of the strategic response to CIs which impact the school community (Wei et al., 2010). In a recent evaluation of the CI practice of 50 EPs in the UK, Beeke (2011), found that approximately half of the participants reported implementing psychological debriefing with affected members of a school community following a CI.

The appropriateness of employing CISM as an early psychological intervention following a traumatic event has sparked a contentious debate in recent decades (Aucott & Soni, 2016; Morrison, 2007a). The widespread acceptance of both CISD and CISM was initially founded on the belief that they were efficacious, and safe and would significantly reduce acute symptoms of distress associated with exposure to traumatic incidents, consequently decreasing the potential for PTSD (Szumilas et al., 2010). More recent research regarding the efficacy of CISM amongst high-risk occupation groups has yielded mixed results (Morrison, 2007b) and some studies found that CISM is not only ineffectual but harmful (Cuijpers et al., 2005; Lilienfeld, 2007; Litz et al., 2002, McNally et al., 2003; Rose et al., 2002;). Wei et al. (2010) argue that by interfering with the normal processes which work to ameliorate emotional distress and the remembering of traumatic experiences, CISD may inhibit recovery from psychological trauma. Despite these findings, research examining the efficacy and safety of CISD in alleviating trauma in school settings is minimal (Hahn, 2008; Wethington et al., 2008). According to Wei et al., (2010), it is concerning that there are policies that promote the use of CISM and CISM interventions in schools, despite the lack of effectiveness for their use, and evidence of potentially harmful effects in adults. Furthermore, Aucott & Soni (2016) noted that CISD was not originally intended for use with school staff,

and subsequently, it is inappropriate to implement such an intervention with this population. In Ireland, current governmental guidelines which outline recommended CI practice in schools does not mention CISD (DES, 2016). Tusla (Child and Family Agency) describes CISD and CISM as part of their policy for the management of stress following exposure to a CI in the workplace but does not mention the use of CISD or CISM in schools (Tusla, n.d).

***2.2.7.1.2 Psychological First Aid.*** Current international clinical practice guidelines for the management of psychological trauma recommend Psychological First Aid (PFA) as the intervention of choice to support persons who have experienced potentially traumatic events (Cain et al., 2010; Forbes et al., 2011). The goal of PFA is to reduce initial post-trauma stress and support long-term adaptive functioning (Ruzek et al., 2007). PFA aims to do this through active listening, comfort, helping affected individuals to connect with others as well as providing practical information and support to address basic needs (Dieltjens et al., 2014).

PFA was developed by the National Child Traumatic Stress Network (NCTSN) and the National Centre for Posttraumatic Stress Disorder (NCPTSD)((Field et al., 2017). It is considered appropriate for developmental levels across the lifespan and has been adapted for use in schools (Brymer et al., 2006; Field et al., 2017; NCTSN, 2017). The core differences between PFA and CISD are outlined by Aucott and Soni (2016). In brief, the authors note that, unlike CISD, PFA is appropriate for any persons who are acutely affected by a CI (i.e., primary or secondary victims). It is not mandatory following a CI and may not always be necessary. Finally, it does not require individuals to revisit the event via a discussion of their experience or reaction (Aucott & Soni, 2016).

PFA is a flexible approach which can be tailored to meet the needs of the intended affected populations (Everly et al., 2021). However, the bespoke nature with which PFA is operationalised renders systematic evaluation cumbersome (Hindley, 2015), and there is a

paucity of empirical evidence demonstrating its effectiveness (Akasaka & Kawashima, 2019; Morris et al., 2019). According to Aucott & Soni (2016), while the efficacy of CISD and PFA have not been evaluated with school staff, PFA may be a more appropriate framework for EPs following a CI as it avoids the limitations of CISD and is a more ecologically valid approach. In Ireland and the UK, PFA is one of the core components of the CI response provided by EPs and is actively practised by NEPS as part of their response to CIs. (DES, 2018; Dunne, 2021; Morgan, 2020).

### *2.2.8 Challenges in Evaluating CI Interventions*

The evaluation of CI interventions is problematic. Although CI response is now a fundamental component of EP practice (Hayes & Frederickson, 2008) the advice and guidance provided by EPs are rarely formally appraised (Beeke, 2013; 2011). Instead, the effectiveness of the CI response is more frequently evaluated by EPs' self-evaluations and informal conversations with school staff (Beeke, 2013; 2011).

Given the unpredictability of CIs, it has been argued that following a traumatic event, there should be an immediate focus on support, not research (Everly et al., 2000)
Further challenges to the evaluation of CI interventions include the ethical constraints associated with conducting research in such a sensitive area and the difficulty measuring socio-emotional upheaval and recovery in the short and long-term with adequate reliability and validity (MacNeill & Topping, 2007). One solution to the dearth of direct research evidence for CI interventions has been to extrapolate from related fields of research to establish evidence-informed principles and to try to gain consensus from expert researchers and practitioners in the field of disaster and mass trauma recovery in relation to the same (Hobfoll et al., 2007; 2021).

#### *2.2.8.1.1 Essential Elements of Immediate and Mid–Term Mass Trauma Intervention.*

According to Hobfoll et al (2007; 2021), the diverse nature of CIs and the associated social-emotional upheaval thwarts the potential for any one set of guidelines to adequately meet the needs of affected populations. Consequently, there is a need for CI interventions which are both flexible and adaptable to specific circumstances (Forbes et al., 2011). Hobfoll et al., (2007; 2021) addressed this issue by proposing five general principles that are informed by empirical literature and can be used to guide CI intervention. These five principles include:

- promotion of a sense of safety,
- promotion of calm
- promotion of a sense of self and community efficacy
- promotion of connectedness
- promotion of hope (Hobfoll et al., 2007; 2021).

NEPS response to major CIs is based on these principles which aim to foster recovery in a traumatised community (DES, 2018, Hobfoll et al., 2007; 2021). An overview of these principles as applied to NEPS response to CIs is provided in Appendix A.

### *2.2.9 Interagency Working Following a CI*

As previously noted, the sudden and unpredictable nature of CIs can overwhelm school communities, disrupt routines and challenge normal coping mechanisms (Donnelly & Rowling, 2007). Depending on the brevity and magnitude of the event, the school may require the support of several services to help manage the situation (Dunsmuir, 2018). In Ireland, this might include a response from services including but not limited to Primary Care HSE psychological services, Child and Adolescent Mental Health Services (CAMHS), the National Office for Suicide Prevention (NOSP), or Tusla (The Child and Family Agency). A collaborative response from EP services such as NEPS and other services can provide

invaluable support to school communities, both in the immediate aftermath of the event and in the longer term (Beeke, 2021), and is essential for early identification, assessment and intervention (Silver, 2014)

Multiagency working is most effective where there are clear aims, clear lines of responsibility and accountability, good communication and information sharing and strong leadership (Sloper, 2004). Where there are many different agencies involved in a CI response, multi-agency collaboration and coordination are necessary to clarify roles and responsibilities as this helps determine the effective use of resources (Silver, 2014). According to the UK's National Institute for Clinical Excellence (NICE, 2006), EPs are the most appropriate service to coordinate the provision of social and psychological care for children during a CI in conjunction with other agencies. In Ireland, the DES (2016) asserts that NEPS is well placed to provide support to school management around the coordination of services and can provide advice on how best to avail of and mobilise available resources. Despite this assertion, previous studies have indicated a lack of clarity within schools regarding the capacity of EPs to assume a role in the coordination of services post-CI (Beeke, 2013; 2011; Hennessy, 2016).

## 2.3 Rationale for Review

Supporting schools both prior to and following a CI has become a core component of EP practice (Cameron, 2006; Farrell, 2006). The significance of programme evaluation and the linking of empirical research to professional practice is essential within the field of educational psychology (Bradley-Johnson & Dean, 2000; Cameron, 2006; Forman et al., 2013; Fox, 2003). Despite this, there is little empirical evidence examining the effectiveness of CI interventions in school settings. This is partly due to the sudden nature of CIs, which renders it cumbersome to isolate and examine all aspects of an intervention to a level which would prove acceptable for scientific research (Holowenko, 2015). There are several

additional challenges associated with the evaluation of CI preparation and CI intervention outcomes. These include ethical considerations in studies which involve withholding a CI intervention from a control group that may be in distress (Greenberg, 2004), and the collection of pre-post intervention data, due to the unpredictable manner in which CIs occur (Morrison, 2007).

One way to circumvent these challenges is to explore the perceptions' of school personnel of the efficacy of support currently being provided both in preparing for and following a CI. The aim of this review, therefore, is to synthesise the CI literature by exploring the perceived readiness of school personnel to respond to a CI, and the perceived effectiveness of CI preparation and CI intervention strategies. The literature will be systematically reviewed using the following question to address the aforementioned aims: What are school personnel perceptions of CI preparedness and the effectiveness of CI preparation and CI intervention strategies?

## 2.4 Literature Review

### *2.4.1 Literature Search*

A literature search of peer-reviewed articles was conducted in March 2022. The following five databases: Academic Search Complete, British Education Index, ERIC, APA Psych Articles and APA PsycInfo were used to conduct these searches. The databases and search terms employed are outlined in Table 3. This search produced a total of 728 results. Inclusion and exclusion criteria (see Table 4) were used to screen these results according to their title and abstract. Following this screening, 22 studies were selected for full-text screening using the inclusion and exclusion criteria. Overall, 16 studies were omitted as they did not meet the inclusion criteria (see Appendix B). In total, 6 studies were chosen for appraisal and inclusion (see Table 5). Figure 2 outlines the screening and selection process employed.

**Table 3**

*Database Searches and Search Terms*

| **Databases** | **Search Terms** |
|---|---|
| Academic Search Complete, British Education Index, ERIC, APA PsycArticles, APA PsycInfo, | "school personnel or teacher or school staff or teachers or educators"<br>AND<br>"perspectives or views or perceptions or attitudes or opinion or experience"<br>AND<br>"critical incident or traumatic event or crisis or critical incident preparation or critical incident preparedness or crisis prevention or critical incident prevention or critical incident intervention or crisis management or critical incident response or crisis response or critical incident management" |

**Figure 2**

*Flow Chart of Screening and Selection Process*

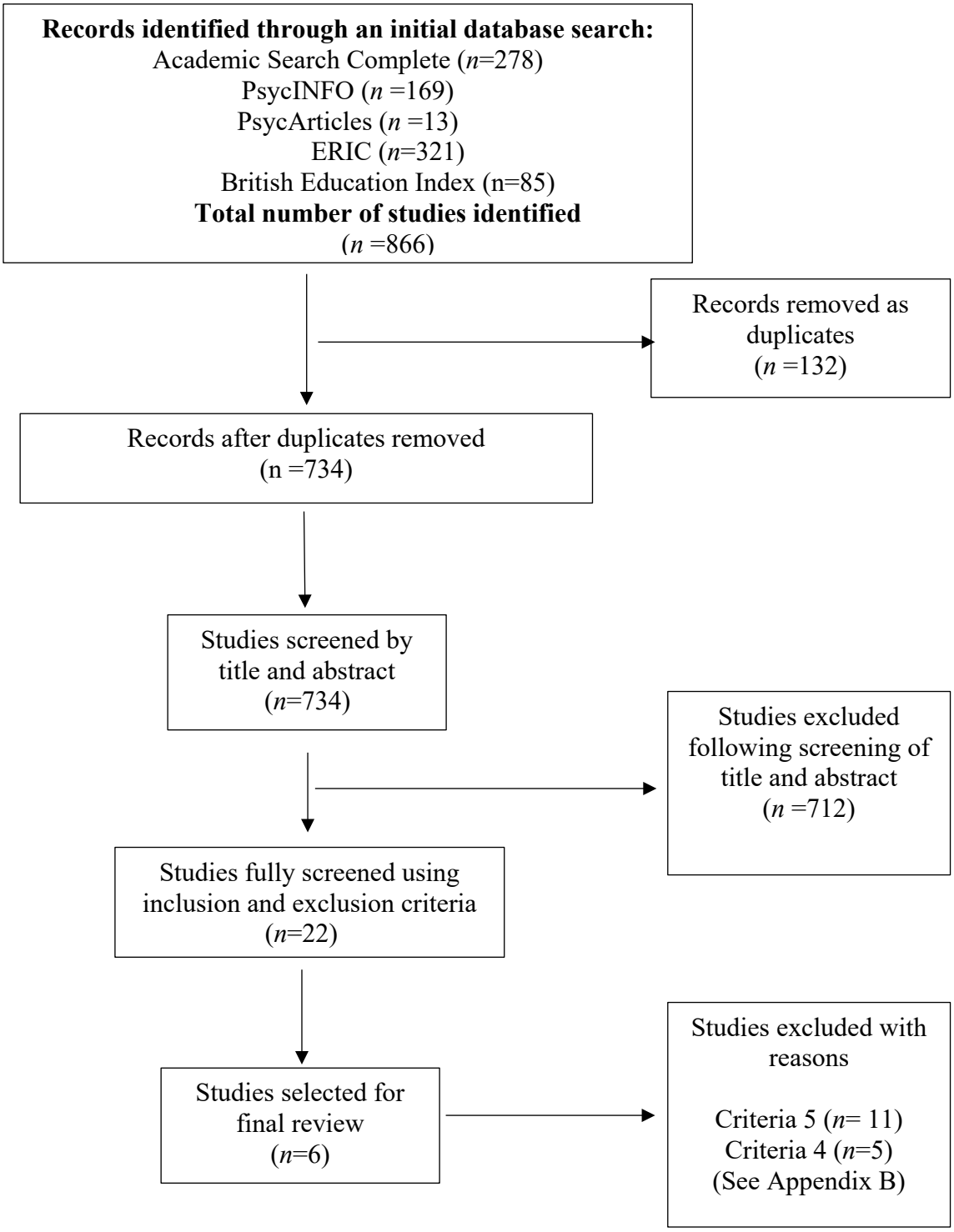


**Table 4**

*Inclusion and Exclusion Criteria with Rationale*

| | Factor | Inclusion criteria | Exclusion criteria | Rationale |
|---|---|---|---|---|
| 1. | Publication category | Peer-reviewed journal | Literature that has been retrieved in a non-peer-reviewed journal | To ensure quality and methodological rigour |
| 2. | Publication date | The study must have been published between January 2012-March 2022 | Any study published prior to January 2012 | To ensure studies are relevant and up to date |
| 3. | Language | English only | Any other language | The use of a transcription service was not feasible given the time constraints of this study |
| 4. | Participants | Primary, post-primary or special school staff including mainstream and/or special education teachers and school counsellors, school social workers, principals, and classroom aides) | Primary, post-primary or special school students OR persons outside the school community | To examine the perspectives of the aforementioned specific population cohorts |
| 5. | Focus of study | Explores school personnel perspectives on CI preparedness and the effectiveness (e.g. strengths and/or weaknesses) of CIs interventions within a school context. | Any training or intervention which is not directly related to a CI e.g. one which targets mental health/self-harm | To examine the perspectives of CI preparedness and the effectiveness of CI intervention strategies within a school context<br>. |
| 6. | Data | The study provides primary, empirical data | The study does not provide empirical data (e.g. reviews, commentaries) | Empirical data allows the reviewer to investigate the CI approaches being used. A variety of measures may be employed in studies including questionnaires, interviews, and self-reflection. |

**Table 5**

*Articles Selected for Inclusion*

| No. | Reference |
|---|---|
| 1. | Augusto, J., & Joav Merrick, M. D. (2017). School safety challenges and school crisis in Saudi Arabia. *International Journal of Child and Adolescent Health, 10*(3), 357-376. |
| 2. | Debes, G. (2021). Teachers' perception of crisis management in schools. *International Online Journal of Education and Teaching*, *8*(2), 638-652. |
| 3. | Karasavidou, E., & Alexopoulos, N. (2019). School crisis management: attitudes and perceptions of primary school teachers. *European Journal of Educational Management*, *2*(2), 73-84. |
| 4. | Le Brocque, R., De Young, A., Montague, G., Pocock, S., March, S., Triggell, N., & Kenardy, J. (2017). Schools and natural disaster recovery: the unique and vital role that teachers and education professionals play in ensuring the mental health of students following natural disasters. *Journal of psychologists and counsellors in schools*, *27*(1), 1-23. |
| 5. | McBrayer, J. S., Tysinger, D., Tysinger, J., Diamanduros, T., & Fallon, K. (2020). Keeping our schools safe: Examining perceptions of crisis frequency and preparedness of educators in a statewide online charter school. *Journal of Online Learning Research*, *6*(2), 107-128 |
| 6. | Olinger Steeves, R. M., Metallo, S. A., Byrd, S. M., Erickson, M. R., & Gresham, F. M. (2017). Crisis preparedness in schools: Evaluating staff perspectives and providing recommendations for best practice. *Psychology in the Schools*, *54*(6), 563-580 |

### *2.4.2 Mapping the Field*

An overview of the study objectives, participant demographics, research design and primary outcomes of studies selected for review is provided in the mapping tables in Appendix C and Appendix D.

### *2.4.3 Relevance and Quality of the Selected Studies*

Gough's (2007) Weight of evidence (WoE) framework was used to evaluate each of the studies selected for review. The studies were critically appraised across methodological quality (WoE A), methodological relevance (WoE B), and the extent to which the study was relevant to the review question (WoE C).

The methodological quality of studies (WoE A) was appraised using the British Medical Journal (2004) checklist for the critical analysis of survey designs as all studies included in the review employed a survey design. Further information on the WoE A coding protocols and the scoring criteria applied to each study are provided in Appendix E.

WoE B focuses on the appropriateness of the study design and its overall relevance to the review question (Gough, 2007). Scores were assigned to each of the studies based on Petticrew and Roberts's (2003) typology of evidence criteria (see Appendix F). This review was concerned with participants' perceptions of the effectiveness of CI interventions. Petticrew and Robert's (2003) assert that qualitative studies and survey studies are the most appropriate design for research questions about "satisfaction".

WoE C focuses on the relevance of the study to the review question (Gough, 2007). Review-specific criteria were developed by the researcher for evaluating WoE C. This review is concerned with the perspectives of school personnel on the efficacy of CI preparation and intervention approaches. Four criteria were used to appraise the degree to which they helped to answer this question: the percentage of school personnel in each study, the country in which the study was situated, the extent of information provided in relation to participants' perspectives on CI preparedness and the effectiveness of CI interventions and participants' perspectives on how CI preparedness and CI interventions could be improved. For further information see Appendix G.

The overall weighting of the study (WoE D) was determined by calculating the average scores of WoE A, WoE B, and WoE C which surmised the overall quality and relevance of each study to the review. The WoE ratings for each study are outlined in Table 6.

**Table 6**

*Overview of WoE ratings (Gough, 2007)*

| Study | Methodological quality (WoE A) | Methodological relevance (WoE B) | Relevance to review question (WoE C) | Overall weighting (WoE D) |
|---|---|---|---|---|
| Alsubie (2017) | 2 (Medium) | 3 (High) | 1.75 (Medium) | 2.25 (Medium) |
| Debes (2021) | 1 (Low) | 3 (High) | 1.5 (Low) | 1.83 (Medium) |
| Karasavidou & Alexopoulos (2019) | 2 (Medium) | 3 (High) | 2.25 (Medium) | 2.42 (Medium) |
| Le Brocque et al. (2017) | 2 (Medium) | 3 (High) | 1.75 (Medium) | 2.25 (Medium) |
| McBrayer et al. (2020 | 3 (High) | 3 (High) | 1.75 (Medium) | 2.58 (High) |
| Olinger Steeves et al. (2017) | 2 (Medium) | 3 (High) | 2.25 (Medium) | 2.42 (Medium) |

Note 1.5 or less = low, 1.51-2.50 = medium, 2.51-3 = high

The next sections will provide further information in relation to the critical appraisal using the following headings: participants, design, analysis and findings.

### *2.4.4 Participants*

The focus of this review was to explore school personnel perspectives on CI preparedness and the effectiveness of CI interventions. Emphasis was placed on the sample used in each of the studies. Greater weight was given to studies whose sample included a higher percentage of school personnel similar to that which would be found within an Irish school. There was a total of 1,170 participants across the studies included in this review. The number of participants in each study ranged from N=48 (Debes, 2021) to N=364 (Le Brocque et al., 2017). Participants ranged in age from 31 to 40 years. Within these studies, females

were more prevalent (N=319), relative to males (N=238). Two of the studies involved only teachers (Debes, 2021; Karasavidou & Alexopoulos, 2019). The remaining studies (Alsubie, 2017; Le Brocque et al., 2017; McBrayer et al., 2020; Olinger Steeves et al., 2017) included a combination of school personnel (see Appendix C). Overall, there was a total of 549 teachers, 309 educational professions, 55 mental health professionals, 51 principals/administrators and 148 counsellors. 'Other' roles (N=58) included counsellors, school psychologists and family liaison officers (where specified).

While none of the studies selected for review were conducted in Ireland or the United Kingdom, four studies (Karasavidou & Alexopoulos, 2019; Le Brocque et al., 2017; McBrayer et al., 2020; Olinger Steeves et al., 2017) were conducted in member countries of the Organisation for Economic Co-operation and Development (OECD). The OECD member countries share policies which influence the development of education and learning (Wiseman & Taylor, 2017). This is reflected in the medium WoE C ratings given to each of the studies conducted in OECD member countries. Studies conducted in non-OECD countries (Alsubie, 2017; Debes, 2021) received a low WoE C rating in this domain.

### *2.4.5 Design*

All of the studies selected for review utilised a survey design. WoE B was concerned with the appropriateness of the study design and its overall relevance to the review question (Gough, 2007). Scores were assigned to each of the studies based on Petticrew and Robert's (2003) typology of evidence criteria. This review was concerned with participants' perceptions of the effectiveness of CI interventions. Petticrew and Robert's (2003) assert that qualitative studies and survey studies are the most appropriate design for research questions about "satisfaction." Therefore, each of the studies within this review received a high WoE B score. Further information in relation to WoE B criteria and scoring can be found in Appendix F. The following sections will provide additional information in relation to the

survey methodologies under the headings of survey design, validity and reliability, example questions, distribution, administration and response biases.

**2.4.5.1 Survey Design.** Four of the studies (Karasavidou & Alexopoulos, 2019; Le Brocque et al., 2017; McBrayer et al., 2020; Olinger Steeves et al., 2017) used researcher-designed surveys. The questionnaire used by Alsubie (2017) was based on instruments used to measure crisis management preparedness in previous studies (Adamson & Peacock, 2007; Mathai, 2002). Debes (2021) reported using 'the crisis intervention scale' which was previously developed by Debes (2020). No information was provided in relation to the psychometric properties of this instrument.

**2.4.5.2 Validity and Reliability**. Studies adopted a variety of approaches to establish the validity of their survey. Karasavidou and Alexopoulos (2019) conducted pilot testing, a review of literature in the field and an expert review and subsequently, received a medium WoE A rating. Alsubie (2017) and Olinger Steeves et al. (2017) developed their respective surveys based on empirical literature and pilot testing but did not report having conducted external reviews. The inclusion of expert review may have strengthened the content validity of these surveys and resulted in higher WoE A ratings (Kelley et al., 2003). The remaining survey studies reported conducting pilot testing (Le Brocque et al., (2017) and pilot testing along with an external review (McBrayer et al., 2020). Debes (2021) provided no information in relation to pilot testing, a review of literature in the field or an expert review and therefore received a low WoE A rating. One study (Karasavidou & Alexopoulos, 2019) provided information regarding reliability checks. This included an examination of internal consistency (Karasavidou & Alexopoulos, 2019). The survey used by McBrayer et al. (2020) was reported to adhere to the needed validity and reliability of survey research (Tysinger et al., 2016). However, exact interrater -reliability scores were not reported.

**2.4.5.2 Example Questions.** One study (Le Brocque et al., 2017) provided example questions within the body of their study. Five studies (Alsubie, 2017; Debes, 2021; Karasavidou & Alexopoulos, 2019; McBrayer et al., 2020; Olinger Steeves et al., 2017) did not include example questions nor a copy of their questionnaire in the body or appendices of their survey. This meant that it was not possible to determine whether the wording of questions was mindful of bias, could be construed as leading, or establish whether there was evidence of response pattern biases (e.g. question order effects, no opinion filter effects) (Mertens, 2015, p. 214).

**2.4.5.3 Distribution, Administration and Response Rate.** Surveys were distributed via post (Karasavidou & Alexopoulos, 2019; Olinger Steeves et al., 2017) and email (McBrayer et al., 2020). Two surveys (Alsubie, 2017; Le Brocque et al., 2017) were administered in person. Debes (2021) did not report the method used to distribute their survey. Just one study (McBrayer et al., 2020) described both the method of survey distribution and their response rate and subsequently, received a high WoE A rating.

McBrayer et al. (2020) reported a response rate of 49%, similar to response rates reported by other email survey studies (Moss & Hendry, 2002). The authors also reported employing several strategies to increase response uptake including sending reminder emails to potential participants (Aerny-Perreten et al., 2015; Christensen et al., 2015). While response rates were not explicitly reported by Olinger Steeves et al., the authors stated that "the response rate for individual schools varied widely, with larger schools returning a smaller proportion of the surveys" (Olinger Steeves et al., 2017, p. 579).

**2.4.5.4 Response Biases.**

Four studies (Alsubie, 2017; Karasavidou & Alexopoulos, 2019; McBrayer et al., 2020; Olinger Steeves et al., 2017) highlighted potential response biases when discussing their findings. However, none of the aforementioned studies included features to minimise

response bias as part of their research design. Debes (2021) and Le Brocque et al.(2017) did not address response bias in their respective discussions' of their findings nor did they implement measures to minimise response bias as part of their research design.

### *2.4.6 Analyses*

Four studies (Alsubie, 2017; Debes, 2021; McBrayer et al., 2020; Olinger Steeves et al., 2017) conducted the appropriate statistical analyses as relevant to their data. For example, Olinger Steeves et al., (2017) used descriptive statistics to analyse participant demographic information and subsequently used multiple regression analyses to identify any factors in the CI plans that were predictive of staff members' perceptions of CI preparedness.

Two studies (Karasavidou & Alexopoulos, 2019; Le Brocque et al., 2017) included both quantitative and qualitative questions in their surveys but did not report the type of statistical analysis used to analyse qualitative data in their respective studies. For example, Karasavidou & Alexopoulos (2019) included an open-ended question in their survey which asked teachers to provide their recommendations for preventing, managing and being trained for CIs at school. However, rather than exploring participants' responses using a qualitative analysis such as thematic analysis (Braun & Clarke, 2006), the authors appear to have used descriptive statistics to discuss the frequency with which participants made specific CI recommendations. Le Brocque et al., (2017) employed open-ended questions to provide participants with the opportunity to give general feedback regarding the strengths and weaknesses of the training course, as well as any suggestions for improvement. However, the authors do not reference how qualitative data was analysed and only discuss qualitative findings deemed to be noteworthy in the findings. As a result, both studies received a medium WoE A rating.

Just one study (Olinger Steeves et al., 2017) provided a rationale for how they determined an appropriate sample size. Olinger Steeves et al. (2017) reported carrying out a

power analysis to determine the number of participants needed to conduct their proposed analyses but did not report if they achieved the target sample size. Debes (2021) did not situate their findings within the wider body of knowledge in the field and consequently, received a low WoE A rating. The remaining situated their findings within the wider body of knowledge in the field and provided recommendations for future research.

### *2.4.7 Findings.*

This section provides an analysis of the relevance of the study findings to the review question. The following section will discuss participants' perspectives' on CI preparedness, the effectiveness of CI intervention and how CI preparedness and CI interventions could be improved. A synthesis of findings is provided in section 2.7.

**2.4.7.1 Participants' Perspectives on CI Preparedness.** WoE C also considered and weighed each study according to the extent of information provided in relation to participants' perspectives on CI preparedness. Four studies (Alsubie, 2017; Karasavidou & Alexopoulos, 2019; McBrayer et al., 2020; Olinger Steeves et al., 2017) explored participants' perspectives of CI preparedness and received a medium WoE C Rating. Le Brocque et al. (2017) examined school personnel perspectives on the efficacy of a CI training program and received a medium WoE C rating. The study by Debes (2021) provided very little information in relation to participants' perspectives of CI preparedness and subsequently received a low WoE C Rating.

Studies varied in relation to participants' perceived confidence in their schools' competency to respond to a CI. Alsubie (2017) reported that participants expressed little confidence in their schools' competency to manage any CI. For example, over half of this study's participants (58.8%, n=160) felt that their schools would not be adequately prepared to respond to suicide. Participants also reported that their school would be ill-equipped to respond to suicidal ideation (66.1%, *n*=183), homicide (67.2%, *n*=180), terrorism (70.3%,

*n*=189) or death from illness (54.6%, *n*=148). This opinion was attributed to a lack of CI training and preparation or planning.

In contrast, Olinger Steeves et al. (2017) reported that the majority of participants (89%-98.5%, *n*=57-63) described feeling as though their schools were at least 'somewhat prepared' to respond to CIs, including fires, bomb threats, suicide, the death of a school community member, severe weather emergency or an intruder on campus. The authors reported that having read the school CI plan and attended CI training positively contributed to school personnel perceptions of CI readiness, particularly in relation to responding to the aforementioned CIs. Every school principal surveyed in this study reported offering CI training at least once in the previous year. Within this same period, Olinger Steeves et al. (2017) noted that less than 70% of participants attended CI training. The authors also identified that there was inconsistency amongst participants in terms of how much CI training was offered. Olinger Steeves et al. (2017) deduced that CI training uptake may have been negatively impacted by a lack of advertising and the fact that attendance was voluntary.

McBrayer et al. (2020) reported that the only area where more than 50% of participants surveyed felt 'very prepared' to respond to a CI was suicidal ideation amongst students (53.1%, n=76). Less than 20% of participants reported feeling very prepared to respond to homicidal ideation (18.9%, *n*=27) and less than 10% of participants described feeling 'very prepared' to effectively respond to CIs including the unexpected death of a teacher (7.7%, *n*=11), and terrorist threats (7.7%, *n*=11). Participants' perceptions of specific CI readiness appeared to positively correlate with whether they had received CI training. For example, the area where the greatest number of participants had received CI training from their local district or in-service training was suicidal ideation (McBrayer et al., 2020).

In two studies (Alsubie, 2017; Karasavidou & Alexopoulos, 2019) participants highlighted a lack of adequate training in helping prepare school personnel to respond to a CI. Participants

in the study by Karasavidou and Alexopoulos (2019) reported that they had not been trained (62.4%, *n*=155), and did not have practical experience in implementing CI interventions (54.7%, *n*=136). Participants also reported that they had not been informed about (74%, *n*=184) or trained on the proper use of the available resources for handling CIs (71.3%, n=178). Consequently, participants in this study were said to feel ill-prepared to provide support to students in the eventuality of a CI. In addition to a lack of CI training, Alsubie (2017) surmised that 29% (*n*=88) of respondents reported there was no CI plan in place within their respective schools, and a further 27.5% (*n*=83) were unsure as to whether there was a CI plan in place or an active CIMT. Furthermore, the authors noted that many participants reported never having worked in a school with an active CI plan or CIMT. While Debes (2021) did not specifically probe participants' perceived readiness to respond to a CI, they reported that with sufficient practice, participants felt they would feel competent in their capacity to manage CIs.

#### 2.4.7.2 Participants' Perspectives' on The Effectiveness of CI Preparation Strategies.

Just one study (Le Brocque et al., 2017) explored participants' perspectives on the effectiveness of a CI preparation strategy. This involved a teacher training programme: 'Childhood trauma reactions: A guide for teachers from preschool to Year 12,' (Kenardy, 2011). The purpose of this programme is to prepare educators to plan and prepare for a future natural disaster and promote post-disaster recovery (Le Brocque et al., 2017). The majority of participants (89.5%, n=325) described the CI preparation training as useful and reported that they would be able to apply the information presented in this training in their professional practice (92.5%, n=337). There were mixed responses in relation to whether the training improved participants' understanding of trauma reactions in childhood.

According to Le Brocque et al (2017), many mental health professionals reported that they were already familiar with the information provided in the training. In contrast,

educational professionals (84.5%, *n*=308), reported that attending the training improved their understanding of childhood trauma reactions. Limitations of the training programme were not specifically addressed. However, participants were asked to provide recommendations as to how the training might be improved. Their recommendations included: increased audience interaction time and discussion time as part of training, the provision of information for parents regarding coping strategies, referral procedures and information on parental reactions to trauma.

#### 2.4.7.3 Participants' Perspectives on the Effectiveness of CI Interventions.

WoE C focuses on the relevance of the study to the review question (Gough, 2007). One of the review-specific criteria of WoE C was concerned with whether studies examined the perspectives of school personnel on both CI preparedness as well as the effectiveness of CI interventions. None of the studies selected for review provided evidence for the effectiveness of CI interventions from the perspective of school personnel. Consequently, it was necessary to broaden the search to examine school personnel perceptions of the effectiveness of CI interventions. To establish the knowledge base of the perceived effectiveness *o*f CI interventions among school stakeholders a broadened literature search of relevant databases was conducted. This search included peer-reviewed papers from 2000 to 2022 and was conducted using the search terms “crisis intervention or critical intervention” AND “school.” A detailed description of the approach to this literature search is provided in Appendix I. Seven studies were identified from the broadened search. Four studies explored the perceptions of school personnel of specific CI intervention approaches (Barron et al., 2013, Baum et al., 2009; Morrison, 2007a; Morrison, 2007b). Two studies explored the general CI practice of school psychologists (Adamson & Peacock, 2007; Nickerson & Zhe, 2004) and one study explored the specific experience of a CI response team that provided CI support to a public high school following a shooting and hostage situation (Crepeau-Hobson &

Summers, 2011). A summary of their findings in relation to the review questions will be provided in the following sections

2.4.7.4 **Perceived Effectiveness of Specific CI Interventions.** Morrison (2007b) evaluated the perceptions of school psychologists and social workers who attended CISM training and had the opportunity to implement the CISM model following a school-based CI. Participants articulated that they valued having a structured framework for CI service delivery and increased knowledge about CI service delivery. Participants also expressed the view that the CISM model resulted in socially significant outcomes for children following a CI, including the identification of students in need of onward referral and the mobilisation of school resources to support students in need. Participants expressed apprehension in relation to the suitability of the CISM model for school-aged populations along with the perception that the CISM model would be more appropriate for adults in first responder professions. Finally, as the CISM model would require adaptation to meet the needs of students from different cultural backgrounds, it was felt that the successful application of this model would depend on the skills and expertise of the individual provider.

Morrison (2007a) set out to explore the perceptions of school personnel regarding the effectiveness of the CISM model. Participants completed a questionnaire which explored their perceptions of the effectiveness of the CI services provided both before and after the implementation of the CISM model, i.e., post-CI. Relative to baseline levels, school personnel reported significantly higher ratings of perceptions of the support provided by CI intervention providers (CIPs) in relation to informing students about the crisis and meeting with school staff regarding the CI. A medium effect size was reported across staff perceptions in relation to whether CIP supported the school in informing parents about the crisis, whether on-site materials were provided by the CIP or whether the CIP assisted the school in developing a school-based action plan to respond to the CI. Little to no effect size was found

across school personnel perceptions of whether the support provided to teachers in dealing with the CI or the individual or group counselling offered to students helped students to deal with the CI. In addition, the CISM model was found to have little to no effect on school personnel perceptions of the degree to which follow-up services were provided to students and staff.

Baum et al. (2009) explored the efficacy of the Building Resilience Project (BRP) on the perceived capacity of teachers to cope with their own stressors and their students' stress following a traumatic incident. At post-test, on a scale of 1–10, a mean of 8.95 was reported when participants were asked how much they learned about trauma, and a mean of 9.14 when asked how much the training contributed to participants' perceived confidence in implementing resilience-building tools in the classroom. At a 6-month follow-up, participants were asked to rate to what extent their work and perceived coping skills had improved after the training on a scale of one to ten. The most gains were reported in teachers' perceived ability to interact with their students (7.06), to respond with empathy to students (7.82), and to speak with students about difficult topics in the classroom (7.35). Participants reported improvements in their understanding of resilience and awareness of typical trauma responses. Participants also reported improved confidence when dealing with students' feelings and mental health concerns (7.29). When asked about the perceived utility of the workshop the two most useful skills reported were developing self-awareness (100% reported gains) and learning coping and stress management skills (94%). Other skills that participants found helpful were working on expressing feelings and developing empathy (81%), developing confidence to speak about difficult issues in class (80%), and learning self-care tools (71%).

Barron (2013) assessed the efficacy of the Teaching Recovery Techniques (TRT) trauma recovery program in reducing PTSD and other symptoms of trauma among children who have experienced and are experiencing ongoing violence. Focus group interviews indicated that the students valued feeling included and also appreciated the opportunity to share their respective experiences. Before the intervention, students indicated that they experienced fear and anxiety; however, these feelings stabilised throughout the intervention and students reported feeling hopeful for the future.

**2.4.7.5 Perceived Effectiveness of General CI Interventions.** In their evaluation of the CI response provided by school psychologists, Adamson & Peacock (2007), reported the most frequently employed form of support provided to students by school staff and CI team immediately after a CI was PFA, which was provided to 84% of participants. This was followed by contacting parents (64%) and making contact with community emergency services (52.4%). Following a CI, 49.1% of participants reported providing generic psychological debriefing and 12.3% of participants provided CISD to individuals impacted by the CI. Recipients of CISD included school staff (40.6%), students (30.7%) and parents (13.2%). The authors noted that given the controversial nature of debriefing and the lack of demonstrable research promoting its efficacy that school districts should practice caution when implementing debriefing following a CI (Adamson & Peacock, 2007). Less than half of the participants reported that their schools conducted parent/student/community meetings after a severe CI (Adamson & Peacock, 2007). The authors suggested that this may partly be because over a third of schools do not have a parent liaison as a CI team member role and few schools included parents as part of the CI team (Adamson & Peacock, 2007).

Nickerson & Zhe (2004) explored the CI experiences of school psychologists and the perspectives of school psychologists regarding the effectiveness of CI intervention strategies. CI interventions perceived to be the most effective when supporting students in the

immediate aftermath of a CI included: individual counselling, the provision of PFA and the facilitation of groups to process the event. Debriefing students was also reported to be an effective CI intervention. Strategies perceived to be the least effective as part of the CI response included: engaging students in activities to draw their attention away from the event, hosting memorials and facilitating parent support groups.

**2.4.7.6 Collaboration in CI Work.** Two of the studies referred to the importance of multiagency and collaborative work as part of the CI response (Adamson & Peacock, 2007; Crepeau-Hobson & Summers, 2011). Adamson and Peacock (2007) assessed the makeup of professionals involved in CI prevention and intervention work and found that administrators (92%) and guidance counsellors (81%) were the most frequently identified professionals. Other professionals identified as part of this collaborative response included teachers (66%), nurses (61%), other school mental health professionals (40%), community crisis response teams (33%), and community mental health professionals (25%) (Adamson & Peacock, 2007). In terms of improving CI interventions, Adamson and Peacock (2007), suggested that schools could improve their CI teams by including a parent or community representative. The authors posited that such a team member could act as a link between the parent body, community and school and could keep all parties informed of the school's response to the CI and could provide practical assistance to individuals impacted by the event in accessing services (Adamson & Peacock, 2007). Crepeau-Hobson and Summer (2011) discussed the importance of a clear line of communication among the various services involved in the CI response. The authors highlighted the necessity of recognising and ironing out "turf issues with other responders"(Crepeau-Hobson & Summers, 2011, p. 291). The authors noted that this was an area which could be improved to ensure that there is clarity amongst all stakeholders around leadership, designated roles and responsibilities.

**2.4.7.7 Evaluation of CI Practice.** Participants across two studies indicated that evaluations of CI practice were infrequent (Adamson & Peacock, 2007; Crepeau-Hobson & Summers, 2011). Participants articulated that frequently there was no opportunity to conduct a systematic evaluation of the response to the CI which was concerning. One participant expressed that "we need to hear what the staff and students have to say about our response. We need to know where they think things fell short and what was helpful. When you don't get that feedback, you keep doing the same thing and assume it's appropriate," (Crepeau-Hobson & Summers, 2011, p. 291).

Adamson and Peacock (2007) reported that just over half of the participants with CI teams in their schools indicated that evaluations of their teams took place (*n*=100, 53.5%). Some participants (*n*=55, 29.4%) were unsure if their teams were evaluated and a small number of participants reported that their CI teams were not evaluated (*n*=32, 17.1%). The authors reported that approximately a quarter of participants (*n*=25, 25.5%) indicated that evaluations were performed periodically. Seventeen (17.3%) participants reported evaluations occurred once annually, and just 6 (6.1%) participants noted that evaluations took place twice a year (Adamson & Peacock, 2007). The authors asserted that evaluations of the CI team would likely increase the team's effectiveness but having periodic evaluations prior to the occurrence of a CI may further improve the effectiveness and readiness of the CI team (Adamson & Peacock, 2007).

#### 2.4.7.8 Recommendations for how CI Interventions might be Improved.

Participants across three studies (Adamson & Peacock, 2007; Crepeau-Hobson & Summers, 2011; Nickerson & Zhe, 2004), provided recommendations in relation to how CI interventions could be improved. Adamson & Peacock (2007) highlighted the importance of CI practice and training. Participants in this study suggested that school districts provide regular ongoing training with everyone in the school around CI management. To further improve their response to CIs participants suggested that their schools consider implementing frequent ongoing training and regular enactment of CI plans. Participants suggested that these practice drills include role play and simulations with all school staff and community services.

In their exploration of the experiences and perceptions of school psychologists with regard to school CI preparedness, prevention, and intervention Nickerson & Zhe (2004), asked participants to consider how the response to CIs could be improved upon. The resources perceived as most needed to inform the response to CIs included local training (83%), on-site consultation (55%), and crisis books/manuals (52%) (Nickerson & Zhe, 2004). In addition, 29% of participants indicated that further empirical studies were needed to guide and inform future CI practice (Nickerson & Zhe, 2004).

Participants in the study by Crepeau-Hobson & Summers (2011) highlighted several components which schools should consider as part of their planned response to future CIs. These components included familiarity with the school system, the need for prior training in CI response and the need to address the needs of all those impacted including the adults. One participant stated that future CI responders "should support the staff's needs first because they're the ones who'll interact with and support the students," (Crepeau-Hobson & Summers, 2011, p. 288). Participants also noted that it was important for CI responders to see the scene or site of the incident (where tenable), to enable them to better share the experience. Participants discussed the need for flexibility in the role of the CI responder given the

changing needs of the staff and student body in the aftermath of the incident. The importance of follow-up support and long-term intervention was noted as well as the need for evaluation of the response. Participants also suggested that CI responders practice self-care and recognise the personal impact of providing support to school communities.

### *2.4.8 Appraisal Summary*

Gough's (2007) WoE framework was used to evaluate each of the studies selected for review. The studies were critically appraised across methodological quality (WoE A), methodological relevance (WoE B), and the extent to which the study was relevant to the review question (WoE C). The overall weighting of the study (WoE D) was determined by calculating the average scores of WoE A, WoE B, and WoE C which surmised the overall quality and relevance of each study to the review. Just one study received a high WoE D rating (McBrayer et al., 2020) and the remaining studies (Alsubie et al., 2017; Debes, 2021; Le Brocque et al., 2017; Olinger Steeves et al., 2017; Karasavidou & Alexopoulos, 2019) were assigned a medium WoE D weighting

The focus of this review was to explore the perspectives of school personnel in relation to CI preparedness and the effectiveness of CI interventions. Four studies (Alsubie, 2017; Karasavidou & Alexopoulos, 2019; McBrayer et al., 2020; Olinger Steeves et al., 2017) explored participants' perspectives of CI preparedness. Two studies (Debes, 2021; Le Brocque et al., 2017) discussed school personnel perspectives on the effectiveness of CI preparation strategies. No study was identified as part of this review which explored school personnel perspectives on the effectiveness of CI interventions. Consequently, it was necessary to extend the search terms to specifically address the review question.

## 2.5 Synthesis of Findings

The following section will synthesise key findings relevant to the review question:

1. What are school personnel's perspectives on CI preparedness and the effectiveness of CI preparation and CI intervention strategies?

Findings will be discussed with reference to national and international policies and guidelines that aim to support CI preparation and interventions.

### *2.5.1 Participants' Perspectives of CI Preparedness and Effectiveness of CI Preparation Strategies*

School personnel perspectives' on CI preparedness varied across studies and appeared to be significantly impacted by whether or not participants had attended CI training (Alsubie, 2017; Karasavidou & Alexopoulos, 2019; Olinger Steeves et al., 2017). Recommendations were provided across three studies (Alsubie, 2017; Karasavidou & Alexopoulos, 2019; Olinger Steeves et al., 2017) regarding how CI preparedness might be improved. Suggestions offered by participants included the provision of additional CI training (Debes, 2021; Karasavidou & Alexopoulos, 2019; Olinger Steeves et al., 2017) and the opportunity to practice going through CI practice drills (Alsubie, 2017; Olinger Steeves et al., 2017).

Additional variables which appeared to influence perceptions of CI readiness included the presence of a CIMP with which participants are familiar (Alsubie, 2017; Olinger Steeves et al., 2017). Participants across three studies (Alsubie, 2017; Karasavidou & Alexopoulos, 2019; Olinger Steeves et al., 2017) articulated that ideally, CIMPs would be concise, easily accessible and regularly updated. This aligns with previous research that posits that schools with a CIMP in place that is routinely reviewed feel significantly more competent in responding to a CI than schools without a CIMP (Holowenko, 2015). While there is currently no legal obligation for CI planning in Ireland, "schools are strongly advised to develop a policy in relation to critical incident response" (DES, 2016, p.79). CI guidelines released by

the Irish government also recommend that schools have a CIMT in place to foster recovery following a tragic event (DES, 2016).

In an investigation of EP's response to CIs in the UK, Beeke (2013; 2011) identified that 81% of educational services reported having a CI policy in place, while 16% reported that they were in the process of creating such a document or had already completed a draft version. These findings differ significantly from past studies in the UK and Northern Ireland, where just 10% of a sample of 123 local authority EPs and Emergency Planning Officers reported having CI plans in place (Houghton, 1996). The contrast in findings shows that CI planning in the UK has gathered significant momentum over the past two decades.

### *2.5.2 Participants' Perspectives on the Effectiveness of CI Interventions*

This review also found a lack of consensus regarding the perceived efficacy of CI interventions. Although initially intended for use as an early intervention for emergency personnel exposed to trauma (Mitchell, 1983). CISD has been employed extensively with civilian trauma survivors (Schultz & Forbes, 2014). Despite a lack of evidence demonstrating its efficacy, CISD has widely informed the CI response of EPs across Canada and the USA (Aucott & Soni, 2016; Szumilas et al., 2010; Wei et al., 2010). Beeke (2013; 2011) explored the psychological models which inform the CI practice of EPs (n=50) in the UK. Although participants reported a mindful awareness of the academic debate surrounding the efficacy of CISD, approximately half of the participants reported employing CISD with impacted school community members following a CI Beeke (2013; 2011). Current Irish governmental guidelines outlining recommended CI procedures in schools do not mention CISD (DES, 2016). Tusla discusses CISM as part of their policy for managing stress following exposure to a CI in the workplace but does not mention its application in school (Tusla, n.d.).

The contentious nature of CISM was evident in studies included in this review (Morrison, 2007a; Morrison, 2007b), where school personnel perspectives of the CISM model were explored. While teachers and school staff did not feel that the CISM model resulted in positive outcomes for students post-CI, school psychologists felt that its implementation model resulted in socially significant consequences for children and young people following a CI. This demonstrates the contrasting vantage points with which school-based CI service providers such as school psychologists and teaching staff may view CI interventions.

Two studies in this review identified the importance of a well-coordinated, multiagency CI response (Adamson & Peacock, 2007; Crepeau-Hobson & Summers, 2011). Crepeau-Hobson and Summer (2011) articulated that the multiagency CI response to future CIs would ideally include a clear communication channel between the multiple services involved. The authors also emphasised the importance of the various agencies recognising and resolving disputes around boundaries etc., with other respondents (Crepeau-Hobson & Summers, 2011). It was also suggested that this was an area which could be strengthened to ensure that all respondents had a clear understanding of leadership, roles, and duties (Crepeau-Hobson & Summers, 2011). In Ireland, the DES (2016) holds that NEPS are well-positioned to support school management with the coordination of services post-CI and can provide guidance on how best to employ and mobilise available resources. Previous literature has ascertained the views of Irish EPs regarding the coordinated CI response (Hennessy, 2016). However, research has yet to explore school personnel perspectives' on the coordinated CI response.

Participants in two studies (Adamson & Peacock, 2007; Crepeau-Hobson & Summers, 2011) expressed concern about the infrequent evaluation of CI practice. CI intervention providers across both studies highlighted the need for future evaluations of the

CI response to identify what is being received well and areas which could be improved. Studies within this review suggested that periodic evaluations of CI teams before the CI may further enhance the effectiveness and readiness of the CI team to support the school community in the eventuality of a CI (Adamson & Peacock, 2007). Due to the sensitive nature of CIs, formal evaluations of support provided by EPs are rare (Beeke, 2013; 2011).

The evaluation of CI interventions is problematic for several reasons. Obstacles include the ethical constraints in conducting research in such a sensitive area and the challenge of evaluating socioemotional upheaval and recovery with sufficient reliability and validity (MacNeill &Topping, 2007).

## 2.6 Conclusion

The focus of this review was to explore school personnel's perspectives on CI preparedness and the effectiveness of CI preparation and CI intervention strategies. Key findings emerging from this review, along with implications for research will now be addressed.

Five studies (Alsubie, 2017; Debes, 2021; Karasavidou & Alexopoulos, 2019; McBrayer et al., 2020; Olinger Steeves et al., 2017) explored participants' perspectives on CI preparedness. Three of these studies (Alsubie, 2017; Karasavidou & Alexopoulos, 2019; Olinger Steeves et al., 2017) also explored the perceptions of school personnel in relation to how CI preparedness could be improved. Just one study (Le Brocque et al., 2017) was identified as part of this review which examined the perceived effectiveness of a CI preparation strategy (CI training). This study also looked at participants' perspectives in relation to how this training might be improved. Three studies looked at the CI practice provided by school psychologists and school counsellors and provided recommendations for how the CI response might be improved (Adamson & Peacock, 2007; Crepeau-Hobson & Summers, 2011; Nickerson & Zhe, 2004). Finally, four studies explored the perspectives of

school personnel and students on specific CI interventions implemented post-CI (Barron et al., 2013; Baum et al., 2009: Morrison et al., 2007a; 2007b).

Perspectives of school staff on CI preparedness differed considerably across studies and appeared to be strongly affected by whether or not participants had received CI training. The provision of CI training and the opportunity to practice going through CI practice drills emerged as a recommendation to improve CI preparedness. The presence of a CIMP with which participants were familiar was another variable that appeared to influence participants' perspectives of CI preparedness. There is currently no legislative requirement for CI planning in Ireland however, "schools are highly encouraged to adopt a strategy for critical incident response" (DES, 2016, p.79). To date, no research has been undertaken in the Republic of Ireland to explore the perceptions of school personnel around the efficacy of this training. Therefore, it is impossible to conclude the extent to which governmental recommendations have been adopted in this regard. This is an important area which should be addressed by future research.

Several studies identified within this review explored the perceptions of school personnel perspectives of CI preparedness. However, there was a dearth of research which explored school personnel perspectives' on the efficacy of CI interventions. Of the few CI intervention studies identified, there was a lack of consensus regarding the perceived efficacy of CI interventions employed amongst the various school-based CI service providers e.g., school psychologists and teaching staff. This highlights the need for further research which explores the views of teaching staff as regards the appropriateness, acceptability and effectiveness of specific CI interventions. Such research could contribute to the growing CI literature and enhance our understanding of how EPs can best assist a school community in the aftermath of a CI.

It is widely understood in the CI literature that EPs often work alongside a variety of other professionals as part of the CI response (Beeke, 2013; 2011). A collaborative response from EPs and other services can give invaluable assistance to school communities in the immediate aftermath of a CI and the longer term (Beeke, 2021). The importance of such a response was identified by two studies (Adamson & Peacock, 2007; Crepeau-Hobson & Summers, 2011), in this review along with the importance of resolving "turf battles" around role responsibilities etc (Crepeau-Hobson & Summers, 2011). In Ireland, the DES (2016) asserts that NEPS are well placed to support school management with the organisation of services and can provide guidance on how best to employ available resources. When several services are involved in a CI response, coordination is required to designate roles and responsibilities as this determines the most effective use of available resources (Silver, 2014). However, research has not yet investigated the perspectives of Irish school personnel on the efficacy of the coordinated CI response. Such information might shed light on what is perceived to be working well in terms of the coordinated response and suggest helpful areas for improvement.

Due to the sensitive nature of CIs, it can be difficult to conduct evaluations of CI interventions (Adamson & Peacock, 2007; Beeke, 2013; 2011; Crepeau Hobson & Summers 2011). These difficulties are further complicated by the challenge of persuading those actively dealing with a CI that there is a place for researchers in a time of upheaval (MacNeil & Topping, 2007). While these challenges are acknowledged there is a pressing need for research to help EPs identify the most effective approaches to support school communities following a CI (Lockhart & Woods, 2017). This may help to inform the future response, organisation and action of EPs to school-based CIs (Dunsmuir et al., 2018).

### *2.6.1 Research Implications*

Due to the unpredictable nature of CIs (Brock et al., 2011), there is a dearth of research which assesses the efficacy of CI interventions, rendering a systematic, scientific approach regarding their respective efficacy challenging (Olinger Steeves et al., 2017). Because of this, most research around school crises has concentrated on evaluating CI training, school crisis plans, and the perceived readiness of school staff to deal with a CI (Olinger Steeves et al., 2017). Schools should be sufficiently prepared and confident in their capacity to deal with a CI should it occur (Felix, 2010). However, there is a need for further research to evaluate the efficacy of the CI interventions currently being implemented to support school communities (Pagliocca et al., 2002). Such research might provide insight into what the ideal CI training and response might look like. It may also assist in guiding the future response, organization, and action of EPs to school-based CIs (Dunsmuir et al., 2018).

Three studies (Adamson & Peacock, 2007; Nickerson & Zhe, 2004; Olinger Steeves et al., 2017) explored the perceptions of school personnel of the effectiveness of general CI prevention and intervention approaches. Just three studies (Baum et al., 2009; Morrison, 2007b; Morrison, 2007a) examined school personnel perceptions regarding the efficacy of a specific CI intervention following its application. These studies highlighted the contrasting vantage points with which school-based CI service providers such as school psychologists and teaching staff may view CI interventions. Previous literature has explored the perceptions of school psychologists on the efficacy of CI intervention approaches (Adamson & Peacock, 2007; Nickerson & Zhe, 2004). However, there remains a paucity of research which explores the perspectives of teaching staff on the suitability, acceptability and efficacy of CI interventions. School personnel including teachers, principals and other support staff remain with students long after school psychological services and other support services withdraw from the school following the CI (DES, 2016). It could be argued that they are on the front

lines of response in terms of supporting students as they come to terms with a CI (Felix, 2010). For these reasons, it is important that future research ascertains the perceptions of school personnel of the CI response currently provided by school psychological services to inform future CI practice (Olinger Steeves et al., 2017).

### *2.6.2 Research Area*

Cameron (2006) posits that the field of educational psychology has contributed to significant improvements in CI management in schools. The DES (2016) asserts that NEPS plays an active role in supporting schools that have experienced a CI. To date, there has been no empirical examination of the perceived impact of their input from schools that have received a response. Such an examination could reveal what is currently well-received within school communities and what is missing from the NEPS response. It might also help illuminate potential areas for improvement in the current NEPS model.

This exploration may provide valuable information regarding what is and what is not perceived to be helpful or useful and may aid the development of a CI intervention response that better meets the needs of schools in Ireland. As such, the central endeavour of this research is to examine school personnel perceptions of the effectiveness of the CI preparation provided by NEPS along with the efficacy of the CI response provided by NEPS and other services following a CI. To this end, this study addresses the following research questions.

1. What are the perceptions of primary, post-primary and special school personnel of the CI training provided by NEPS?
2. What are the perceptions of primary, post-primary and special school personnel of NEPS and other services response to a CI?
3. What are the perceptions of primary, post-primary and special school personnel of the coordinated response provided by NEPS and other services following a CI?

# 3 Empirical Paper

## 3.1 Introduction

### *3.1.1 What is a Critical Incident?*

A Critical Incident (CI) is an abrupt and unexpected event that falls outside the parameter of the normal recurring challenges which confront schools daily (Nickerson & Brock, 2011; Smith & Riley, 2012). CI's represent acute "confronting, intrusive and painful experiences," (Smith & Riley, 2010, 53), which have the potential to significantly disrupt normal school routines. Beeke (2013; 2011) defined a CI within the school context as follows:

> "a sudden and unexpected event that has the potential to overwhelm the coping mechanisms of a whole school or members of the school community. A serious and significant event, it is likely to be outside the range of normal human experience and would be markedly distressing to anyone in or directly involved with the school community."

In Ireland, types of CIs typically experienced by schools include the death of an individual or individuals within the school community through suicide, accident, illness, or physical assault (DES, 2016).

### *3.1.2 The Impact of a CI on the School Community*

In typical circumstances, schools are environments which strive to foster the development of students' emotional well-being, learning and self-development (Sokol et al., 2021). The abrupt and unpredictable nature of CIs, however, exposes students and staff to danger and trauma and can counteract the efforts by school personnel to establish a consistent routine to support students learning and perceived sense of safety and security (Greenway, 2005; Morrison, 2007b)

According to Brock (2000), CIs have the potential to adversely affect cognitive and social functioning and significantly impact students' potential for learning. In addition, exposure to trauma puts children and adolescents at high risk of Post-Traumatic Stress Disorder (PTSD) and other adverse behavioural, emotional and mental health outcomes (Gillies et al., 2016).

Current research indicates that school personnel play a significant role in providing support to students following a CI (Baum et al., 2009; Evans & Oehler-Stinnett, 2006; McGovern & Tracy, 2010). However, the unpredictable nature of CIs can impede the confidence and decision-making capacity of school personnel in responding to such an event, which can lead to external professionals, for example, EPs supporting the school community (Dunne, 2021).

### *3.1.3 The Role of the Educational Psychologist (EP) in CIs*

Educational Psychologists (EPs) are frequently called upon to provide a response in the aftermath of a CI (Holowenko, 2015). According to McCaffrey (2004), EPs are well-placed to provide support to school communities given their understanding of systems and pre-established relationships with school personnel.

Within the Irish context, the National Educational Psychological Service (NEPS) is the main employer for educational psychologists working in schools (Parkinson, 2004). NEPS offer a school-based service to primary, post-primary and special schools and referrals are prioritised through a consultative process at the school level (NCSE; 2019, Nugent et al., 2014). Since its establishment in 1999, NEPS has been involved both in helping prepare schools in Ireland to respond to a CI and providing support to schools that have experienced a CI (DES, 2016).

In Ireland, the DES (2016) holds that following a CI, the EP is in a unique position to provide support and advice as they are familiar with the principal and school staff and the

running of the school. This familiarity can offer comfort to school personnel at a time when all normality can disappear (DES, 2016).

The DES (2016) outlines the typical CI response provided by EPs in 'Responding to Critical Incidents: Guidelines for Schools.' This includes providing support to school management to determine the severity of the event, mobilising school resources and external services to provide support and establishing a response plan. EPs provide information and advice to management and staff as they come to terms with the situation and are available for school staff as they support the students. Following a CI, EPs also work alongside teachers to identify students most in need of support, the development of procedures for reviewing their needs, and where necessary, support onward referral (DES, 2016b).

A range of services are likely to be involved in providing a CI response to schools and the scale of an interagency response is typically determined by specific circumstances surrounding the CI (Dunsmuir et al., 2018). An interagency response which includes clear lines of communication and designated responsibilities can help to avoid turf battles, reduce duplication of work and ensure that available resources are used both effectively and efficiently (Mendenhall, 2006; Silver, 2014). At an organisational level, one of the key factors which facilitate effective multiagency working is strong leadership (Sloper, 2004). In Ireland, the DES (2016) asserts that NEPS are well placed to coordinate the various offers of support post-CI.

### *3.1.4 CI Preparation*

According to Brock (2001), while it is nearly impossible to prepare for all contingencies, CI response preparation places schools in the best possible position to respond to traumatic circumstances. The development of a CI management plan (CIMP) which anticipates potential difficulties and creates mechanisms for resolution maximises the likelihood that members of the school community will adapt successfully to a CI (Smith et

al., 2001). There is currently no legal requirement regarding CI planning in Ireland. However, "schools are strongly advised to develop a policy in relation to CI response" (DES, 2016, p.79).

The DES has published several guidelines which provide an overview of the role of NEPS and outline how schools can best prepare and respond to CIs (DES, 2003; 2007; 2016). The most recent set of CI guidelines published by NEPS is 'Responding to Critical Incidents: Guidelines for Schools.' (DES, 2016). These guidelines outline how schools can implement preventative approaches to establish a safe and supportive environment and guide how schools can plan for CIs (DES, 2016). Within this document, guidance is provided which "encourages schools to develop a Critical Incident Management Plan (CIMP), outlining who will do what in the event of a tragedy*,"* (DES, 2016, p.79). The type of support offered by NEPS to schools around CI preparation is also outlined in this document which includes the provision of CI training and supporting the development of a CIMP, CI management policy, and a CI Management Team (CIMT) (DES, 2016b).

### *3.1.5 CI Intervention*

The goals of CI interventions are outlined by Everly and Rapopor (2006). They include the stabilisation and control of the situation, efforts to mitigate the impact of the traumatic event, the mobilisation of resources required to manage the experience and the restoration of affected individuals to an acceptable level of adaptive function. There is a range of CI intervention models and strategies available to address CI situations (Jimerson et al., 2005).

One of the models which have informed the CI response provided by EPs internationally, in recent decades is CI Stress Debriefing (CISD)(Mitchell, 1983). CISD was originally developed to support emergency personnel who had experienced a traumatic event (Mitchell, 1983). Despite a dearth of research demonstrating its efficacy with school-aged

populations, it has been widely endorsed by school districts throughout the USA and Canada and is seen as a central component of the strategic response to school-based CIs (Wei et al., 2010). In addition to a lack of empirical evidence, some studies have suggested that CISM is not only ineffective but potentially harmful (Cuijpers et al., 2005; Lilienfeld, 2007). This argument is based on the premise that the remembering of traumatic experiences may inhibit recovery from psychological trauma by disrupting the normal processes which work to alleviate emotional distress (Wei et al., 2010). Irish governmental guidelines which outline recommended CI practice in schools do not mention CISD (DES, 2016).

Current international clinical practice for the management of psychological trauma recommends Psychological First Aid (PFA) as an early intervention for survivors of potentially traumatic events (Forbes et al., 2011). The objective of PFA is to reduce initial distress and support both short and long-term adaptive functioning (Ruzek et al., 2007). PFA includes eight core components: contact and engagement, safety and comfort, stabilization (if needed), addressing needs and concerns, information gathering on current needs and concerns, practical assistance, connection with social support, information on coping, and linkage with collaborative services (Brymer et al., 2006; Uhernik & Husson, 2009). PFA is a flexible approach, which is considered appropriate for developmental levels across the lifespan (Aucott & Soni, 2016; The National Child Traumatic Stress Network., 2017). Despite the paucity of demonstrable empirical evidence, there is a strong international consensus that PFA is the intervention of choice in the immediate aftermath of a CI, (Akasaka & Kawashima, 2019; Forbes et al., 2011). PFA is one of the central tenets of the CI response provided by EPs in Ireland and the UK and is actively implemented by NEPS as part of their response to CIs (DES, 2018; Dunne, 2021; Morgan, 2020).

### *3.1.6 Challenges in Evaluating CI Interventions*

Supporting schools before and post-CI is a core component of EP practice (Farrell, 2006). According to Yule (2001), the key to improving CI intervention is forward planning and more effective criterion outcome measurement. Despite this, there is little empirical evidence examining the effectiveness of the CI response provided by EPs to school communities (Dunne, 2021; Gaukroger, 2020; Morgan, 2020). This is partly due to the sudden nature of CIs which renders it cumbersome to isolate and examine all aspects of an intervention to a level which would prove acceptable for scientific research (Holowenko, 2015). Other difficulties which impede research include the ethical constraints associated with conducting such research and the difficulty of measuring socio-emotional upheaval and recovery in the short and long term with adequate reliability and validity (MacNeill & Topping, 2007). One way in which to overcome these difficulties is to explore school personnel perceptions of the effectiveness of support currently being provided for both in preparing for and following a CI.

### *3.1.7 The Present Study*

In Ireland, the DES (2016) asserts that NEPS plays a key role in supporting schools that have experienced a CI. As part of the CI response EPs often work collaboratively with a range of other professionals (Beeke, 2011; Dunsmuir et al., 2018; Rees & Seaton, 2011). To date, there has been no empirical examination of the perceptions of school personnel of the efficacy of the CI response provided by NEPS. Furthermore, there is a paucity of research which investigates the perceived effectiveness of how EPs and other services intervene in the wake of a crisis (Silver, 2014)

Such an examination might provide insight into the perceived effectiveness of school personnel on the efficacy of the CI response provided by NEPS and the efficacy of the coordinated CI response provided by NEPS and other services. This might highlight areas

which could be improved upon and may aid the development of a CI response that better meets the needs of schools in Ireland. Therefore, this study aims to address the following research questions:

1. What are the perceptions of primary, post-primary and special school personnel of the CI training provided by NEPS?
2. What are the perceptions of primary, post-primary and special school personnel of the NEPS and other services' response to a CI?
3. What are the perceptions of primary, post-primary and special school personnel of the coordinated response provided by the NEPS and other services following a CI?

## 3.2 Methodology

### *3.2.1 Research Paradigm*

A paradigm can be understood as a researcher's 'worldview' (Mackenzie & Knipe, 2006; Whitney, 2010). This worldview constitutes a set of beliefs and influences what should be studied, how it should be studied and informs the meaning or interpretation of research data (Kivunja & Kuyini, 2017). A pragmatic paradigm was employed in this study. As a research paradigm, pragmatism advocates a non-singular reality ontology (Kivunja & Kuyini, 2017). The pragmatic paradigm emphasises the importance of the research problem and the researcher is encouraged to consider all methodological approaches available to better understand the problem (Creswell, 2009; Mackenzie & Knipe, 2006). A central tenet of pragmatic inquiry is to create knowledge in the interest of change and improvement (Goldkuhl, 2012). This aligns with the objective of this study which is to explore school personnel perceptions of the CI response from NEPS and other services. It is hoped that the findings obtained may help inform future NEPS interagency working and response to CIs.

### *3.2.2 Theoretical Framework*

Appreciative Inquiry (AI) was the theoretical framework adopted for this study. AI is a "strengths-based approach to goal visualisation and realisation, operationalised through structured, positively framed inquiry," (Delgadillo et al., p. 167). AI aligns with the philosophical underpinnings of pragmatism, as it explores not only what "is," but also what "might be" (Goldkuhl, 2012). AI is an evaluative approach which focuses on building upon strengths rather than fixing deficits (Schutt, 2007). This approach was deemed appropriate as the exploration of school personnel perceptions' of the CI response from NEPS, and other services represented an under-researched and potentially sensitive area of inquiry.

It was hoped that the application of AI would facilitate the development and exploration of positive possibilities (Morris & Atkinson, 2018). Whitney and Trosten-Bloom (2010) outline the core principles upon which AI is based:

1. The Constructionist Principle. The language people use creates their reality.
2. The Positive Principle. A positive focus can sustain effective change.
3. The Simultaneity Principle. Change begins when we ask questions.
4. The Poetic Principle. Individuals are not static; they are subject to ongoing change and what we choose to focus on determines that change.
5. The Anticipatory Principle. Positive images of the future create positive change.

AI consists of five stages, which are collectively known as the 5-D cycle (Cooperrider & Whitney, 2001). An outline of the 5-D cycle is provided in Table 7.

**Table 7**

*The 5-D AI cycle (Cooperrider & Whitney, 2001)*

| Stages | Focus |
|---|---|
| **Stage 1 Define** | Defining the focus of the inquiry (MacCoy, 2014). |
| **Stage 2 Discovery** | Exploration of strengths and what is working well (Cooperrider & Whitney, 2001) |
| **Stage 3 Dream** | Envisioning an ideal scenario or what it could be like if "the best of what is" occurred more frequently (Coghlan et al., 2003) |
| **Stage 4 Design** | Discussion around what is needed, in terms of both tasks and resources, to bring the desired future to fruition (Coghlan et al., 2003) |
| **Stage 5 Destiny** | The implementation of the agreed action plan to bring about the desired changes (Coghlan et al., 2003) |

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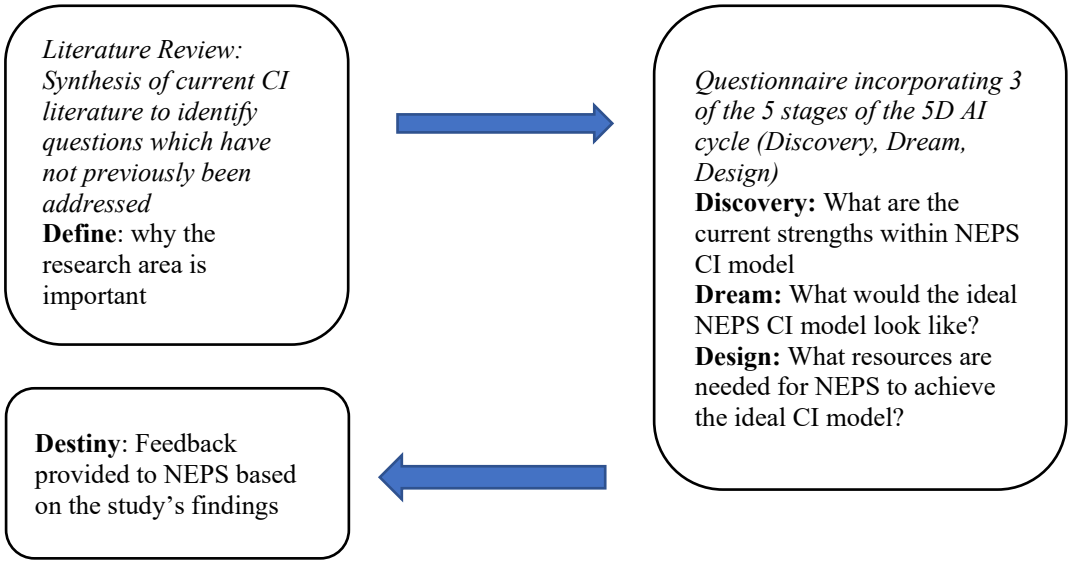
The first stage, 'Define' involved synthesising the current CI literature which was achieved via a systematic literature review. This allowed the principal researcher to identify research questions which had not previously been explored within the CI literature. The 'Discovery, Dream and Design' stages were addressed via the design and administration of the questionnaire. Participants' completion of the questionnaire facilitated the identification of current strengths within the CI training and CI response provided by NEPS as well as strengths within the coordinated CI response provided by NEPS and other services. Completion of the questionnaire also helped to ascertain participants' perceptions of what the ideal CI training and CI response from NEPS and other services might look like, as well as the resources which would be needed to achieve this goal. The fifth stage 'Destiny' was addressed via a discussion of the research findings and implications for professional EP practice. Recommendations arising from this review will then be provided to NEPS once the thesis has been academically reviewed. This will provide NEPS with the opportunity to

consider the findings and may help inform NEPS response to CIs in the future. An outline of AI mapped onto the current study is provided in Figure 3.

**Figure 3**

*Appreciative Inquiry Mapped on to the Current Study*




### *3.2.3 Study Design*

The research questions in this study were investigated using a mixed methods approach. A mixed methods approach is one in which the investigator collects and analyses both qualitative and quantitative data, integrates the findings, and draws conclusions based on both methods of inquiry (Tashakkori & Creswell, 2007). This study used a triangulation design: validating the quantitative data model. Creswell and Plano Clark (2007) state that this model can be used to validate and expand upon a survey's quantitative findings by also including open-ended questions.

Mixed methods survey research offers several advantages including methodological flexibility and the collection of rich, comprehensive data (Wisdom & Creswell, 2013), as well as the expansion and explanation of contradictory or complex survey responses (Driscoll, 2007).

Despite its relative merits, there are several shortcomings associated with mixed-methods research. For example, the combination of both qualitative and quantitative methods can mean that more resources are required for data collection, management and analysis (Halcomb & Andrew, 2009), which can be taxing on the researcher's time and energy (Johnson & Onwuegbuzie, 2014). Other criticisms of mixed methods include the argument that mixing qualitative and quantitative approaches contributes to a devaluation of qualitative methods (Wiggins, 2011). In weighing up the merits and criticisms of a mixed methods questionnaire it was deemed appropriate for this study as closed questions facilitate the exploration of quantifiable data which can support the development of a representative summary of the data set (O'Cathain & Thomas, 2004). Additionally, open-ended questions can be used to corroborate answers to closed questions and provide respondents with the opportunity to provide a wide range of answers which may provide illuminating information (Hyman & Sierra, 2016; O'Cathain & Thomas, 2004).

### *3.2.4 Sampling and Sample Size*

Total population sampling (Etikan et al., 2016) was used in this study wherein the entire population that meet inclusion criteria were invited to take part in the research. This study aimed to explore the perceptions of primary, post-primary and special school personnel of NEPS CI training, and the response provided by NEPS and other services following a CI. Therefore, all schools (N=243) that had experienced a level 2 or level 3 CI and subsequently received a response from NEPS before March 2020 (pre-COVID-19), were invited to participate in this study. This figure was inputted into the Qualtrics Sample Size Calculator with a 95% confidence interval and with a 5% margin of error. This calculation suggested that an ideal sample size was 149 schools.

### *3.2.5 Identification of Participants*

The NEPS facilitated access to participant information relevant to this study. NEPS personnel with responsibility for CIs agreed to support the principal researcher with this study. In consultation with the NEPS, it was agreed that a representative of the NEPS with responsibility for CIs would contact school principals to invite them to participate in this study. As the researcher was processing data belonging to an external source, ethical approval was sought from and granted by the NEPS Research Ethics Committee.

### *3.2.6 Recruitment Process*

NEPS personnel with responsibility for CIs contacted school principals via email (see Appendix S) on behalf of the principal researcher. This initial email provided information about the research, the principal investigator, and the nature of the request. The principal was informed that they could complete the questionnaire themselves, or delegate completion to a member of the CIMT, who was involved in the CI response supported by the NEPS. The email also contained a link to the study information sheet, participant consent form and online questionnaire. To support response uptake, three reminder emails were circulated to participants at intervals of 14, 20 and 26 days following the initial invitation (Granello & Wheaton, 2004).

### *3.2.7 Inclusion and Exclusion Criteria*

The following section provides an overview of the inclusion and exclusion criteria pertaining to participants' eligibility to partake in this study (see Table 8)

**Table 8**

*Inclusion and Exclusion Criteria for Participation*

| **Inclusion Criteria** | **Rationale for Criteria** |
|---|---|
| Schools were only considered eligible to take part in this study where a CI was provided by NEPS following a CI prior to March 2020 (pre-COVID-19 | There does not appear to be a definitive body of literature regarding a timeframe within which a community such as a school and individuals within that community recover from a CI. Given the particular circumstances of each CI, school community members' recovery processes may vary. This is echoed by Kropf and Jones's (2014) assertion that there is no linear or universal grief healing period. Since March 2020, school closures owing to the COVID-19 pandemic have significantly disrupted CI practices. This timeline served to increase the likelihood that sufficient time had elapsed since the CI for potential participants to feel competent to respond and avoid insensitivity in seeking involvement |
| Only schools that had received a CI response from NEPS between 2017 and March 2020 were considered eligible for this study | The collation of NEPS CI data began in 2017 |
| Only primary, post-primary, and special schools that received a level 2 or a level 3 response from SPS were considered eligible for participation. | The NEPS employs a classification of response levels linked to numerous situational factors to clarify a school psychologist's expected CI response (DES, 2016). This rating helps schools and psychologists assess the level of intervention needed, including additional support from colleagues and other agencies. A level 1 response to a CI is often managed via a phone response wherein the school psychologist calls the impacted school to help mobilise resources, whereas a level 2 or level 3 response requires more intense interventions (DES, 2016). Schools that received a level 2 or level 3 answer from NEPS after a CI likely had a greater experience with the NEPS CI response given the level of input warranted |
| **Exclusion Criteria** | **Rationale for Criteria** |
| Schools other than primary, post-primary and special schools (e.g., pre-schools, Youth reach centres or further education institutes were not considered eligible for participation in this study | The NEPS primarily provide a service to primary, post-primary and special schools |
| Schools were not eligible to participate in this study where less than 12 months had passed since the CI occurred. | To avoid insensitivity in requesting participation |
| Schools that received a level 1 response from school psychological services following a CI were not considered eligible for participation in this study, | Level 1 incidents typically involve a lower level of support than level 2 and level 3 incidents |

### *3.2.8 Ethical Considerations*

This research involved participants' recollections of CIs in their schools. This may have involved the recall of issues related to bereavement. Several steps were implemented to protect participants. Consideration was given to the timeframe which would reasonably need to have passed since the CI before a school could be approached about this study. To avoid inadvertently causing distress to CIMT members of such schools, schools were only contacted about this study where at least 12 months had passed since the CI. The information sheet described in detail the content of the study and what would be involved (see Appendix T). Participants were informed that they could opt out if they did not feel ready to participate in this study. Potential risks of participation were clearly outlined. Consent was sought from participants before participation. Participants were asked to confirm that they felt ready to discuss experiences related to the CI in the consent form for the online questionnaire.

Additionally, upon completion of the online questionnaire, participants were provided with a debriefing document (see Appendix W). The purpose of the study and the potential value of their participation was reiterated (Brody et al., 2000). Information on available psychological support services was also provided (Draucker et al., 2009).

As part of the data analysis, it was necessary to alter some qualitative data to ensure participants' anonymity (Saunders et al., 2015). For example, the principal researcher altered data where participants referred to the specific timeframe in which their CI occurred. The principal researcher replaced participants' specific references to months or events during the academic calendar with generic terms such as "holiday period," etc. This decision was made as it was felt that the inclusion of specific CI timelines, could lead to the identification of particular schools, as well as the psychologists who worked with them (Saunders et al., 2015).

### *3.2.9 Measures Employed*

A web-based questionnaire (see Appendix T) was used to explore school personnel perceptions of the effectiveness of CI interventions. The popularity of online surveys (also referred to as web-based or internet surveys) has increased significantly over the last decade (Loomis & Paterson, 2018). Web-based questionnaires offer several advantages including reduced cost (Wright, 2005), rapid dissemination time (Evans & Mathur, 2005), a reduced time frame for data collection, and access to a large and diverse population with the potential for significant amounts of data (Lefever et al., 2007). In addition, web surveys facilitate automated data entry and analysis (Nickerson & Zhe, 2004; Schmidt, 1997).

The questionnaire used in this study was established based on previous research in the field (Beeke, 2013; 2011). Several modifications were made to contextualise this study to an Irish setting. Adaptations made to Beeke's (2013; 2011) questionnaire, are outlined in Table 9. Further information regarding adaptations made is provided in Appendix O.

**Table 9**

*Adaptations made to Beeke (2013; 2011)*

| Beeke (2011) | Adaptations made to Beeke's (2011) questionnaire | Rationale for adaptation |
|---|---|---|
| **Demographic information**<br>Participants in this study were asked questions pertaining to:<br>• EP training.<br>• The number of years in practice.<br>• Role within the CI response. | **Demographic information**<br>Participants in this study were asked questions pertaining to their:<br>• Professional role<br>• School setting<br>• Type of school<br>• Role within the school CIMT | This study was concerned with the perceptions of school personnel of CIs within an Irish context. Therefore, the questions around demography required adaptation to suit school personnel within the Irish educational system as opposed to professional EPs in the United Kingdom. |
| **CI policy**<br>Participants in this study were asked questions pertaining to:<br>• The psychological models and theories underpinning the policy.<br>• Participant familiarity with the policy.<br>• The accessibility of the policy to staff.<br>• Whether they consulted the policy document when responding to a CI<br>• How helpful they found the policy guidance. | **CI policy**<br>Participants in this study were asked questions pertaining to:<br>• Whether the school had a CI policy in place.<br>• The accessibility of the policy to staff. | This study was concerned with whether there was a CI policy in place and participants' accessibility to this survey. It is unlikely that school personnel within an Irish context would have an awareness of the psychological models and theories underpinning their CI policies. Therefore, these questions were omitted from this survey. |
| **CI training**<br>Participants in this study were asked:<br>• To indicate to what extent their professional training prepared their school to respond to a CI<br>• When they had last received training in responding to CIs.<br>• To indicate to what extent they feel competent in responding to CIs<br>• To indicate their most recent CI training provider and the psychological models and | **CI training**<br>Participants in this study were asked:<br>• To indicate whether they had attended training<br>• The medium through which training was delivered<br>• How long ago they received training from NEPS.<br>• To indicate to what extent the training provided by the NEPS prepared their school to respond to a CI. | This study was concerned with the perceptions of school personnel of the CI training provided by the NEPS rather than the training which would be provided to CI response providers. Therefore, participants were asked questions pertaining to whether or not they had attended CI training and how well prepared they felt the training provided by the NEPS helped prepare their school to respond to a CI. |

| | | |
|---|---|---|
| approaches which best describe their most recent training. | • To rate their opinion of the effectiveness of each training component in helping their school respond to a CI. | • The perceived effectiveness of each training component provided by the NEPS<br>• It is unlikely that school personnel within an Irish context would have an awareness of the psychological models and approaches underpinning the CI training. As a result, these questions were omitted from this survey. |
| Participants were asked to indicate:<br>• How many times they have responded to specific CIs.<br>• The types of CIs to which they have responded.<br>• To describe their most recent response to a CI.<br>• The interventions that they have offered to families, pupils and school staff who were either directly or indirectly involved in the CI and to rate their perceived effectiveness. | Participants in this study were asked to indicate:<br>• The type of CI (s) most recently experienced by their school and whether the CI(s) had a high media profile.<br>• To what extent they felt the CI response provided by the NEPS following the CI had met their needs.<br>• How helpful they found each of the CI interventions offered by the NEPS were to staff in helping them respond to the CI<br>• How helpful they found each of the CI interventions offered by the NEPS were in helping them to support students following the CI. | This study was concerned with the perceptions of school personnel of the CI response provided by the NEPS rather than the response which would be provided by CI response providers. Therefore, participants in this study were asked questions pertaining to the perceived effectiveness of the CI interventions both in helping staff respond to the CI and in helping staff to support students after the event. |
| **CI response from other services**<br>Participants were asked to indicate:<br>• What other services were involved in the CI response provided to the school.<br>• How successful they felt this intervention was in providing support to the school community following the CI | •<br>**CI response from other services**<br>Participants were asked to indicate:<br>• What other services provided support to their school following the CI<br>• To what extent they thought the CI response offered by the NEPS and other services was well coordinated.<br>• To what extent they felt the CI response provided by other services following the CI had met their needs. | This study was concerned with the perceptions of school personnel of the perceived effectiveness of the coordinated CI response provided by the NEPS and other services as opposed to the perceptions of EPs in relation to their CI response. |

### *3.2.10 Expert Review*

To support the external validation of the questionnaire, it was reviewed by two senior EPs with 34 years of combined experience in CI training and responding**.** Expert reviews are often employed to evaluate draft questionnaires before their dissemination and to provide guidance to the researcher. The main objective of an expert review is to reveal problems with a survey instrument so that they can be remedied before distribution (Olson, 2010). According to Ikart (2019), as subject matter experts, the function of expert reviewers is to make sure that the wording of the questionnaire is technically correct, appropriate and that the questions are logically presented, and response sets are reasonable. Feedback from the expert review was considered and several adaptations were subsequently made to this questionnaire.

Modifications included clarification around the wording of questions to support respondent comprehension. For example, initially, this questionnaire asked participants to provide some information about the training they received from the NEPS to help prepare them to respond to a CI. If they had not received CI training, participants were advised to skip this section and go to the next section on NEPS CI response. Following feedback from the expert review, this section was edited, and participants were explicitly asked to state whether they had attended NEPS CI training. If they answered yes, they were asked to complete the proceeding questions. If they answered no, they were directed to skip to the next section on CI response.

In terms of response sets, the uptake of feedback from the expert review is illustrated in adaptations which were made to ascertain the types of CI (s) experienced by school personnel. Initially, the options available to participants included:

- The death of a student or staff member who was seriously ill.
- The death of a parent or sibling of a student
- A fire in the school not resulting in serious injury.
- Serious damage to school property
- The sudden death of a student or staff member
- An accident or event involving several students
- A violent death
- An incident with a high media profile involving several schools

Following the expert review, this response set was edited to include the categories used by the NEPS when they are recording CI(s). They included:

- Suspected suicide
- Suspected attempted suicide
- Road traffic accident
- Sudden death/illness
- Serious illness
- A violent death

Other changes included the expansion of the sample to include special schools. The original sample proposed for this study included primary and post-primary schools only. This change was made to align with the extension of the NEPS service to all schools and to enhance the representativeness of the sample in this study.

### *3.2.11 Pilot Testing*

Pilot testing allows the researcher to develop and test the adequacy of the research instruments, assess the feasibility of a full-scale study, and assess whether the research protocol is realistic and workable (Van Teijlingen & Hundley, 2001). The sample size for the pilot study was determined using the 10% rule of thumb for piloting an instrument (Johanson & Brooks, 2010). The sample size calculated for this study was 149 participants. As such, a sample of 15 participants was considered appropriate for the pilot study. It was hoped that this would facilitate the retention of potential participants. The NEPS personnel with responsibility for CIs randomly selected 15 schools from the sample and contacted school principals via email on behalf of the principal researcher to invite participants to take part in the pilot. This email provided information about the research, the principal investigator as well as what was being requested. Just two of the fifteen schools that were invited to participate in the pilot study completed the questionnaire.

Piloting the questionnaire allowed the principal researcher to identify issues such as accessibility, formatting or gaps in the questions being asked, and review participant comprehension (Rattray & Jones, 2007). Feedback was used to review and refine the items of the questionnaire before data collection. Changes made based on participant feedback included the rewording of one question and the inclusion of a definition of a CI in the participant information sheet to help contextualise the study for participants. Once refined, this questionnaire was disseminated to all primary, special and post-primary schools that had received a level 2, or level 3 CI response from NEPS before March 2020.

### *3.2.12 Methodological Rigour*

Korstjens and Moser (2018), assert that there are five main criteria which can support the quality of qualitative research, including reflexibility, transferability, dependability,

credibility, and confirmability. The following sections provide an overview of the strategies employed in the current study with regard to each of these criteria.

#### 3.2.12.1 Researcher Reflexivity

. Reflexivity, according to Braun and Clarke (2021; 2019), is a fundamental component of TA. Furthermore, the authors emphasize that in TA, the researcher actively participates in the meaning-making process. Therefore, the researcher is encouraged to "embrace and interrogate" their subjectivity rather than being expected to maintain an objective stance (Braun, 2021, p. 13). To consciously reflect upon how the researcher's experiences and perspectives affected the gathering and interpretation of data, the principal researcher kept a reflexive journal throughout the research process (Braun, 2021). A three-part log of participant responses was employed wherein the researcher noted what was said by the participant, what it might mean, and what the researcher thought about the response (Berger, 2015). An example of the researcher's reflexive field notes is provided in Appendix X. Revisiting these field notes allowed the researcher to identify content that she may have subconsciously shied away from or emphasised and alerted her to 'unconscious editing,' (Berger, 2015).

#### 3.2.12.2 Credibility.

Credibility is determined by the accuracy of research findings and the researcher's efforts to show that the phenomenon under study is truly represented by those findings (Lincoln & Guba, 1985). Credibility assesses the extent to which confidence can be placed in the truth of the research findings and the extent to which the views are representative of the population under investigation (Korstjens & Moser, 2018). Strategies which were used to ensure the credibility of this study included data triangulation, researcher reflexivity, and engaging with other researchers to reduce the potential for moderator bias (McCabe & Holmes, 2009; Noble & Smith, 2015).

**3.2.12.3 Transferability.** According to Tobin and Begley (2004), transferability addresses the extent to which the results of qualitative research can be applied to different contexts or settings with different respondents. Bitsch (2005, p. 85) holds that the researcher facilitates the judgement of transferability through "thick description" and "purposeful sampling." Transferability was enhanced in the current study through the provision of a rich account of descriptive data, including the context in which the research was conducted, the study setting, sampling strategy, inclusion and exclusion along with a full outline of the questionnaire employed (Korstjens & Moser, 2018).

**3.2.12.4 Dependability.** Dependability can be established where the research process is logical (i.e., the methods are appropriate to answer the research question and they are in line with the chosen methodology), traceable, and clearly documented (Munn et al., 2014). To ensure dependability, the researcher is required to provide the reader with enough details to assess how reliable the study and researcher are (Ryan et al., 2007). In the current study, the principal researcher has transparently described the research steps from the beginning of the study through to the development and reporting of the findings (Korstjens & Moser, 2018). She has also described in detail the adaptations made to Beeke's (2013; 2011) questionnaire to contextualise the questionnaire to an Irish context (see appendix O). An overview of Braun and Clarke's (2006) six-phase approach to TA as compared to the current research is provided in appendix P. Finally, an outline of Clarke and Braun's (2021) Fifteen Point Checklist for Good Reflexive TA as compared to the current study is provided in appendix Q.

#### 3.2.12.5 Confirmability.

Confirmability is the extent to which the investigation's findings could be corroborated or verified by other researchers (Anney, 2014). It is important to note that instead of supporting the idea of intercoder reliability, Braun and Clarke (2021) suggest that good TA practice typically involves a single coder who uses their own personal experiences to interpret the data. However, Braun & Clarke (2022) also note that if the goal is to increase reflexivity and interpretive depth, good coding (and theme development) can be accomplished either individually or collaboratively. For these reasons, an independent coder was employed in this study who coded a subsection of the dataset. Discussion of codes with the independent coder allowed the researcher to engage with the data at a deeper level which lead to a richer understanding of the dataset.

### *3.2.13 Approach to Data Analysis*

Quantitative information generated from the questionnaire was exported from Qualtrics and analysed using the Statistical Package for Social Sciences (SPSS; version 27) (IBM Corp., 2020). Descriptive statistics (e.g., frequencies and percentages), were used to summarise data pertaining to closed questions e.g., participants' roles within the school and the location and type of school. Descriptive statistics were also used to summarise participants' roles within the CIMT and the presence and accessibility of CI management policy.

Thematic Analysis (TA) was employed to analyse participant responses to open-ended questions. TA follows six key phases (Braun & Clarke, 2006). It starts with becoming familiar with the data through reading and noting initial ideas, followed by the systematic generation of codes, the generation of themes from codes using relevant data, reviewing themes in relation to the originally generated codes and data set and engaging in ongoing analysis to refine themes with clear definitions and the production of the final report (Braun & Clarke, 2006). A sample of the coding process is provided in Appendix R.

An independent coder was employed to assess the rigour and transparency of the data analysis process (O'Connor & Joffe, 2020). According to Campbell et al., (2013), debate exists regarding the proportion of the data set which would facilitate a reliable estimate of inter-coder reliability. However, contingent upon the size of the data set, 10-25% of data units is thought to be acceptable (O'Connor & Joffe, 2020). Once the principal investigator had reviewed and coded the data set, an independent coder coded 25% of the data set which was randomly selected. Coding inconsistencies were resolved via discussions between the independent coder and the principal researcher (Roberts et al., 2019). For example, initially, the independent coder and the principal researcher disagreed as to how to categorise one participant's comments regarding the lack of clarity around the role of the NEPS psychologist post-CI. This disagreement centred around whether this comment merited categorisation into a theme or subtheme. An agreement was eventually reached wherein it was concluded that while these comments were of interest, no other corroborating comments emerged whilst coding responses to open-ended questions. Subsequently, the independent coder and principal researcher concluded that there was insufficient data to substantiate the development of an independent theme or subtheme.

## 3.3 Results

The following section is divided into four parts. In the first section, a summary of response rates is provided. The second section includes an overview of the characteristics of the sample. Section three outlines the results, structured to align with the research questions and section five outlines how the 5D AI cycle maps onto the thematic analysis of qualitative data.

### *3.3.1 Response Rate and Missing Data*

Overall, 51 online questionnaires were completed in November 2021. This figure represented a return rate of 22% from the original sample of 228 schools that were invited to

take part in this study. This aligns with previous studies which have reported a low response rate to surveys which are emailed (Shih & Fan, 2009). It is plausible that the response rate to this study may have been impacted by the sensitive nature of the topic being investigated (Tourangeau & Yan, 2007). For example, participants may have felt unable to answer specific questionnaire items due to the difficulty associated with recalling the circumstances of their respective CIs. This questionnaire explored how soon after a CI participants felt they would have been ready to review the CI response provided by NEPS. Participant responses to this question varied significantly. Seven participants reported that they would have been happy to review the CI response with a NEPS psychologist shortly after, within a fortnight, after one month and within the same term as the CI. Contrastingly, twelve participants shared that they would not have been ready to review the CI response for at least 1 year after the CI occurred. This may provide some insight into the low response rate of this questionnaire.

All respondents fully completed the first section which examined demographic information. Of the 51 questionnaires, two of the questionnaires were fully completed. The remaining 49 questionnaires contained sections which were incomplete. These sections were analysed in further detail to explore whether missing data was random or whether any patterns emerged. Section 2 of this questionnaire explored participants' perceptions of the CI training provided by NEPS. Results showed that the majority of respondents (N=30) had not attended NEPS CI training, which meant that they were unable to complete this section. Section 3 of the questionnaire looked at the CI response from NEPS. 61% of respondents (N=31) did not complete the open-ended questions in this section which explored what the ideal CI response might look like. Section 4 of the questionnaire explored the CI response from other services. Again, 84% of respondents (N=43) did not complete the open-ended questions in this section which explored what the ideal CI response from other services might look like. It is important to note that depending on the severity of the CI experienced, some

schools may not have received a response from services other than NEPS, which meant that this section would not have applied to certain respondents. This might partly account for why some respondents did not complete this section.

### *3.3.2 Characteristics of Sample*

Descriptive statistics were used to establish an overview of participant demographics. This provided insight into participants' roles, school type and school location. Information was also gleaned in relation to participants' roles within the CIMT along with the CIMP policy and accessibility of this policy within each school. Table 10 provides an overview of the dataset.

**Table 10**

*Demographic Information for Participants*

| **Demographic Variable** | ***n*** | **(%)** |
|---|---|---|
| **Role within the school** | | |
| Teacher | 1 | (2.0) |
| Vice Principal | 4 | (7.8) |
| Principal | 42 | (82.4) |
| Other | 4 | (7.8) |
| **Location of school** | | |
| Rural | 17 | (33.3) |
| Urban | 15 | (29.4) |
| Suburban | 14 | (27.5) |
| Inner City | 5 | (9.8) |
| **Type of school** | | |
| Primary school | 30 | (58.8) |
| Secondary school | 19 | (37.3) |
| Special school | 2 | (3.9) |
| **Role in CIMT** | | |
| Team leader | 42 | (82.4) |
| Parent liaison | 1 | (2.0) |
| 'Other' (not specified) | 8 | (15.7) |

**Percentages may not amount to 100% because of rounding.*

The respondents in this survey included teachers (2.0%), vice principals (7.8%), principals 82.4%), and individuals in other roles including home school community liaison officers and teaching principals (7.8%). Seventeen respondents (33.3%) described the

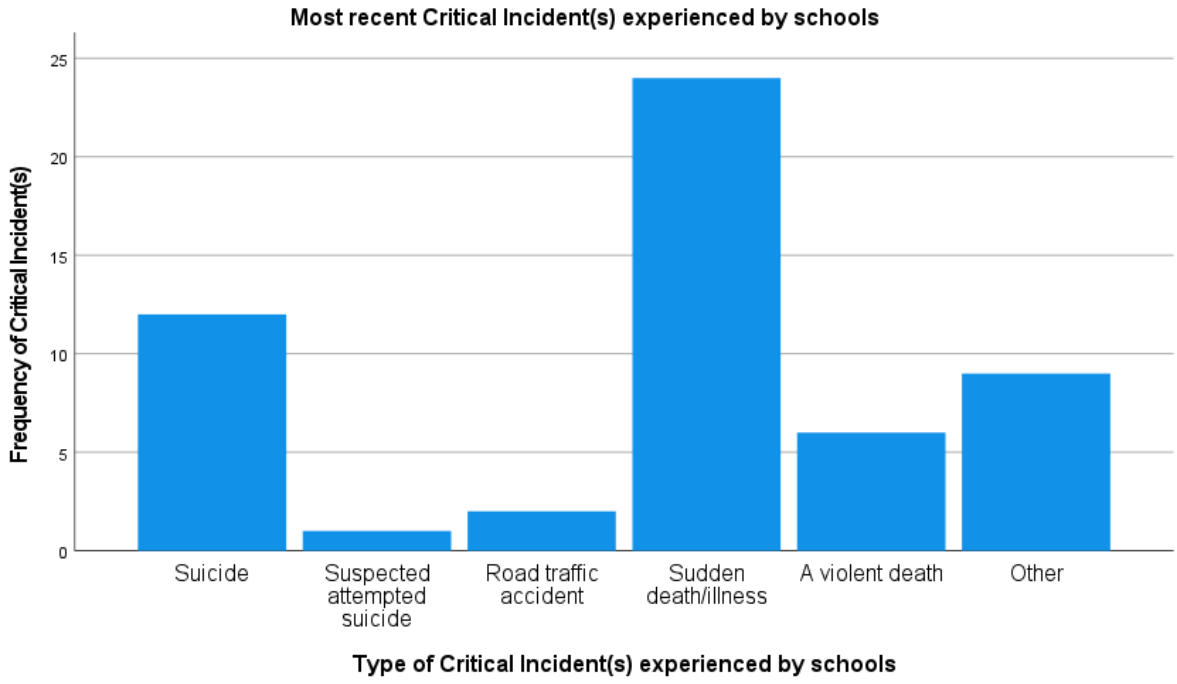
location of their schools as rural (i.e., a school in a village/small town). The remaining respondents reported that their schools were located in urban settings (29.4%), suburban settings (27.5%), and inner-city settings (9.8%). The majority of respondents worked in primary schools (58.8%) or secondary schools (37.3%). Just two respondents (3.9%), worked in special schools. All respondents reported that their school had a CIMT and that they were a part of the CIMT. Respondents' roles within the CIMT included team leader (82.4%), parent liaison (2.0%), and other roles (15.7%), which were not specified. All of the respondents reported that their school had a CI management policy in place which was readily accessible.

### *3.3.3* Participant Information concerning the Most Recent CI Experienced by their School.

Participants were asked to describe the most recent type of CI experienced by their school. The types of CIs included suicide, suspected suicide, road traffic accident, sudden death or illness or violent death. An 'other' option was also presented to allow participants to describe their CI if it did not fall into any of the aforementioned categories. The frequency of the type of CI experienced by respondents is presented in Figure 4.

**Figure 4**

*Recent CIs(s) Experienced by Schools*



Twelve participants (23.5%) reported that the CI experienced by their school had a high media profile and/or involved several schools. Thirty-nine participants (76.5%) stated that their CI did not have a high media profile.

### *3.3.4 Structure of Results as Presented in the Research Questions*

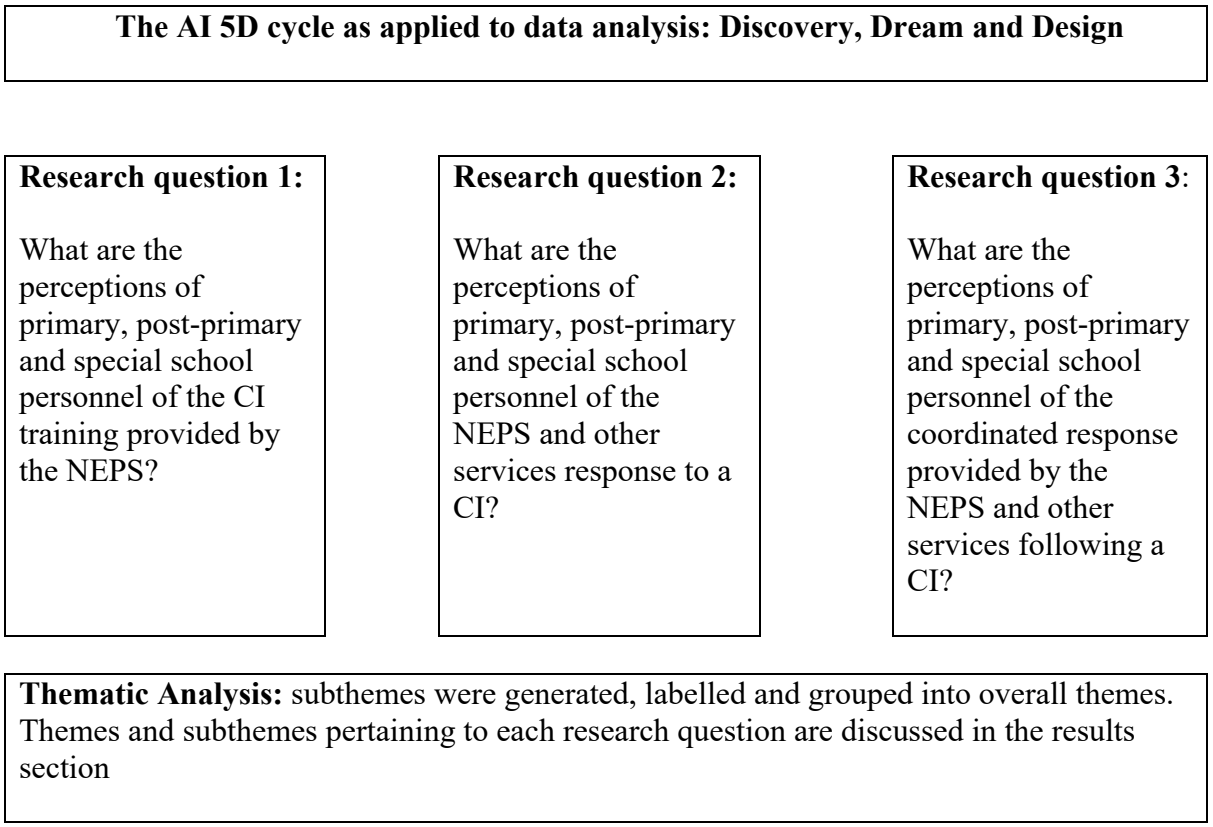
School perceptions of the CI training provided by the NEPS and the CI response provided by the NEPS and other services were explored using a questionnaire which included 3 of the 5 components of AI including Discovery, Dream, and Design. Quantitative data emerging from this questionnaire were summarised using descriptive statistics. Qualitative data were analysed using thematic analysis from which themes and subthemes emerged.

Quantitative data pertaining to each of the research questions will first be presented to provide an overview of the perceived efficacy of the CI preparation and CI response provided by the NEPS and other services for each research question. This will then be followed by an overview of relevant themes and subthemes emerging from each research question.

Qualitative data were analysed using thematic analysis from which themes and subthemes emerged. Owing to the overlap in the data emerging from questions pertaining to what the ideal CI response would look like and how NEPS could achieve this ideal, the Dream and Design phases were analysed together (Morris & Atkinson, 2018). Figure 5 provides an outline of the process by which themes and subthemes were identified.

**Figure 5**

*Layout of Thematic Analysis of Results Section*




An overview of the themes and subthemes relating to each research question is provided in Table 11.

**Table 11**

*Overview of Themes and Subthemes for each Research Question*

| Question/AI Cycle | AI Cycle Theme | Subtheme(s) |
|---|---|---|
| **Training (RQ1) 'Dream' and 'Design'** | Increased accessibility of training | • Increased delivery of training to prepare schools<br>• Online training |
| | Increased interaction | • Opportunities for increased interaction during training<br>• Shared learning with other schools |
| **Response by the NEPS (RQ2) 'Discovery'** | Support provided post-CI | • Practical support<br>• Emotional support |
| | Contact provided post-CI | • Contact provided at the time of the CI<br>• Follow-up support |
| **The Ideal response (RQ2) 'Dream' and 'Design'** | Additional support for staff | • Additional guidance for teachers in relation to supporting students<br>• Support for staff as well as students |
| | Increased accessibility | • Accessibility in the immediate aftermath of the incident<br>• The promotion of adequate staffing levels<br>• Out-of-hours support<br>• The importance of follow-up support |
| **Coordinated Response by NEPS and other services (RQ3) 'Discovery'** | The guidance provided to schools | • Guidance in relation to the school's response<br>• Support provided to staff |
| | Support provided to children and their families | • Support provided to children<br>• Support provided to parents |
| **Coordinated Response by NEPS and other services (RQ3) 'Dream' and 'Design'** | Increased accessibility | • Ensuring that there are enough staff to provide an appropriate response<br>• Being physically present in the immediate aftermath of a CI |
| | The importance of being proactive | • Initiating contact with the school to offer a response<br>• The importance of prior preparation |
| | The importance of being well-coordinated | • Providing guidance for schools in relation to services which can provide support<br>• A streamlined, organised response from all services |
| | Providing continued support post-CI | • Support for staff and students<br>• A timeline for continued support |

### *3.3.5 Research Question 1: What are the Perceptions of Primary, Post-Primary and Special School Personnel of the CI Training provided by NEPS?*

**3.3.5.1 Discovery.** Participants were asked whether they had attended NEPS CI training and through what medium the training had been delivered. Information was also gathered in relation to the recency of this training and whether participants had attended training prior to, or since the CI. Table 12 provides an overview of this information.

**Table 12**

*Participant Information on CI Training*

| Variable | *n* | (%) |
|---|---|---|
| **Have you attended NEPS CI training?** | | |
| No | 30 | (58.8) |
| Yes | 21 | (41.1) |
| **Was the training delivered via:** | | |
| Face-to-face training | 21 | (41.1) |
| An E-learning training Module online | 0 | (0) |
| Missing data | 30 | (58.8) |
| **When did you last receive training from NEPS in responding to CI(s)?** | | |
| Between 1-3 years ago | 8 | (15.7) |
| More than 3 years ago | 11 | (21.6) |
| Other | 4 | (7.8) |
| Missing data | 28 | (54.9) |
| **Did you have CI training prior to the CI(s)?** | | |
| Yes | 15 | (29.4) |
| No | 14 | (27.5) |
| Missing data | 22 | (43.1) |
| **Have you had CI training since the CI(s)?** | | |
| Yes | 7 | (13.7) |
| No | 22 | (43.1) |
| Missing data | 22 | (43.1) |

**Missing data refers to participant non-response to questionnaire items. Percentages may not amount to 100% because of rounding.*

Over half the respondents (N=30, 58.8%) stated that they had not attended NEPS CI training. Twenty-one participants (41.1%) reported that they had attended face-to-face training. No participants had completed CI training via an E-learning module online.

In section two of the questionnaire, participants rated the helpfulness of each training component in preparing their school to respond to a CI using a five-point Likert scale (see

Appendix T). This scale ranged from 1 being 'very helpful' to 5 'not at all helpful'. This information is outlined in Table 13. Twenty-one participants (41.1%) responded to this section of the questionnaire. Overall, the majority of respondents found the training components very helpful or helpful.

**Table 13**

*The Perceived Helpfulness of Specific Components of CI Training*

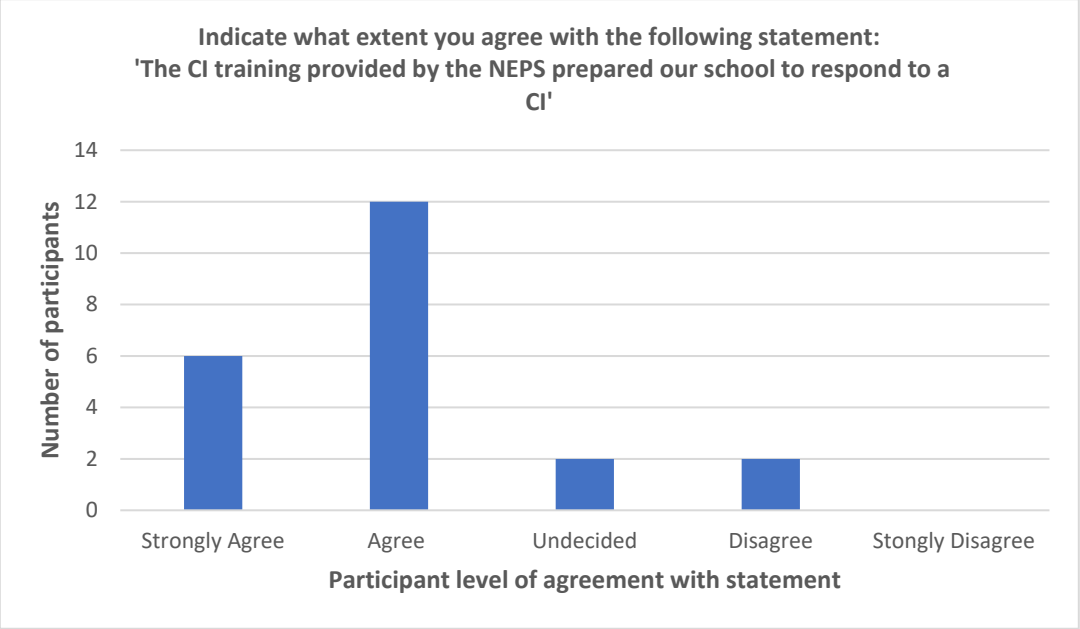
| Training component | Very Helpful | | Helpful | | Neither helpful nor unhelpful | | Not helpful | | Not at all helpful | |
|---|---|---|---|---|---|---|---|---|---|---|
| | ***n*** | **(%)** | ***n*** | **%** | ***n*** | **(%)** | ***n*** | **(%)** | ***n*** | **( %)** |
| Providing information on the development of a CIMT | 9 | (17.6) | 12 | (23.5) | 0 | (0) | 0 | (0) | 0 | (0) |
| Providing information on the development of a CIMP | 8 | (15.7) | 11 | (21.6) | 2 | (3.9) | 0 | (0) | 0 | (0) |
| Providing information on the development of a Critical Incident Management Policy | 10 | (19.6) | 9 | (17.6) | 2 | (3.9) | 0 | (0) | 0 | (0) |
| Providing information on how to respond to a CI | 11 | (21.6) | 9 | (17.6) | 1 | (2.0) | 0 | (0) | 0 | (0) |

**Percentages may not amount to 100% because of rounding*

In section two of the questionnaire, participants (N=22) indicated to what extent they agree with the statement "the CI training the NEPS provided to our school prepared us to respond to a CI", (see Figure 6). The majority of participants either agreed or strongly agreed with this statement. Only 2 participants (9.1%) disagreed that training prepared them to respond.

**Figure 6**

*Participants' Perceptions of the Efficacy of CI Training (N=22)*




**3.3.5.2 Dream and Design: The Ideal CI Training.** To explore participants' perceptions of the ideal CI training, open-ended questions were analysed. Participants were asked to consider what aspects of the CI training currently provided by NEPS could be changed if any, for it to be more effective. Participants were also asked what the ideal CI training would look like. Responses to both questions were combined to provide a more succinct overview of the information. Increased accessibility of training and increased interaction emerged as key themes in relation to these questions (see Table 14).

**Table 14**

*Perceptions on How NEPS CI Training could be Improved.*

| Theme | Subtheme(s) | Examples of Supporting Quotes |
|---|---|---|
| Increased accessibility of training | Increased delivery of training to prepare schools | • "*Regular training would help in advance of anything happening*" (P22).<br>• "*Training took place after the CI, but I found the training very informative and wish I had had the training prior to the CI*"(P30).<br>• "*Training for all staff regardless of a role on the CIMT/better equipped should a similar incident occur in the future"*(P6).<br>• "*As time passes, the team changes - and I'm sure recommendations change - perhaps re-training every 3 years might be helpful*"(P40). |
| | Online training | • "*Mix of delivery models/ online module/face-to-face training"*(P44).<br>• *"Think these are best so that you can access them from home*"(P42) |
| Increased interaction | Opportunities for interaction during training | • *"Workshop format works best for me"(*P43).<br>• *"More time allowed for questions from the floor"*(P27).<br>• *"Role-playing a real situation would be helpful*"(P41).<br>• *"Balance the generic with time to explore needs and challenges in different schools, as each situation is so different"* (P23). |
| | Shared learning with other schools | • "*Training would be face-to-face with other schools*" (P30).<br>• *"This would raise the level of awareness and equip a widespread group of staff"*(P41).<br>• *"A person who went through it talking about what they did and how they coped"* (P49).<br>• *A real-life example rather than theory*" (P4).<br>• "*Schools to share experience and learnings*, *from other s*chools' CIs" (P46). |

#### 3.3.5.3 Theme 1: Increased Accessibility of Training.

As illustrated in Table 14, accessibility of training can be separated into two subthemes: increased delivery of training to prepare schools and online training being made available. Nine responses contributed to this theme.

***Subtheme 1: Increased Delivery of Training to Prepare Schools.*** Participants reported that they would appreciate regular CI training to equip school personnel with the skills to respond to a CI. For example, P22 noted that "regular training would help in advance of anything happening." It was suggested that ideally, CI training would be available to staff at a whole school level "regardless of a role on the CIMT"(P6).

##### *3.3.5.3.2 Subtheme 2: Online Training.*

The potential value of an online CI training module emerged as a suggestion that the NEPS could use to increase the accessibility of CI training. Participants noted that this might increase the reach of CI training as participants could complete training at their own pace and in their own time.

#### 3.3.5.4 Theme 2: Increased Interaction.

When asked to consider what the ideal CI training would look like, the theme of increased interaction emerged. Eleven responses contributed to this theme. Two subthemes were identified including opportunities for increased interaction time during training and shared learning with other schools.

##### *3.3.5.4.1 Subtheme 1: Opportunities for Interaction During Training.*

Participants articulated that they would welcome increased interaction opportunities, both amongst school staff and between school personnel and the NEPS psychologist, during CI training. For example, P27 stated that ideally, there would be "*more time allowed for questions from the floor"* and P41 noted that *"role-playing a real situation, would be helpful."* It was suggested that this might help school personnel better understand and consolidate the information being delivered during training.

#### *3.3.5.4.2 Subtheme 2: Shared Learning with Other Schools.*

Participants highlighted that it may be helpful for CI training to be delivered in person to a cluster of several schools at a time as this might "*raise the level of awareness and equip a widespread group of staff"*(P41). It was also suggested that it might be helpful if a staff member (from another school) who has previously experienced a CI could attend CI training to talk about "*what they did and how they coped*" (P49). Participants noted that this would provide a real-life example to complement the theory.

### *3.3.6 Research Question 2: What are the Perceptions' of Primary, Post-Primary and Special School Personnel of NEPS Response to a CI?*

Section three of the questionnaire asked participants to indicate how helpful they felt the interventions outlined by the DES (2016) were to staff in supporting them to respond to the CI (see Appendix T). A five-point Likert rating scale ranging from 1 being 'very helpful' to 5 'not at all helpful,' was used to explore participants' perceptions of such interventions (see Table 15).

**Table 15**

*The Perceived Helpfulness of the NEPS CI Interventions in response to a CI*

| CI Intervention | Very Helpful | | Helpful | | Neither helpful nor unhelpful | | Not helpful | | Not at all helpful | | Total number of non-responders | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *n* | (%) | *n* | (%) | *n* | (%) | *n* | (%) | *n* | (%) | *n* | (%) |
| **Providing support in assessing the significance of an event** | 20 | (39.2) | 18 | (35.3) | 2 | (3.9) | 0 | (0) | 2 | (3.9) | 9 | (17.6) |
| **Providing support in establishing a response plan** | 24 | (47.1) | 17 | (33.3) | 2 | (3.9) | 0 | (0) | 2 | (3.9) | 6 | (11.8) |
| **Providing support in mobilising school resources** | 14 | (27.5) | 19 | (37.3) | 7 | (13.7) | 0 | (0) | 2 | (3.9) | 9 | (17.6) |
| **Providing support in accessing other support services** | 16 | (31.4) | 15 | (29.4) | 11 | (21.6) | 1 | (2.0) | 2 | (3.9) | 6 | (11.8) |
| **Consulting with school staff on how best to support students** | 22 | (43.1) | 18 | (35.3) | 2 | (3.9) | 0 | (0) | 0 | (0) | 9 | (17.6) |
| **Support in developing procedures to identify students most in need of support** | 17 | (33.3) | 15 | (29.4) | 8 | (15.7) | 1 | (2.0) | 1 | (2.0) | 9 | (17.6) |
| **Providing support in identifying onward referral where required** | 14 | (27.5) | 15 | (29.4) | 8 | (15.7) | 1 | (2.0) | 3 | (5.9) | 10 | (19.6) |
| **Any other intervention not listed above** | 5 | (9.8) | 3 | (5.9) | 0 | (0) | 0 | (0) | 1 | (2.0) | 42 | (82.4) |

**Total number of non-responders refers to participant non-response to questionnaire items. Percentages may not amount to 100% because of rounding.*

Participants described the support provided in the following areas as being either helpful or very helpful; assessing the significance of the event (N=38, 74.5%), establishing a response plan (N=41, 80.4%), consulting with school staff on how best to support students (N=40, 78.4%). There were mixed perceptions as regards the efficacy of the support provided by the NEPS across several areas. For example, participants described the following areas as being neither helpful nor unhelpful; developing procedures to identify students most in need of support (N=8, 15.7%), providing support in accessing other support services (N=11, 21.6%) and providing support in identifying onward referral where required (N=8, 15.7%).

Following a CI, the NEPS states that its primary role is to support school staff in their support of students (DES, 2016). Section three of the questionnaire also asked participants to rate how helpful they felt several strategies were in helping teachers to support students following a CI (see Appendix T). A five-point Likert rating scale ranging from 1 being 'very helpful' to 5 'not at all helpful,' was used to explore participants' perceptions of these strategies. The findings for this question are presented in Table 16.

**Table 16**

*The Perceived Helpfulness of NEPS CI interventions to Help Teachers Support Students*

| Teacher Strategy | Very Helpful | | Helpful | | Neither helpful nor unhelpful | | Not helpful | | Not at all helpful | | Total number of non-responders | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *n* | (%) | *n* | (%) | *n* | (%) | *n* | (%) | *n* | (%) | *n* | (%) |
| Providing teachers with information on how to support students | 25 | (49) | 20 | (39.2) | 2 | (3.9) | 1 | ( 2.0) | 0 | (0) | 3 | (5.9) |
| Providing teachers with support in planning a classroom session | 18 | (35.3) | 12 | (23.5) | 4 | (7.8) | 2 | (3.9) | 0 | (0) | 15 | (29.4) |
| Providing teachers with information on cultural sensitivity and awareness | 7 | (13.7) | 7 | (13.7) | 5 | ( 9.8) | 2 | (3.9) | 0 | (0) | 30 | (58.8) |
| Providing teachers with information on how to support students with learning difficulties | 13 | (25.5) | 11 | (21.8) | 3 | (5.9) | 2 | (3.9) | 0 | (0) | 22 | (43.1) |
| Providing teachers with information on the stages of grief | 20 | (39.2) | 17 | (33.3) | 1 | (2.0) | 3 | (5.9) | 0 | (0) | 10 | (19.6) |
| Providing teachers with information on grief after suicide | 4 | (7.8) | 14 | (27.5) | 2 | (3.9) | 1 | (2.0) | 0 | (0) | 30 | (58.8) |
| Providing teachers with information on normal reactions to a CI | 23 | (45.1) | 16 | (31.4) | 5 | (9.8) | 1 | (2.0) | 0 | (0) | 6 | (11.8) |
| Any other strategies not listed above | 3 | (5.9) | 1 | (2.0) | 0 | (0) | 0 | (0) | 0 | (0) | 47 | (92.2) |

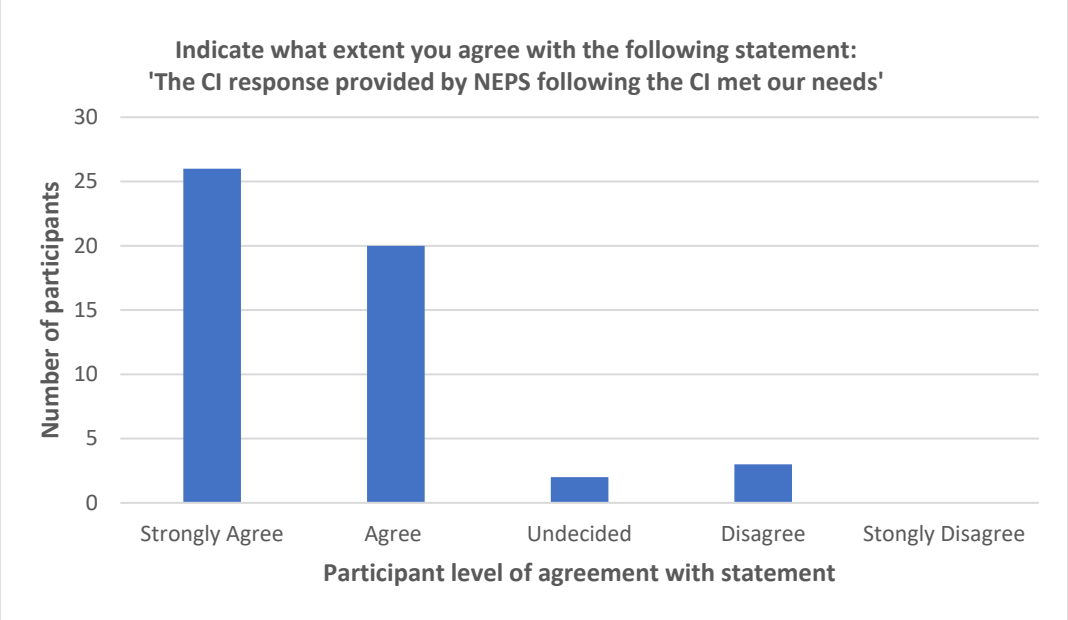
**Total number of non-responders refers to participant non-response to questionnaire items. Percentages may not amount to 100% because of rounding.*

Participants described several strategies as being either helpful or very helpful to teachers in their support of students following a CI. They included the information provided on how to support students (N=45, 88.2%) and the stages of grief (N=37, 72.5%). The information provided to teachers in relation to cultural sensitivity and awareness received was described as neither helpful nor unhelpful by 5 participants (9.8%) and not helpful by 2 participants (3.9%). This strategy along with 'Providing teachers with information on grief after suicide' had the largest number of non-respondents (N=30, 58.8%).

**3.3.6.1 Discovery.** In section three of the questionnaire, participants were asked to indicate to what extent they agree with the statement "the CI response provided by NEPS following the CI met our needs." A five-point Likert scale ranging from 1 'strongly agree' to 5 'strongly disagree' was used to explore participant views in relation to this statement (see Figure 7).

**Figure 7**

*Participants' Perceptions of the Efficacy of the NEPS CI Response (N=51)*



As shown in Figure 7, 90% of participants that responded to this statement (N=46) either agreed or strongly agreed with this statement. Only 3 participants (5.9%) reported that the CI response provided by the NEPS did not meet their needs.

**3.3.6.2 Thematic Analysis of Themes and Subthemes: Research Question 2.** To further explore which aspects of the CI response provided by the NEPS participants were particularly advantageous, participants were asked if there were any other aspects of NEPS involvement in their CI that they found particularly helpful. Two themes emerged in relation to this question: the support provided post-CI and the contact provided post-CI (see Table 17).

**Table 17**

*Effective components of the NEPS CI Response*

| Theme | Subthemes | Examples of Supporting Quotes |
|---|---|---|
| Support provided post-CI | Practical support | • ***"****The language we should use was very important when approaching the subject of suicide in primary school/as staff are not trained to discuss suicide with classes."* P14 |
| | | • *"Continue with the class as normally as possible and maintain normality as much as possible"* (P4). |
| | Emotional support | • "G*uidance on how to manage ourselves*."(P43). |
| | | • "R*eassuring presence walking around the school, discretely listening and available to us*." (P28) |
| Contact provided post-CI | At the time of the CI | • *"Their personal empathy and experience was very comforting and reassuring at the time." (*P19) |
| | | • *"Having an established relationship with the NEPS psychologist was very supportive, felt very safe"* (P23). |
| | | • "*The local familiarity was important/ that can't always be the case"*(P38). |
| | ○ Follow-up support | • *"Follow-up check-ins over the course of time afterwards" (*P7). |
| | | • *"Personal phone calls were much appreciated" (*P2). |
| | | • *"Visiting the school a week or so after the CI"* was *"helpful"* (P39) |
| | | • *"NEPS psychologist was very good about checking in with me and advising me," (*P12). |

**3.3.6.3 Theme 1: Support Provided Post-CI.** The support provided by the NEPS emerged as a key theme in relation to the 'Discovery' stage of the AI cycle. Six responses contributed to this theme. This theme can be further divided into two subthemes: practical support and emotional support.

***3.3.6.3.1 Subtheme 1: Practical Support.*** Participants positively praised the practical support provided by the NEPS to help teaching staff support students following the CI. Components which were particularly well received included the practical support around the type of "language" (P14) which should be used to discuss the CI. Information provided by the NEPS in relation to the resumption of the normal routine was also positively described.

***3.3.6.3.2 Subtheme 2: Emotional Support.*** The emotional support which NEPS provided to staff was also described as beneficial following a CI. P43 shared that they appreciated the "*guidance on how to manage ourselves*." Similarly, P28 described the psychologist being on site as a "*reassuring presence walking around the school, discretely listening and available to us*."

**3.3.6.4 Theme 2: Contact Provided Post-CI**. The contact provided by the NEPS following the CI was well-received by participants and emerged as a key theme in relation to the 'Discovery' stage of the AI cycle. Eight responses contributed towards this theme. This theme can be further divided into two sub-themes: contact provided at the time of the CI and the follow-up support provided by the NEPS.

***3.3.6.4.1 Subtheme 1: Contact Provided at the Time of the CI.*** Participants articulated that they appreciated the contact provided by the NEPS at the time of the CI. For example, P13 shared that "*having someone empathetic that I could call on as principal was invaluable. It's a lonely job when a CI happens."* Similarly, P19 said that *"their personal empathy and experience was very comforting and reassuring at the time."* Participants also expressed that they appreciated the familiarity of their psychologists during the CI: *"Having*

*an established relationship with the NEPS psychologist was very supportive, felt very safe,"* (P23).

#### *3.3.6.4.2 Subtheme 2: The Follow-Up Support Provided by the NEPS.*

Participants expressed that they found the follow-up support provided by NEPS psychologists to be particularly helpful. For example, P2 noted that *"personal phone calls were much appreciated".* P12 shared that while they had not fully understood the role of the NEPS before their CI, they appreciated the follow-up support provided. They expressed that

> *"Before this incident my understanding of NEPS involvement was incorrect…I had wrongly presumed that NEPS would be on hand…in the days after the tragedy to talk to staff/pupils/parents. The reality of NEPS involvement is that they provide the advice and resources, and the school implements" (*P12).

P12 acknowledged that their *"NEPS psychologist was very good about checking in with me and advising me"* in the aftermath of the CI.

**3.3.6.5 Dream and Design: The Ideal CI Response from NEPS.** Participants were asked to consider what NEPS could have done differently, if anything, in helping schools respond to a CI. They were also asked to consider what the NEPS could do to provide the ideal CI response to schools in the future. Two themes emerged from these questions: additional support for staff and increased accessibility. **Table 18**

*Participants' Perceptions of the Ideal NEPS CI Response*

| Theme | Subtheme(s) | Examples of Supporting Quotes |
|---|---|---|
| Additional support for staff | Additional guidance for teachers in relation to supporting students | • "*There was very little specific information on how to support students a available to them"* (P40).<br>• "*More resources to support teachers in talking about bereavement with*<br>• *"Help referring children to appropriate agencies,"* (P25). |
| | Support for staff as well as students | • "A*ll of the emphasis was on the support to the students/ This is very ne traumatised. We tried to help each other." (*P24).<br>• "*More time was spent with teachers/one day does not fully prepare tea (*P25). |
| Increased accessibility | Accessibility in the immediate aftermath of the incident | • *"Be able to spend more time on site whilst pupils were being informed*<br>• "*Prepared to meet with students,"* P32.<br>• "*Indicate their availability to staff and readiness to meet with the whol* |
| | The promotion of adequate staffing levels | • "*We had no designated NEPS psychologist at the time of the CI and no have a named person to contact in the event of a CI,*"(P3).<br>• *"Would be concerned that there are not enough personnel to provide a*<br>• "*Don't allow any more cuts to/service such as those experienced by oth* |
| | Out-of-hours support | • *"Many times events happen at the weekend and there is no support ava*<br>• *Phone support immediately,*" (P34).<br>• "*An out-of-hours helpline/most beneficial as a way of support,*"(P30). |
| | The importance of follow-up support | • *"In the emergency time, I could not fault the service at all. But it is dur teachers need to be reassured that they are doing Ok,"* (P47).<br>• "*More formal follow-up - not just a phone call,"(P23).*<br>• "*Follow-up after the event would be very helpful. Do we acknowledge t vocal/visual can we be in our acknowledgements, it may upset some to others if not acknowledged,'* (P40). |

**3.3.6.6 Theme 1: Additional Support for Staff.** Participants articulated that the ideal CI response from the NEPS would be one in which there was additional support for staff. Six responses contributed towards this theme. This theme can be further divided into two subthemes: guidance for teachers in relation to supporting students and support for staff as well as students.

***3.3.6.6.1 Subtheme 1: Additional Guidance for Teachers in relation to Supporting Students.*** Participants provided examples of additional guidance that the NEPS could provide to support teachers in their support of students following a CI. P40 noted that "*there was very little specific information on how to support students other than to make a time-out room available to them."* It was suggested that it would be helpful if the NEPS could provide "*more resources to support teachers in talking about bereavement with very young children"* (P15) along with practical guidance around *"referring children to appropriate agencies"* (P25) (see Table 18).

***3.3.6.6.2 Subtheme 3: Support for Staff as well as Students.*** Some participants expressed that they would appreciate it if additional support could be provided to staff post-CI. For example, P24 noted that "*all of the emphasis was on the support to the students. This is very necessary. However, staff were also traumatised. We tried to help each other."* This participant shared that ideally, NEPS could "*provide support to staff in dealing with the trauma."* P25 expressed that NEPS response to CIs could be improved if "*more time was spent with teachers*" as "*one day does not fully prepare teachers for dealing with traumatic incidents."*

**3.3.6.7 Theme 2: Increased Accessibility.** Participants noted that the ideal CI response from the NEPS would be one where there is increased accessibility to the NEPS. Nineteen responses contributed towards this theme. Four subthemes emerged from this theme: accessibility in the immediate aftermath of the incident, the promotion of adequate staffing levels, out-of-hours support and the importance of follow-up support.

***3.3.6.7.1 Subtheme 1: Accessibility in the Immediate Aftermath of the Incident.*** Some participants expressed that greater accessibility to NEPS psychologists in the immediate aftermath of a CI would be valued. P7 expressed that ideally, NEPS psychologists would *"be able to spend more time on site whilst pupils were being informed in case of difficult situations."* Similarly, P41 shared that it would be helpful if NEPS psychologists could "*indicate their availability to staff and readiness to meet with the whole staff."*

***3.3.6.7.2 Subtheme 2: The Promotion of Adequate Staffing Levels.*** Some concern was expressed around the availability of NEPS psychologists to provide support following a CI. For example, P3 reported that they "*had no designated NEPS psychologist at the time of the CI and no one person to link with."* P16 shared that they *"would be concerned that there are not enough personnel to provide a comprehensive response to schools."* P13 suggested that, if possible, it would be helpful if NEPS could try to prevent *"cuts to their service such as those experienced by other educational supports"* to circumvent this difficulty.

***3.3.6.7.3 Subtheme 3: Out-of-Hours Support.*** Participants noted that CIs can often happen outside of normal school hours when *"there is no support available*," (P45). When a CI occurs, P30 suggested that "*an out-of-hours helpline*" would be "*most beneficial as a way of support*" in such instances.

#### *3.3.6.7.4 Subtheme 4: The Importance of Follow-Up Support.*

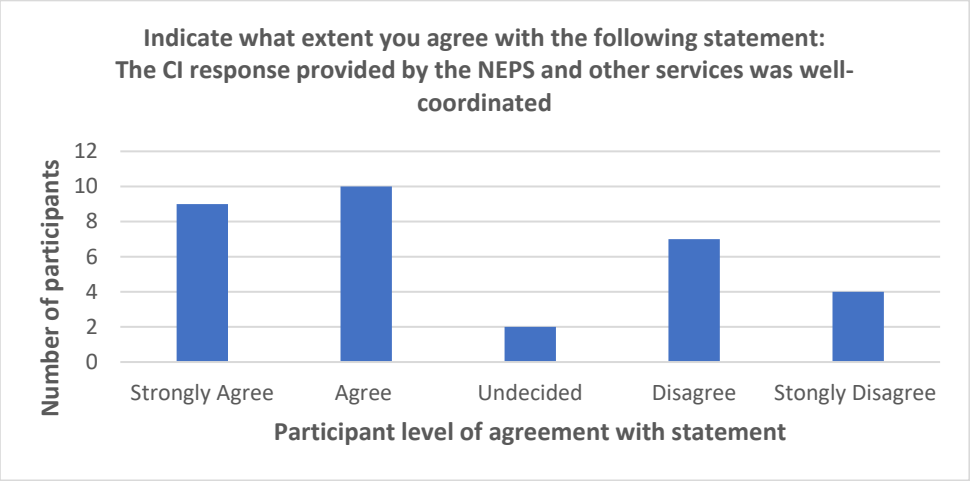
Participants articulated that they would greatly appreciate regular support and reassurance from the NEPS in the immediate months after the event. P47 expressed that "*in the emergency time, I could not fault the service at all. But it is during the "picking up the pieces" phase that teachers need to be reassured that they are doing ok."* P23 expressed that they would appreciate a *"more formal follow-up - not just a phone call."* P40 discussed the complexity of approaching significant events within the academic calendar post-CI and highlighted that additional guidance from the NEPS around the same would be beneficial (see Table 18).

### *3.3.7 Research Question 3: What are the Perceptions of Primary, Post-Primary and Special School Personnel of the Coordinated Response provided by NEPS and Other Services following a CI?*

**3.3.7.1 Discovery.** To explore participants' perceptions of the coordinated CI response provided by NEPS and other services, participants were asked to indicate to what extent they agreed with the statement 'the CI response provided by NEPS and other psychological services following the CI response was well coordinated." A five-point Likert rating scale ranging from 1 being 'strongly agree' to 5 'strongly disagree,' was used to explore participants' perceptions of the coordinated response. These findings are illustrated in Figure 8.

**Figure 8**

*Participants Perceptions of the Efficacy of the Coordinated CI Response (N=32)*

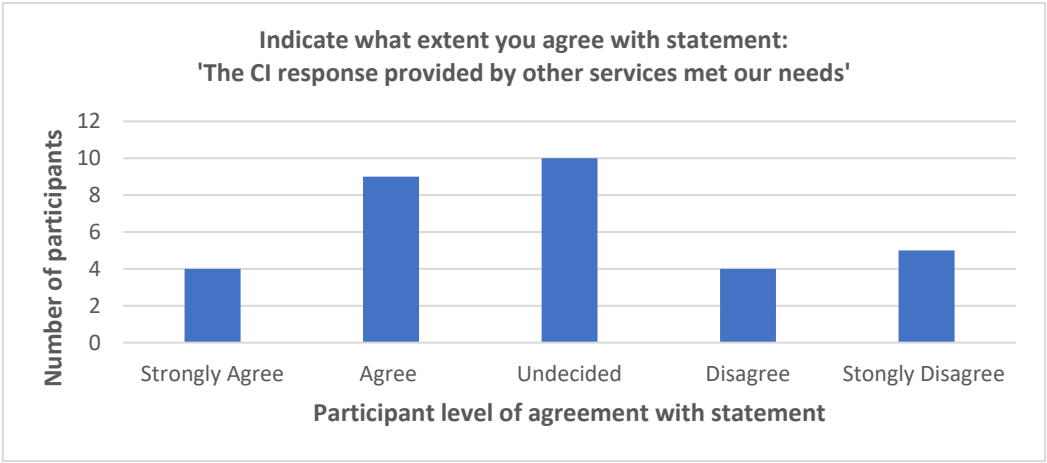



As can be seen in Figure 8, 59% of participants that responded to this statement (N=19) either agreed or strongly agreed with this statement. Interestingly, 34% of participants (N=11) either disagreed or strongly disagreed with this statement.

To explore participants' level of satisfaction with the response provided by other services participants were asked to rate their agreement with the following statement "The CI response provided by other services following the CI met our needs." (see Figure 9).

**Figure 9**

*Participants' Perspectives on the Efficacy of the CI Response Provided by Other Services (N=32)*

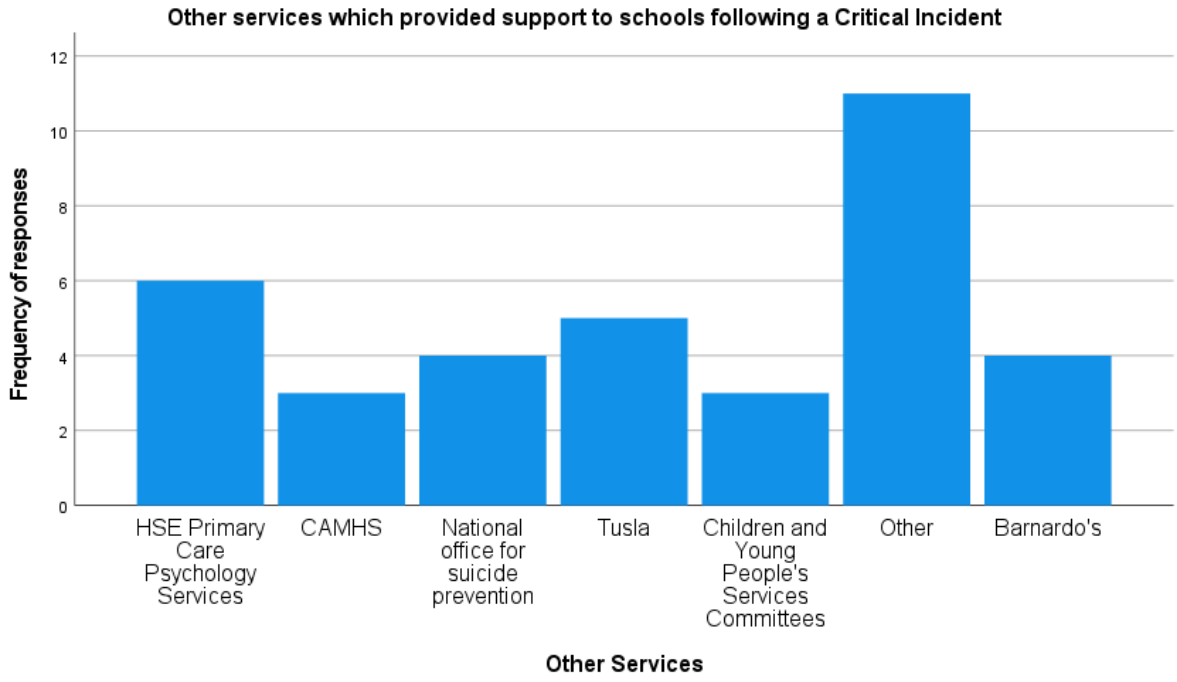


As shown in Figure 9, 13 participants (41%) agreed or strongly agreed with this statement. Nine participants (28%) felt that the CI response from other services did not meet their needs.

Participants were asked to indicate what services or agencies other than NEPS had responded to their school CI (see Figure 10).

**Figure 10**

*Other Services that Provided Support to Schools following a CI*




As can be seen from Figure 10, a range of services provided support to schools. 'Other' services, i.e., those which were not listed in this questionnaire were the most frequently cited services involved in the CI response provided to respondents. Other services included Rainbows (an organisation which provides bereavement support), An Garda Síochána, the National Ambulance Service, a suicide prevention officer and Pieta House (an organisation which provides support to persons bereaved by suicide).

### 3.3.7.2 Thematic Analysis of Themes and Subthemes pertaining to Research

**Question 3.** To identify the most helpful aspects of the coordinated CI response provided by other services participants' responses to the following question were analysed: What Aspects of the Coordinated CI Response provided by Other Services were most helpful in supporting the School following the CI. An overview of key themes, subthemes and supporting quotes emerging from this question is provided in Table 19.

**Table 19**

*Helpful Components of the Coordinated CI Response provided by Other Services*

| Theme | Subtheme | Examples of Supporting Quotes |
|---|---|---|
| The guidance provided to schools | Guidance in relation to the school's response | • *"Immediate advice on the school's response and involvement in the funeral, memorials, etc" (P12).*<br>• "*Keeping us briefed and putting us in touch with family members*"(P22).<br>• "*A conference for all schools in the town to try to heighten awareness and avert copycat events*" (P46) |
| | Support provided to staff | • *"Talking to staff about how to move forward,"* (P43<br>• *"Someone to talk to and to be a physical presence"* (P13). |
| Support provided to children and their families | Support provided to children | • "*Reassuring to know that some of the most vulnerable children were being cared for*" (P23)<br>• "O*ffering counselling services to students with trauma from the event," (P43)*<br>• *"Prioritising out students for access to their service"(P44).* |
| | Support provided to parents | • *"Talk to parents by Barnardo's"*(P42) |

**3.3.7.3 Theme 1: Guidance Provided to Schools.** Participants articulated that they valued the guidance which was provided to schools by other services following a CI. Five responses contributed towards this theme. Two subthemes emerged from this theme; guidance in relation to the school's response and support provided to staff.

***3.3.7.3.1 Subtheme 1: Guidance in relation to the School's Response.*** When asked about the aspects of the CI response which were particularly helpful participants discussed the guidance provided to the school by other services. P12 shared that they appreciated the "immediate advice on the school's response and involvement in the funeral, memorials, etc. P46 stated that they found "a conference for all schools in the town to try to heighten awareness and avert copycat events," helpful following the CI.

***3.3.7.3.2 Subtheme 2: Support Provided to Staff.*** The support provided by other services to staff was also well received following the CI. For example, P43 noted that "talking to staff about how to move forward," was particularly beneficial. Similarly, P13 shared that they valued having "someone to talk to and to be a physical presence," post-CI.

**3.3.7.4 Theme 2: Support for Children and their Families.**

The support provided by other services to children and their families post-CI was well received by participants in this study. Two subthemes emerged from this theme: support provided to children and support provided to parents. Five responses contributed to this theme.

***3.3.7.4.1 Subtheme 1: Support Provided to Children.*** Following a CI, participants expressed that they valued the support offered to their students by other services. P23 shared that it was "*reassuring to know that some of the most vulnerable children were being cared for.*" Similarly, P43 stated that they were grateful for services "*offering counselling services to students with trauma from the event."*

#### *3.3.7.4.2 Subtheme 2: Support Provided to Parents.*

Participants stated that the support provided to parents post-CI was also helpful. P27 stated that they valued where services provided "*links to parents*," on available services. P42 shared that the "*talk to parents by Barnardo's*," was particularly helpful following the CI.

### 3.3.7.5 Dream and Design

**3.3.7.6 The Ideal CI Response from Other Services.** Participants were asked to consider what other services could have done differently, if anything, in helping schools respond to a CI. They were also asked to consider what other services could do to provide the ideal CI response to schools in the future and what the ideal coordinated CI response might look like. Four main themes emerged from these questions: increased accessibility, the importance of being proactive, the importance of being well coordinated and continued support post-CI. An overview of key themes, subthemes and supporting quotes is provided in Table 20.

**Table 20**

*The Ideal CI Response from Other Services and the Ideal Coordinated CI response*

| Theme | Subtheme | Example of Supporting Quotes |
|---|---|---|
| Increased accessibility | Ensuring that there are enough staff to provide an appropriate response | • *"Other agencies are rarely available for the day-to-day incidents that happen in schools because the resources just aren't there"* (P38).<br>• *"Recruitment drive to generate enough capacity to meet the needs adequately"* (P23). |
| | Being physically present in the immediate aftermath of a CI | • "*Available to travel to site,"* ( P43),<br>• "*Prepared to get involved on the ground immediately"* (P32).<br>• *"Visit the school to speak with students/teachers… "staff needed reassurances at the time that they were doing the right thing,"* (P40).<br>• *"Support on the day"*(P20)<br>• *"Been on site offering day-to-day counselling when students showed signs of trauma within the school, instead of having to wait for referrals"* (P43). |
| The importance of being Proactive | Initiating contact with the school to offer support | • "*Immediate contact*" (P9).<br>• *"Be more proactive,"* (P13).<br>• *"Let us know what they offer. We can't go knocking on doors in an emergency*" (P49). |
| | The importance of prior preparation | • "*Everyone was very supportive but possibly before you are in the incident all these different service providers should be explained to schools/ maybe explain to all schools before a CI who they are what they do and how they work together,* (P44).<br>• "*prior preparation"*(P30). |
| | | • "*what the availability is in our area"* (P49). |
| The importance of being well-coordinated | Providing guidance for schools in relation to services which can provide | • "*A clear set of guidelines/steps that school could follow, i.e., agencies to which family could be referred to and appropriate timelines identified*" (P15).<br>• *"Short/set out in bullet format/list of key personnel"* (P38). |

| Theme | Subtheme | Example of Supporting Quotes |
|---|---|---|
| | support | |
| | A streamlined, organised response from all services | • "*Great support from NEPS at the time/too many people and too many differing responses for one or two people to deal with over a short period of time*"(P43).<br>• "*Coordination between all the relevant support agencies*"(37).<br>• "*Everyone knows their role/effective communication with all stakeholders so that the school can cope with the tragic event*" (P42)<br>• "W*ho they are, what they do, and how they work together*" (P44). |
| Providing continued support post-CI | Support for staff and students | • "C*heck-in with the family/provide counselling support for the affected, grieving family/pupils*" (P20).<br>• "*Backup for school managements in large schools to assist staff with their personal grief*" (P41).<br>• "S*upport from professionals/given to the parent body immediately/ have different ways of communicating with their children about an incident and this causes problems in the classroom when some children have more information than others, particularly in Primary school*" P19). |
| | A timeline for continued support | • "Co*ntinued support after the incident*"(P9)<br>• "S*upport on the day/a visit after events to offer support and answer questions"(P20),*<br>• "*A follow-up"* visit *"1 week later"* and *"1 month later"* (P49). |

**3.3.7.7 Theme 1: Increased Accessibility.** Participants articulated the importance of increased accessibility to other services following a CI. Seven responses contributed to this theme. This theme can be further divided into two subthemes: ensuring that there are enough staff to provide an appropriate response and being physically present in the immediate aftermath of a response.

***3.3.7.7.1 Subtheme 1: Ensuring that there is Enough Staff to provide an Appropriate Response.*** Participants highlighted that frequently, other agencies cannot provide an immediate CI response *"because the resources just aren't there,"* (P38). To provide a more effective CI response P23 stated that all services would need to engage in a *"recruitment drive to generate enough capacity to meet the needs adequately."*

***3.3.7.7.2 Subtheme 2: Being Physically Present in the Immediate Aftermath of a CI.*** Participants expressed that it would be helpful post-CI if other services could be physically present within the school in the immediate aftermath of a CI as *"staff needed reassurances at the time that they were doing the right thing,"*(P40). P43 suggested that the presence of a counsellor "*on-site offering day-to-day counselling when students showed signs of trauma"* would have been beneficial as it may have circumvented the need for onward referrals.

**3.3.7.8 Theme 2: The Importance of Being Proactive.** The importance of NEPS and other services being proactive both before and following a CI emerged as a theme. Seven responses contributed towards this theme. Two subthemes emerged from this theme: initiating contact with the school to offer support and the importance of prior preparation.

#### *3.3.7.8.1 Subtheme 1: Initiating Contact with the School to offer Support.*

Participants shared that ideally, other services would *"be more proactive"* (P13) and make "immediate contact" (P9) with schools post-CI. They also suggested that it would be helpful if schools were provided with a "*list of who offers what so we could pick what services were required*,"(P49).

#### *3.3.7.8.2 Subtheme 2: The Importance of Prior Preparation.*

Participants articulated that other services could improve their CI response by engaging schools in "*prior preparation*" (P30), to explain *"what the availability"* (P30) of services is in their area. P44 mentioned that during their CI that "*everyone was very supportive,"* but that other services could potentially provide a more effective CI response if they could "*maybe explain to all schools before a CI who they are, what they do, and how they work together*," (P44).

### 3.3.7.9 Theme 3: The Importance of Being Well-Coordinated.

Another theme which emerged from these questions was the importance of being well-coordinated. Six responses contributed towards this theme. This theme can be further subdivided into two subthemes: providing guidance for schools in relation to services which can provide support and a streamlined, organised response from all agencies.

#### *3.3.7.9.1 Subtheme 1: Providing Guidance for Schools on Services which can Provide Support.*

Participants shared that the ideal CI response from other services and the ideal coordinated CI response would include the provision of *"short"* guidelines *"set out in bullet format"* regarding "*key personnel"* who can offer support (P38). It was also suggested that this guidance could outline *"steps that the school could follow,"* and appropriate *"agencies"* to whom families *"could be referred,"* (P15).

#### *3.3.7.9.2 Subtheme 2: A Streamlined, Organised Response from all Services.*

Participants expressed that they felt "*great support from NEPS at the time*," of their CI but that there were "*too many people and too many differing responses for one or two people to deal with over a short period of time*", (P43). P42 shared that the ideal CI response would be one where "*everyone knows their role*" and there is "*effective communication with all stakeholders so that the school can cope with the tragic event*."

**3.3.7.10 Theme 4: Providing Continued Support Post-CI.** Providing continued support post-CI also emerged as a theme. Seven responses contributed towards this theme. Two subthemes emerged from this theme: support for staff, students, and families and a timeline for continued support.

#### *3.3.7.10.1 Subtheme 1: Support for Staff, Students, and Families.*

Participants expressed that ideally, affected members of the school community would continue to receive support from other services post-CI. P20 suggested that it would be helpful if other services could provide "*counselling support for the affected, grieving family/pupils.*" The need for ongoing support for affected school personnel was also mentioned. P41 shared that ideally, other support services would be able to provide "*backup for school managements in large schools to assist staff with their personal grief*."

#### *3.3.7.10.2 Subtheme 2: A Timeline for Continued Support.*

The need for continued support from other services in the days, weeks and months following a CI was highlighted in several examples. Participant 9 expressed that they would appreciate "*continued support after the incident*." This was echoed by participant 20 who shared that they would welcome "*support on the day"* along with *"a visit after events to offer support and answer questions."* Similarly, participant 49 stated that the ideal response from other services would include "*a follow-up"* visit *"1 week later"* and *"1 month later."*

## 3.4 Discussion

The goal of this study was to explore the perceptions of school personnel of the CI training and response provided by NEPS and other services following a CI. The following section will discuss the results of this study in the context of previous CI literature. Key findings relevant to each research question will be discussed. An outline of implications for practice will then be provided.

### *3.4.1 Research Question 1: What are the Perceptions of Primary, Post-Primary and Special School Personnel of the CI Training provided by NEPS?*

**3.4.1.1 Discovery.** The results of this study indicate that the CI training provided by NEPS is currently well received. Components of training that were found to be particularly helpful included supporting staff to develop a CIMT, a CIMP and a CI policy. Nearly all respondents found the guidance provided on how to respond to a CI helpful. Overall, participants expressed positive perceptions of the extent to which the CI training provided by NEPS helped prepare schools to respond to a CI.

CI training may positively impact the degree to which teachers perceive they can effectively support students following a CI. Providing support to individuals who have experienced a traumatic event poses a significant risk to the mental well-being of service providers (Hayes & Frederickson, 2008), and places them at risk for vicarious trauma (Comerchero, 2015). According to social cognitive theory (Bandura, 1997), an individual's reaction to difficult situations is contingent upon their perceived levels of self-efficacy. Within this theory, self-efficacy is outlined as encompassing broad beliefs about one's capacity to overcome difficult situations and realise desired outcomes (Schwarzer & Warner, 2013; Shakespeare-Finch et al., 2015). Self-efficacy is said to play a key role in stress reactions and in the quality of coping with adverse and threatening situations (Albert

Bandura, 1997; Benight & Bandura, 2004). Previous studies have indicated that the provision of CI training may help to improve the perceived confidence of teachers to support students in terms of broaching difficult topics and recognising atypical trauma responses post-CI (Baum et al., 2009). Contrastingly, some studies have found that a lack of CI training negatively impacts school perceptions of CI readiness (Alsubie, 2017; Karasavidou & Alexopoulos, 2019). Therefore, the suggestion of additional training may indeed be very beneficial in supporting teachers as they develop confidence in their perceived capacity to support students following a CI.

**3.4.1.2 Dream and Design.** When asked about what NEPS could do to improve their CI training, two themes emerged: increased accessibility of training and increased interaction. It was suggested that ideally, there would be an increased delivery of CI training. It was felt that this would help prepare staff in advance of anything happening and build confidence in their capacity to respond to future CIs. This aligns with previous research where school personnel have expressed a need for training to increase their skills and knowledge in supporting students following a CI (Debes, 2021; Karasavidou & Alexopoulos, 2019; Olinger Steeves et al., 2017).

It was found that whole school staff training would be valued in any increased delivery of training for schools. As with previous studies, the results of this study indicate that whole school training would equip a wider body of staff with the information and skills needed to respond to such an event. Similar findings have been reported by other studies (Adamson & Peacock, 2007; Crepeau-Hobson & Summers, 2011; Gaukroger, 2020). For example, Gaukroger (2020) suggested that training should be provided to all school personnel as the entire staff provide support to students following a CI, not just teachers.

Increased interaction during training emerged as a second theme in considering the ideal CI training. According to Bandura (1998), people's belief in their self-efficacy can be

developed by four main sources of influence; vicarious experiences, social persuasion, mastery and positive interpretation of somatic and emotional states. A CI training framework, informed by sources of self-efficacy has been proposed by Bennett et al., (2021). Although intended for use with educational psychologists, there are parallels which could be applied to CI training for school personnel. The framework posits that by hearing about the successful experiences of CI work by similar colleagues (Bandura, 1994), individuals can vicariously improve their own CI self-efficacy (Bennett et al., 2021). The authors assert that vicarious experiences could include case discussions and whole school training days to help educational psychologists observe perseverance and success specifically in relation to CIs. Hearing from other schools who have experienced and successfully responded to a CI might be beneficial in terms of building upon the perceived CI self-efficacy of school personnel through vicarious experiences.

Bennet et al., (2021) articulate that guided mastery experiences encompassing interactive scenarios such as role-playing CI situations whilst being observed using person-centred approaches can help educational psychologists develop an awareness of their CI skills. The authors state that positive verbal feedback, when used in conjunction with vicarious experiences and guided mastery can contribute towards raising self-efficacy when given by persons who have knowledge of CI work (Bennett et al., 2021). Verbal feedback can be provided during group discussions as a means of cultivating a shared belief that the audience possesses the skills needed to succeed in CI work (Bennett et al., 2021). Guided mastery experiences, such as role-playing CI situations paired with verbal feedback from NEPS psychologists, might support the perceived self-efficacy of school personnel to respond to a CI. Similarly, previous research has suggested that CI training could be improved with the provision of increased audience interaction and time allocated for discussion as part of training (Le Brocque et al., 2017).

### *3.4.2 Research Question 2: What are the Perceptions of Primary, Post-Primaand Special School Personnel of NEPS and Other Services Response to a CI?*

**3.4.2.1 Discovery.** Findings emerging from this study indicate that the current NEPS CI response is generally well-received. Components of the CI response that were found to be particularly helpful to staff included the support provided around assessing the significance of the event, establishing a response plan and mobilising school resources. There were mixed views in relation to the efficacy of support provided by NEPS around accessing other support services and providing support in identifying onward referrals where required. Aspects of NEPS response school personnel staff felt were most helpful to them in their support of students included the information provided on the stages of grief and normal reactions to a CI. There were mixed perceptions regarding the efficacy of the information provided regarding cultural sensitivity and awareness and information on grief after suicide. These two strategies also received the lowest responses in terms of helpfulness. In the absence of subsequent focus group discussion, it was not possible to ascertain why this might be. However, it is possible that these strategies may not have been relevant to the specific CIs experienced by participants who completed this questionnaire.

The support provided by NEPS emerged as a key theme in terms of what is currently working well within the NEPS CI response. The practical support offered to teachers to support students post-CI was positively received. This coincides with previous studies that have demonstrated that showed educators appreciate where practical help is provided in communicating with students about traumatic events (Baum et al., 2009; Papadatou et al., 2002). Similar to the findings in this study, Nickerson and Zhe (2004) observed that one of the most beneficial components of CI support was the advice provided around reinstating normal routines. The emotional support provided to staff by the NEPS psychologist following the CI was also appreciated. This is consistent with previous literature which demonstrates

that school staff value the emotional containment and reassurance by educational psychologists post-CI (Hindley, 2015; Morgan, 2020; North, 2007). Additional support for staff also emerged as a potential area for development. This suggestion will be discussed in greater detail as part of the ideal NEPS CI response.

The contact provided by NEPS post-CI emanated as a key theme in terms of components of NEPS CI response perceived to be working well. School personnel took comfort in having an established relationship with their respective EP during their CI experience. This is consistent with previous studies which hold that EP knowledge of the school system along with pre-established relationships with school personnel help to facilitate the formulation of an appropriate CI response (Beeke, 2011; 2013; Lockhart & Woods, 2017). The follow-up support provided by NEPS in the days, weeks and months following the CI were found to be well-received in this study. Morgan (2020) and Gaukroger (2020) similarly found that school staff expressed gratitude for EPs checking in on their well-being post-CI. Regular check-ins from NEPS post-CI also emerged as a potential area for development. This suggestion will be discussed in greater detail as part of the ideal NEPS CI response.

**3.4.2.2 Dream and Design.** Two main themes emerged as regards how NEPS could provide the ideal CI response to schools in the future. These themes included additional support for staff and increased accessibility. The findings of this study suggest that ideally, NEPS could provide additional guidance to teachers in relation to their support of students post-CI. For example, it was suggested that this guidance could include referring students to appropriate agencies where necessary. It was also suggested that in the future, it may be helpful if NEPS could provide additional support to staff, as well as students post-CI. Similar studies (Crepeau-Hobson & Summers, 2011) have emphasised the need for personal support for school personnel following a traumatic event. According to Greenway (2005), teachers often act in "loco parentis" for large groups of students and following a CI are faced with the significant burden of looking after the learning and pastoral care needs of students while managing their own grief. While the logic of providing support to students through teachers is clear, the findings of this study suggest that school personnel would appreciate it if greater emphasis could also be placed on providing direct support for school staff. As previously mentioned, this study did not employ subsequent focus group discussion. Therefore, it was not possible to clarify or explore the type of additional support which would be helpful to school staff e.g., additional reassurance or therapy from NEPS post-CI. If the latter applies, it would appear that clarification around the role of NEPS may be warranted. This may help promote a wider understanding as to why NEPS do not provide counselling following a CI. It may also help to avoid feelings of confusion and positively steer school personnel expectations of the role of NEPS post-CI.

Increased accessibility emerged as a key theme in terms of how NEPS might improve its response to future CIs. It was proposed that it might be helpful if NEPS could spend more time in the school whilst students were being informed about the CI in case any students became distressed. Similar findings were reported by Gaukroger (2020), where participants

highlighted the value of direct access to an EP as it enabled them to work through how best to broach specific situations following a CI. While the extended presence of an EP on-site may seem reassuring post-CI, it may be unhelpful in terms of fostering a sense of reliance on external supports and impeding the school's sense of community self-efficacy in overcoming tragedy (Hobfoll et al., 2007; Virgil & Geary, 2007). For example, in line with Hobfoll et al.'s (2007) principle of promoting efficacy, following a CI, the NEPS role is to "empower school personnel to make use of their own resources and generate the belief that staff and students can get themselves through this difficult time," (DES, 2018, p.74).

It was noted that CIs can happen outside of normal school hours, for example at the weekend or during school holidays. In such instances, it is not always possible to access support from NEPS. A proposition made in this study was that it may be beneficial for an 'out-of-hours support' service to be made available to allow schools to receive support from a NEPS in such scenarios. Previous CI literature raises a similar suggestion and explores its practicality and logistics. Hennessy (2016) suggested NEPS consider establishing a voluntary out-of-hours CI service whereby schools call a central number that is redirected to an 'on-call' EP who can provide prompt CI support.

The results of this study indicate that there are concerns amongst some school personnel as regards the capacity of current staffing levels within NEPS to meet the demands of CIs as they occur. This is consistent with other Irish research which has determined while the support provided by NEPS is very good, there is inadequate staffing availability (Downes et al., 2006). In this regard, it was suggested the promotion of adequate staff availability may increase the likelihood of having enough NEPS psychologists in place to respond to a CI if one occurs.

In general, the immediate CI response provided by NEPS was well received by participants. However, it was felt that regular check-ins in the days, weeks, and months after

the CI would reassure and support the school community as they come to terms with what has taken place. This aligns with findings by Cole et al. (2013) who assert that long-term follow-up support may be necessary as the reactions of school personnel to CIs can be long-lasting. Furthermore, longer-term follow-up support may be warranted to ensure that appropriate support is given as each person's response to a CI is unique and people may differ in terms of how, when or if they react to a CI (Slawinski, 2006).

### *3.4.3 Research Question 3: What are the Perceptions of Primary, Post-Primary and Special School Personnel of the Coordinated Response provided by NEPS and Other Services following a CI?*

**3.4.3.1 Discovery.** The results of this study show that there are mixed views regarding the perceived efficacy of the coordinated CI response provided by NEPS and other services. Just over half of the participants who responded to questions in this section felt that the CI response provided by NEPS and other services was well coordinated. Less than half of the total number of respondents felt that the CI response provided by other services met their needs.

In terms of components of the coordinated response which are perceived to be working well, two key themes emerged: guidance provided to schools and the support provided to children and their families.

The guidance in relation to the school's response was found to be helpful in terms of maintaining a line of communication between the school and the bereaved family and the provision of advice on the school's involvement in the funeral. The support provided to staff, children and their families by other services post-CI was also well received by school personnel. This included the offer of counselling services to affected parties as well as a talk provided to parents.

**3.4.3.2 Dream and Design.** Four key themes emerged regarding what other services could do differently, in helping schools respond to a CI and what the ideal coordinated CI response from NEPS and other services might look like. These themes included increased accessibility, the importance of being proactive, the importance of being well-coordinated and providing continued support post-CI.

It was suggested that ideally, other services could try to ensure that there are adequate numbers of staff available to respond to schools. An observation made in this study was that frequently, other therapeutic services cannot provide a prompt CI response to schools due to staffing shortages. Specialist youth mental health services such as CAMHS in Ireland have long experienced significant under-resourcing where demand far exceeds service availability and staffing levels fall well below recommended levels (Department of Health., 2006; Leahy & McNicholas, 2021; McNicholas, 2018; McNicholas et al., 2020). This seems understandable given the reverse trend in overall budget funding for mental health services in the Republic of Ireland which has consistently decreased since 2008 and currently stands at 6%, lower than in many other countries (Leahy & McNicholas, 2021; McNicholas, 2018). Before the onset of COVID-19, CAMHS referrals were already increasing (McNicholas & Moore, 2022). The unprecedented increase in referrals attributable to COVID-19 and related restrictions on an already over-stretched service may cause a new mental health crisis in Ireland unless additional, ring-fenced funding is made quickly available (McNicholas & Moore, 2022, McNicholas et al., 2021).

Where feasible, it was suggested that it might be helpful if other services could be physically present on-site following future CIs. It was also proposed that counselling services could be provided to students on-site when they showed signs of trauma. Taken together, it was felt that these suggestions could help support and reassure the school community as they tried to process the event and move forward.

It was proposed that ideally, other services could initiate contact with the school to offer a response post-CI. The importance of prior preparation was also emphasised. This aligns with previous studies which have recommended that CI providers communicate the various ways in which they can offer support to school communities before CIs occur (Dunne, 2021). While the infrequency of CIs may decrease the effectiveness of information sharing, transparent communication of the various CI support models available may improve interprofessional understanding (Dunne, 2021).

An observation made in this study was that school staff can feel overwhelmed as a result of the numerous agencies that offer their support post-CI. It was suggested that the ideal coordinated CI response would be one in which there was effective communication amongst each of the services involved along with a clear understanding of respective roles and responsibilities. Given the number of agencies involved in a CI response, multi-agency coordination is necessary to clarify roles and responsibilities (Silver, 2014). As previously noted, the DES (2016), assert that NEPS are well-placed to assume a coordinating role as part of the CI response. However, the findings of this study suggest that this may not be something of which schools are aware. It could be argued that further clarification is needed regarding the capacity of NEPS to assume a coordinating role post-CI. This may help to alleviate the stress and confusion experienced by school staff and allow them to begin to process what has taken place. It may also help to appropriately steer school personnel expectations of NEPS role in the CI response.

It was also proposed that NEPS and other services could improve their coordinated CI response by providing schools with clear guidance as regards the services and the type of support available to members of the school community. Gaukroger (2021) contended that when school personnel are first informed about a CI, they may not be best placed to take in key information being presented. The provision of key information in a one to two-page

handout that school personnel can refer to at a later time might be most helpful in this regard (Balk et al., 2011). As outlined in NEPS Wellbeing guidelines, schools are encouraged to be "proactive in identifying and building relationships with key statutory and voluntary agencies, so that key personnel know how to access services and who to contact, in the event of a CI," (DES, 2013). This is in line with the Health Promoting School's key areas of action (DES, 2018; International Union for Health Promotion and Education, 2010). The promotion of the aforementioned recommendations might expedite the mobilisation of appropriate services following a CI. If effective, this might support the alignment of a collaborative multiagency approach and ensure a more timely provision of services to meet the needs of those affected (Sloper, 2004).

It was suggested that the ideal CI response from other services would include the provision of continued support to affected members of the school community and families in the longer term. As with previous studies, it was found that the level of support offered by other services post-CI can be insufficient (Silver, 2014). According to the DES (2016b) following a CI, it is expected that there will initially be "normal" distress among school staff, students and family members in the immediate aftermath. While most students and school staff will be able to return to normal functioning without formal mental health intervention, some individuals will require further support (Brock et al., 2009; Crepeau-Hobson et al., 2012, DES, 2016). The findings of this study demonstrate the need for ongoing support to ensure the longer-term recovery needs of those impacted are met (Crepeau-Hobson et al., 2012).

## 3.5 Conclusion

This study has contributed to the literature on the CI response provided by EPs such as NEPS. Overall, the findings of this study are supported more broadly in the CI literature. This study has provided insight into how the current CI training and response provided by

NEPS and other services are being received by school personnel in Ireland. It also highlights areas of the CI response which could potentially be further developed.

The findings of this study suggest that the CI training provided by NEPS is generally well received and increases school readiness to respond to a CI. The 'dream' CI training would be one in which NEPS could provide regular CI training at a whole school level. This would equip a wider body of school staff with the information and skills needed to respond to a CI and also increase their perceived CI readiness.

The potential value of increased interaction opportunities during CI training was also highlighted. This would include interaction with the NEPS psychologist delivering training and shared learning from other schools that have previously experienced a CI.

The current CI response provided by NEPS is also well received. In the aftermath of a CI, components of the NEPS CI response which were found to be helpful included the practical support provided to teachers to support children, the emotional support provided to school staff and the follow-up support provided to schools.

Several recommendations were put forward regarding the ideal NEPS CI response. The importance of accessing timely support from NEPS in the immediate aftermath of the CI was noted. This could be facilitated by the establishment of an 'out-of-hours' helpline and increasing the current number of staff to ensure there are sufficient NEPS psychologists in place to provide a CI response. Ideally, post-CI, tNEPS could provide additional support to school staff. Finally, the importance of NEPS providing ongoing follow-up support to school staff in the days, weeks and months after the CI as the school community comes to terms with what has taken place was emphasised.

There were mixed views regarding the efficacy of the coordinated CI response provided by NEPS and other services following the CI. There were also mixed views regarding school staff satisfaction with the CI response provided by other services. Positive

components of the CI response from other services included the guidance provided to schools and the support provided to children and their families. A variety of suggestions were offered regarding what other services could do differently in helping schools respond to a CI and what the ideal coordinated CI response might look like. Ideally, there would be adequate numbers of staff available across NEPS and other services to respond to schools in the aftermath of a CI. In addition, other services would continue to provide follow-up support to schools following a CI. The 'ideal' CI response from other services would include proactive outreach to schools before a CI, informing them of the services and assistance they offer, etc. Furthermore, the ideal coordinated CI response would be one in which there was a shared understanding amongst NEPS and other services around respective roles and responsibilities. If realised, this could provide a more organised and effective CI response to the school community.

### *3.5.1 The Strengths and Weaknesses of the Research*

The following section provides an introduction to the strengths and limitations of the study (see Table 21). These will be discussed in detail in Chapter 4 (Critical Review).

## Table 21

*Strengths and Limitations of this Study*

| **Strengths** |
|---|
| • A notable strength of this study includes the measures taken to promote the validity and reliability of the survey instrument. A measure previously used in the field (Beeke, 2011; 2013) was adapted for use within this study. To support the external validation of the questionnaire, it was reviewed by two senior educational psychologists with 34 years of combined experience in CI training and CI response. Feedback from the expert review was taken into consideration and several suggested adaptations were made to this questionnaire prior to its dissemination.<br>• To support the reliability and validity of this research a pilot study was conducted. Piloting the questionnaire allowed the principal researcher to identify issues such as accessibility, formatting or gaps in the questions being asked and review participant comprehension (Rattray & Jones, 2007). Feedback was used to review and refine the items of the questionnaire prior to data collection.<br>• An additional strength of this study was the data collection method. An online anonymous questionnaire including open and closed questions was considered an appropriate data collection method for several reasons including potentially reaching a geographically diverse population (Lefever et al., 2007). It was also hoped that an online questionnaire would provide participants with a degree of anonymity in which they would feel comfortable providing honest responses (Beeke, 2011; 2013).<br>• To support the rigour and transparency of the data analysis process, an independent coder familiar with the process of TA, analysed a sample of the dataset (O'Connor & Joffe, 2020). Inconsistencies in coding were resolved through conversations between the independent coder and the principal researcher (Roberts et al., 2019). |
| **Limitations** |
| • Despite the relative merits of the online survey employed in this instance, the principal researcher is aware of potential limitations associated with this data collection method. Such limitations include a low response rate, missing data and the potential for self-selection bias and social desirability bias.<br>• The low response rate may be considered a shortcoming of this study. To support the potential representativeness of findings this study used total population sampling (Etikan et al., 2016), wherein all schools (N=243), that met inclusion criteria were included in the research being conducted. In total, just 51 questionnaires were completed by participants. This reflects a response rate of 23%, meaning that the representativeness of the findings obtained in this study is limited.<br>• While it is not possible to ascertain with absolute certainty whether social desirability was present within this study, it is plausible that some participants were conscious of positively representing their personal experience of NEPS CI response. Therefore, social desirability bias should be highlighted as a potential limitation of this study.<br>• The potential for self-selection bias within this study is acknowledged. School personnel with a particular interest in CIs may have been more inclined to complete the questionnaire. Within this study, primary school personnel were overly represented relative to post-primary and special school personnel. Therefore, the resulting sample may not be truly representative of the population as a whole (Elston, 2021).<br>• It is important to acknowledge the proportion of missing data across sections 2, 3 and 4 of the questionnaire. Some sections may not have applied to participants e.g. if they had not attended CI training or received a coordinated CI response from NEPS and other services. However, the absence of such information may preclude a fuller understanding of the topic under examination.<br>• It is recognized that conducting tests of internal reliability and content validity would have enhanced the credibility of the findings of this study (Lakshmi & Akbar, 2013). Due to time constraints and the small sample size of the study (Kyriazos, 2018), this was not possible in the present investigation. |

### *3.5.2 Implications for Educational Psychology Practice*

Several implications for educational psychology policy and practice emerged as a result of the findings. An outline of these implications is provided in Table 22. A full overview of implications is provided in Section 4.5.1 and Section 4.5.2 (Critical Review).

**Table 22**

*Implications for Educational Psychology Policy and Practice*

| **Implications for Educational Psychology Practice** |
| --- |
| • Additional CI training<br>• Out-of-hours support<br>• Follow-up support<br>• Improved coordination of services |
| **Implications for Policy** |
| • Increased staffing levels |

### 3.5.3 *Implications for Future Research.*

Future research can consider building on this research in several ways. An outline of areas for future research is provided in Table 23. A full overview of recommendations for future research can be found in section 4.5.3 (Critical Review).

**Table 23**

*Implications for Future Research*

| Areas for future research |
|---|
| • Future research should explore the perspectives of school personnel on EPs' CI responses via focus groups or individual interviews. This may provide more in-depth information on the topic and richer qualitative data.<br>• Another area which warrants further exploration is the perceptions of special school personnel of the CI response provided by NEPS. The views of special school personnel were underrepresented in this study. Eliciting and exploring the views of this cohort may reveal what is perceived to be working well in special schools and identify aspects of the CI response which could be strengthened.<br>• It was suggested that CI training could be improved by adapting the training format to include role-playing, case discussion, and audience participation with the NEPS psychologist. Future research can consider examining the efficacy of increased interaction on participants' perceived self-efficacy to respond to a CI.<br>• At the time of writing, NEPS had recently introduced an e-Learning course on CI training. In time, it may be helpful to evaluate the efficacy of this approach in supporting school personnel to prepare for a CI. |

# 4 Critical Review

## 4.1 Introduction

A critical review of the research process, design and methodology adopted within the current research is provided in this chapter. The strengths and limitations of the study, along with ethical dilemmas encountered during the process, are discussed in this section. Implications for understanding the research area, policy, practice, and future research are also outlined. The final section is the impact statement, which describes how the understanding and knowledge gained from this research might benefit the practice of educational psychology

## 4.2 Reflections on the Epistemological Position

This research aimed to explore school personnel's perceptions of the CI training and response provided by NEPS and other services. It was hoped that the findings obtained might help inform the future NEPS response to CIs incidents and interagency response to CIs. To achieve these aims, consideration was given to the research paradigm, as paradigms exert significant influence over how to approach the research process and how the study's findings should be interpreted (Kivunja & Kuyini, 2017).

The paradigm selected for use in this study was pragmatism. As a research paradigm, pragmatism sets aside the quantitative and qualitative division (Feilzer, 2010) by proposing that the most crucial question is whether the research has helped "find out what the researcher wants to know" (Hanson, 2008, p. 109). Ultimately, pragmatism is predicated on the concept that researchers should utilise the philosophical and methodological approach most appropriate for the research problem being investigated (Tashakkori & Creswell, 2007). Pragmatism endorses 'a needs-based or contingency approach to research method and concept selection' (Johnson & Onwuegbuzie, 2004, p. 17). This allowed the researcher to

collect, analyse and synthesise quantitative and qualitative information to answer the research questions.

Pragmatism is concerned with meaningful research and is interested in what the world could look like "it orients itself toward a prospective world, a world not yet realised" (Kaushik & Walsh, 2019, p. 11). According to Goldkuhl (2012), a central objective of pragmatism is to create practical knowledge that can be applied to make a meaningful difference in practice. This aligns with the goals of appreciative inquiry (AI), the conceptual framework adopted for this study and the overarching purpose of this study.

## 4.3 Critical Appraisal

The following section will critically evaluate various aspects of the study's conceptual framework, sampling approach, data collection methods and methods of analysis.

### *4.3.1 Reflections on the Conceptual Framework*

#### *4.3.1.1.1 Strengths of Adopting Appreciative Inquiry (AI).*

The conceptual framework adopted in this study was AI (Cooperrider & Whitney, 2000). AI is a process of search and discovery which seeks to identify and explore an organisation's positive aspects, strengths and capabilities to create an 'aspirational future' (MacCoy, 2014; Rowett, 2012). AI is rooted in positivity and avoids deficit-based narratives (Cooperrider & Srivastva, 1987), which proponents of AI suggest may become a degenerative cycle (Cooperrider & Whitney, 2000).

Research in education and educational psychology has demonstrated the utility of AI (Jackson et al., 2020; Kozik et al., 2009; Morris & Atkinson, 2018; Naude et al., 2014). Previous literature has also shown how AI can be employed as a methodology to promote enquiry into sensitive or complex topics (Govender & Edwards, 2009; Liebling et al., 2001).

As described in previous chapters, the nature of CIs makes the context of the current study sensitive. Therefore, a strengths-based positive mode of inquiry was necessary. According to Liebling et al. (2001, p. 166), AI appears to take better care of participants in research by putting 'struggles into context' and providing a safe space within which to openly explore strengths, weaknesses and wishes for the future." The researcher also felt that by framing this study along the five principles of AI, she could potentially generate positivity and future-orientated reflections amongst participants (Corrigan, 2019). For these reasons, AI was selected as a research tool to delicately broach this sensitive topic whilst assisting members of the CIMT in identifying the strengths of NEPS CI response and fostering innovative thinking about the service's future development.

Advocates of AI posit that AI can be helpful when there is an interest in learning and improvement, and one of the main goals of evaluation is to promote and utilise the research findings (MacCoy, 2014; Preskill & Coghlan, 2003). Furthermore, it is argued that the objective of AI is to induce change in practice instead of just measuring what is taking place (MacCoy, 2014; Skov Dinesen, 2009). This research aimed to ascertain what is working well regarding the CI response provided by NEPS and other services and explore whether NEPS could improve their current CI response. Therefore, using AI supported the identification of existing strengths within the NEPS CI model while facilitating the exploration of how the model might be strengthened.

#### *4.3.1.1.2 Critique of Adopting AI.*

Critics of AI have queried how the process can address challenges within an organisation when it appears to only focus on the positive (Lewis, 2020). Another critique of AI is that the emphasis on positive stories and experiences may devalue participants' negative experiences and impede potentially critical conversations which need to occur (Bushe, 2012; Clouder & King, 2015; Grieten et al., 2018; MacCoy, 2014). AI does not ignore negative situations or experiences but addresses issues from a different vantage point (Coghlan et al., 2003). For example, rather than asking participants to list what is wrong, they are asked to explain what is going well, why it is going well and what they would like to see more of (Coghlan et al., 2003). Consideration of what is desired in the future often facilitates discussion around the steps needed to achieve this vision and obstacles or challenges that will need to be overcome as part of this process (MacCoy, 2014). Therefore, advocates of AI hold that it is through imagining an ideal future that perceived weaknesses and deficits are addressed (Bellinger & Elliot, 2011; Lewis, 2020). The use of AI in this study allowed the researcher to explore perceived strengths within the current NEPS CI response and how existing strengths might be enhanced.

#### *4.3.1.1.3 Alternative Conceptual Frameworks.*

Third-generation activity theory (AT) (Engeström, 2001) was also considered as a conceptual framework for this study. AT focuses on the activities in which people are engaged, the tools used in these activities, the social and contextual relationships among the collaborators in those activities and the objects or outcomes of those activities (Jonassen & Rohrer-Murphy, 1999). Put simply- AT is concerned with who is doing what, why and how (Hasan & Kazlauskas, 2014).

A central assumption of AT is that people are active cognising agents but do not act in settings entirely of their own choosing (Cole, 1998). Instead, they are influenced by tools that both constrain and afford their actions (Russell, 2002). As a practical framework, AT is a valuable tool for researchers as it can discover human activity without the explication of tasks

by participants (Hashim & Jones, 2017). Instead, "through the mediated study of the participant's tools, an understanding of activity is revealed which includes tacit and explicit actions" (Hashim & Jones, 2017, p.8)

AT was initially considered as a framework for this study as an analytical tool as it facilitates the exploration of tensions or 'contradictions' within an activity system and the exploration of possible solutions to alleviate these tensions. (Engeström, 1987; Leadbetter, 2017). In this regard, AT can be utilised to help engage "with organisations to examine and expand efficient work practices" (Leadbetter, 2008, p. 209) and can help to bring about change (Leadbetter, 2017). The research questions within the study are concerned with the perceived areas of strengths and needs of the CI response. Therefore, initially, the researcher felt that AT may have supported the identification of emerging 'contradictions' and the exploration of practical solutions to improve the NEPS CI response. The second tenet of AT is that activity systems often incorporate numerous viewpoints or a group of interconnected people and communities that express various views and interests (Frambach et al., 2014). As this study was solely concerned with the perceptions of one population subgroup (CIMT members), it was felt that the use of third-generation AT may not have been appropriate. Therefore, it was rejected as a potential framework.

### *4.3.2 Reflections on the Research Sample*

#### *4.3.2.1.1 Strengths of the Sampling Approach Adopted.*

Total population sampling (Etikan et al., 2016) was employed in this research. The entire population that met the inclusion criteria were invited to take part in the study. The objective of this study was to explore the perceptions of primary, post-primary and special school personnel of NEPS CI training, and the response provided by NEPS and other services following a CI. Therefore, all schools (N=243) that had experienced a level 2 or level 3 CI and subsequently received a response from NEPS before March 2020 were invited to participate in this study. A strength of this sampling method is that it helped obtain the views of school personnel working within diverse geographical contexts on a national scale. An advantage of the total population sampling technique is that it facilitates the measurement of comprehensive coverage of the population of interest along with the possibility of analytical generalisations as all units of the same characteristics are selected for inclusion (Awan et al., 2021).

#### *4.3.2.1.2 Limitations of the Sampling Approach Adopted.*

A limitation of the purposive sampling technique is that it can be prone to researcher bias (Rai & Thapa, 2015). Researcher bias can occur within this approach as the researcher deliberately chooses participants in a study based on their characteristics (e.g., specific experience, knowledge, exposure to an event) they possess (Rai & Thapa, 2015; Rivera, 2019). Essentially, the principal investigator decides what needs to be known and intentionally identifies individuals who are able and willing to provide information about the topic of interest by virtue of knowledge or experience (Bernard, 2017; Etikan et al., 2016). A fundamental limitation of this sampling technique is that it is likely that another researcher would select a different sample when identifying important characteristics to include within the sample, which brings the subjectivity of the selection mechanism into question (Battaglia, 2008). Other disadvantages of this sampling technique include issues around the practicality and logistics of gaining access to such a population list (Oppong, 2013). This was experienced during this research due to the General Data Protection Regulations (GDPR), which meant that the gatekeeper to participant information was required to assemble a list of the entire population who met inclusion criteria and contact members on the list on the researcher's behalf.

1

### *4.3.3 Reflections on the Data Collection Methods*

#### *4.3.3.1.1 Strengths of the Data Collection Methods Employed.*

An online questionnaire including open and closed questions was used to explore school personnel's perceptions of the effectiveness of CI interventions. The use of an online questionnaire was deemed an appropriate data collection method for several reasons. Perceived benefits included the potential of accessing a large and geographically diverse population (Lefever et al., 2007). Secondly, participants were able to complete the survey at a time of their own convenience time (Hogg, 2003), which would avoid disrupting the school routine (Lefever et al., 2007). This is supported in the CI literature where it is argued that the more "consumer friendly" the mode of evaluation, the more likely it is likely data will be collected (Nickerson et al., 2021). Thirdly, the use of online questionnaires facilitated ease of data entry and analysis (Evans & Mathur, 2005). Finally, it was hoped that an online questionnaire would provide participants with a degree of anonymity in which they would feel comfortable giving honest responses (Beeke, 2013; Beeke, 2011).

#### *4.3.3.1.2 Limitations of the Data Collection Methods Employed.*

Weaknesses associated with online surveys include difficulty accessing the study due to a lack of online experience (Evans & Mathur, 2005) and technological variations (Granello & Wheaton, 2004). Previous literature has suggested that some participants neglect to finish an online survey due to distractibility or boredom (Kılınç & Fırat, 2017) or because of difficulty understanding questions (Evans & Mathur, 2018). As this study did not include semi-structured interviews or focus groups, it was not possible to ascertain if any of these variables were an issue for participants

#### *4.3.3.1.3* ***Response Rate.***

Another shortcoming of this data collection method was the response rate to the questionnaire. To support the potential representativeness of findings, this study used total population sampling (Etikan et al., 2016), wherein all schools (N=243) that met inclusion criteria were included in the research being conducted. NEPS circulated an initial invitation to the principal of 228 schools to invite them to partake in this study. The response uptake was closely monitored by the researcher, who reviewed the literature to identify potential ways to increase uptake. While the optimal frequency of reminders is unknown, some studies suggest that response rates typically improve till a maximum of three to four reminders have been circulated (Menon & Muraleedharan, 2020). With this in mind, three email reminders were sent at interspersed intervals to support response uptake (Granello & Wheaton, 2004). Despite this, in total, just 51 questionnaires were completed by participants. This reflects a response rate of 22%, meaning that the representativeness of the findings obtained in this study is limited. This is consistent with literature highlighting the low response rate often associated with online surveys (Shih & Fan, 2008), with typical response rates within the range of 25-30% (Menon & Muraleedharan, 2020).

#### *4.3.3.1.4* ***Missing Data.***

While responses to questionnaire items on CI training were mostly positive, it is important to note that most participants (N=30) reported that they had not attended CI training. Therefore, this section only applied to a relatively small number of participants (N=21). Furthermore, depending on the classification of severity of the CI experienced, some schools may or may not have received a CI response from services other than NEPS. The questionnaire did not include an item to ascertain whether this was the case. However, nineteen participants (37.3%) neglected to respond to questions which explored participant satisfaction with the coordinated response provided by NEPS and other services and the general CI response provided by other services.

#### *4.3.3.1.5 Social Desirability Bias.*

Social desirability bias is the tendency of survey respondents to underreport socially undesirable activities and overreport socially desirable activities due to self-presentation concerns (Krumpal, 2013). Social desirability bias can significantly impact survey results (Larson, 2019), which can skew the findings of a study. According to Mundia (2011), this phenomenon is common in human beings, including school teachers and administrators. Mundia (2011) also asserts that social desirability is exhibited to differing degrees across social interactions such as interviews and when individuals respond in writing to open-ended items on self-report questionnaires. Some studies assert that steps can be taken to neutralise this bias, such as using an online, anonymous survey (Larson, 2019). However, Dodou and de Winter (2014) reported no difference in social desirability between surveys completed in person or online. One possible explanation is privacy concerns and the ever-increasing awareness that online data can be monitored, stored or leaked (Dodou & de Winter, 2014). It is not possible to conclude whether the data collection process in this study involved social desirability. However, due to the important relationship between NEPS and schools, it is possible that some participants were conscious of positively representing their personal experience of NEPS CI response. Therefore, social desirability bias should be highlighted as a limitation of this study.

#### *4.3.3.1.6 Self-Selection Bias.*

It is important to recognise the possibility of self-selection bias as school personnel with a particular interest in CIs may have been more inclined to complete the questionnaire. According to Lavrakas (2008), self-selection often leads to biased data, as the respondents who opt to participate in a study will not represent the entire population. The majority of respondents who completed this survey worked in primary schools (58.8%), followed by secondary schools (37.3%). Just two respondents (3.9%) worked in special schools.

### *4.3.4 Reflections on Methods of Data Analysis*

#### *4.3.4.1.1 Strengths of the Data Analysis Methods Employed.*

The qualitative analysis of open-ended questions included a two-stage hybrid approach of inductive and deductive TA (Fereday & Muir-Cochrane, 2006). The first stage of data analysis included an inductive process of TA wherein data was read and reread, coded, and sorted into themes, in accordance with the research questions and the principles of AI (Naude et al., 2014). The second stage of data analysis involved the deductive mapping of emergent themes onto three stages of AI (Discovery. Dream and Design). According to Xu & Zammit (2020) rather than purely relying on the frequency of codes decontextualised from their context, the integration of inductive and deductive coding reflects a balanced, comprehensive view of the data. The combined inductive and deductive approach also fits well with both a mixed methods style of methodology and a pragmatic epistemology, in which the researcher selects the methods most suited to answering the research questions (Roberts et al., 2019). Another notable strength of TA is that it has the flexibility to accurately represent patterns found in participants' accounts whilst facilitating a reflexive awareness of the researchers' own biases and presumptions (Curtis & & Wrigley, 2017).

Braun & Clarke (2021;2021) assert that reflexivity is an essential aspect of TA and that in TA the researcher actively participates in the meaning-making process. The principal researcher kept a reflexive journal throughout the research process (Braun & Clarke, 2021), which allowed her to consciously reflect upon how her own subjective experiences and perspectives affected the collection and interpretation of data. Furthermore, the researcher enhanced the quality of AT by adhering to Clarke and Braun's (2021) Fifteen Point Checklist for Good Reflexive TA, which adds to the credibility and transferability of the research findings.

#### *4.3.4.1.2 Critique of Data Analysis Methods Employed.*

Ideally, all of the questionnaire responses to open-ended questions would have been coded by one or more independent coders (Belotto, 2018). This was not feasible, however, as the researcher was not a member of a larger team of researchers (Braun & Clarke, 2012). Instead, to support the rigour and transparency of the data analysis process, an independent coder familiar with the process of TA, analysed a sample of the dataset (O'Connor & Joffe, 2020). Inconsistencies in coding were resolved through conversations between the independent coder and the principal researcher (Roberts et al., 2019).

It is acknowledged that conducting tests of internal reliability and content validity would have supported the trustworthiness of this study's findings (Lakshmi & Akbar, 2013). However, due to time constraints and the small sample size of the study (Kyriazos, 2018), this was not possible in the present study. This is an area which may be addressed by future research to determine the suitability of this questionnaire for use as an evaluative tool which could be used by NEPS post-CI.

## 4.4 Ethical Considerations

The principal researcher consulted with NEPS during the questionnaire design phase to discuss the research design. Initially, the principal researcher proposed that this study would consist of two stages: an online questionnaire followed by focus group discussions with CIMTs of schools that had received a CI response from NEPS. The objective of the focus groups was to explore themes emerging from the thematic analysis of the open-ended questionnaire items. During this consultation, a NEPS member with responsibility for CIs expressed that due to the sensitivity of the topic under evaluation, a CIMT member may become upset or distressed while discussing their CI experience.

The NEPS member offered that the principal researcher may not be best placed to facilitate a focus group discussion considering her current level of experience as a trainee

educational psychologist. The principal researcher reflected upon this suggestion consulted with her research supervisors and referred to the literature as part of the decision-making process. The British Psychological Society (BPS) Code of Human Research Ethics (2021) sets out that 'harm to research participants must be minimised' and that 'psychologists need to be sensitive to the potential impact of their involvement with participants, for example, to the possibility of unwittingly causing distress' (BPS. 2021, p 9). The principal researcher also recalled that psychologists should 'recognise the boundaries of their competence, and do not exceed these' (The Psychological Society of Ireland [PSI], 2019, p10). The principal researcher reflected upon the advice provided by NEPS and discussed the implications of this change to the research design stage with her research supervisors. Following this, she decided to forgo the focus group discussions with CIMT members and concentrate on data collection using an online questionnaire.

The researcher was aware from the outset that the topic being explored was sensitive. Therefore, significant consideration was given to the timing of the questionnaire and participant recruitment to avoid inadvertently causing upset. Consideration was given to the timeframe which would reasonably need to have passed since the CI before a school could be approached about this study. A review of the CI literature indicated that there does not appear to be a conclusive body of evidence regarding an approximate timeframe within which a school-based community recovers from a CI. Depending on the nature and severity of the CI, recovery can take months or even years and the trajectory of individuals will vary greatly (Cowan & Rossen, 2013). Since March 2020, school closures owing to the COVID-19 pandemic have significantly disrupted the practice of EPs (Reupert & Fisk, 2022), including responding to CIs. As such, schools were only considered eligible to take part in this study where a CI was provided by NEPS following a CI prior to March 2020 (pre-COVID-19). This timeframe functioned to increase the likelihood that enough time had passed since the CI

for potential participants to feel competent to respond and avoid insensitivity when seeking participation.

## 4.5 Implications for Policy, Practice and Future Research.

Due to this study's small scale and constraints, recommendations and implications can tentatively be taken from the research findings. An overview of emerging implications and recommendations for educational psychology practice, policy, and future research will now be outlined.

### *4.5.1 Implications for Educational Psychology Practice*

Several implications for educational psychology practice emerged as a result of the findings. These included: additional CI training, increased staffing levels, out-of-hours support, follow-up support, and improved coordination of services. The following sections will discuss these implications.

***4.5.1.1.1 Additional CI training.*** Findings from this study indicate that school personnel would value more CI training. It was proposed that CI training at a whole school level would help equip a wider body of staff with the information and skills needed to respond to a CI. The introduction of the NEPS eLearning course on CI training may go some way to meeting this need and help improve the accessibility of CI training for all school staff (DES, 2022). However, face-to-face training still may be required for members of the CIMT, or newly appointed school principals, especially if the findings emerging from this study regarding the opportunity for increased interaction during CI training are to be considered.

The present study indicates that the format of future, face-to-face CI training, might benefit from the inclusion of role-play scenarios, case discussions, increased audience engagement with the NEPS psychologist and time allocated for questions and answers. The potential merit of shared learning from school staff from other schools who have experienced

a CI was also proposed in this study. The introduction of vicarious experiences, guided mastery and social persuasion may be beneficial in terms of promoting the perceived self-efficacy of school personnel to respond to a CI (Bandura, 1977; 1998; Bennett et al., 2021).

#### *4.5.1.1.2 Out of Hours Support. A*n important point raised within these findings was that from time to time, a CI can take place outside of regular school hours during which time NEPS support may not be readily available. It was suggested that an out-of-hours helpline might circumvent this issue and allow school personnel to access prompt psychological support. A similar suggestion has been raised in previous CI literature, wherein the practicality and logistics of this suggestion are explored. Hennessy (2016) discussed the possibility of NEPS establishing a voluntary out-of-hours CI service whereby schools call a central number which is redirected to an 'on-call' EP who can provide prompt CI support. Hennessy (2016) highlighted the importance of fairly compensating educational psychologists who volunteer to be on-call and suggested that time in lieu might be provided in remuneration. Where a CI occurs outside of normal school hours an out-of-hours CI helpline might help alleviate the understandable stress felt by school personnel as they begin to process what has occurred. This suggestion would have obvious staffing implications and would likely necessitate NEPS increasing the number of psychologists available to provide such a service.

#### *4.5.1.1.3 Follow-Up Support.* The follow-up support provided by NEPS was simultaneously identified as an invaluable component of the CI response and an area which could be strengthened. While the support provided at the time of the CI was described positively, it was articulated by school personnel that it was often only in the weeks and months after the CI that the brevity of what had taken place began to sink in. Consequently, a key finding within this study was that, ideally, NEPS would be able to provide more frequent check-ins post-CI to review how school personnel and students were coping.

The busyness and practicalities involved in responding to a CI can often mask or camouflage pain in the immediate aftermath of a CI (DES, 2018). As supports such as NEPS begin to withdraw from schools, it is understandable that this pain or sadness might reignite

(DES, 2018). 'Responding to Critical Incidents: Guidelines for Schools' outlines the short-medium-and long-term roles of NEPS and considerations for school management as part of the CI response (DES, 2016). As indicated by findings within this study, given each CI's specific context and circumstances, establishing a one size fits all timeframe for check-ins post-CI is impossible. However, it may be helpful for NEPS to liaise with school management to establish a timeline of short- and long-term check-ins as part of the withdrawal process. This would need to be adapted to each school's individuals needs and capacity but may provide school management with a sense of comfort and reassurance knowing that ongoing support will be provided

As previously noted, EPs are well placed to offer support to schools following a CI given their understanding of systems and familiarity with school staff (McCaffrey, 2004). While responding to CIs is now an established part of an educational psychologist's role, one must remain cognisant of the potential impact of CIs on educational psychologists (Bennett et al., 2021). In addition to taking time away from routine duties, responding to CIs can be physically and emotionally taxing for educational psychologists and can result in compassion fatigue and vicarious trauma (Bolnik & Brock, 2005; Daniels et al., 2007; Harbert, 2000). The rationale for providing regular follow-up support to school personnel is clear. However, if NEPS psychologists are to provide more frequent check-ins to schools following a CI, it will be important that line managers make accommodations to alleviate the stress accrued by proxy of providing CI support. (Op de Beeck et al., 2017). Several suggestions are put forward by Hennessy (2016) around how senior management might support educational psychologists as they respond to CIs. For example, buying in locum or private assessments could help to mitigate the effects of CIs on planned work (Hennessy, 2016). Additionally, a line manager might decide to assign another educational psychologist to cover a CI if it was

felt that a team member required time away from that line of work due to fatigue etc, (Hennessy, 2016). Staffing implications

***4.5.1.1.4 Improved Coordination of Services.*** It is widely recognised in the CI literature that EPs will often work alongside a variety of other professionals in response to CIs (Beeke, 2011; Dunsmuir et al., 2018; Hennessy, 2016). Given the number of services involved in a CI response, multiagency collaboration, communication and coordination are necessary to clarify roles and responsibilities (Silver, 2014). This may help to avoid 'diffusion of responsibility,' duplication of support and can help direct the effective use of resources (Latane & Darley, 1970; Silver, 2014) The findings of this study indicate that there may be room for improvement in terms of the coordinated CI response currently being provided by NEPS and other services. It was suggested that, at times, there can be a sense of disjointedness during a CI response as there are too many individuals offering different services. The DES (2016b) states that NEPS are well-placed to coordinate response efforts from a range of services in the eventuality of a CI. However, as with previous studies, (Hennessy, 2016), descriptions of the coordinated CI response from school personnel within this study suggest that there can be a lack of awareness amongst both school personnel and other services as regards the capacity of NEPS to assume this role.

Posada (2006) recommends that multi-agency training be established to ensure that each of the services likely to be involved in a CI response has information about each other's roles and responsibilities, and collective awareness of trauma, the needs of those affected and how best to support them. Further research may be necessary to establish how such training might be funded and to determine who could oversee the organisation and delivery of such training.

As Hennessy (2016) suggested, it may be helpful for NEPS to clearly explain their capacity to assume a leadership role in coordinating the various services that respond to a CI

to both schools and services that support schools post-CI. It is plausible that this conversation could take place during multi-agency training, as previously mentioned. When developing future CI guidelines for schools, it may also be helpful for NEPS to provide further rationale and theoretical justification around why NEPS are well placed to assume a coordinating role as part of the CI response. Ideally, implementing the aforementioned strategies would help to allay stress caused by confusing approaches that are inconsistent with NEPS CI guidelines (DES, 2016) and also help to establish clear lines of responsibility and accountability (Hennessy, 2016; Sloper, 2004).

### *4.5.2 Implications for Policy.*

One implication for policy which emerged as a result of the findings included the importance of increasing staffing levels to provide appropriate support to schools following a CI. This implication will now be discussed.

***4.5.2.1.1 Increased Staffing Levels.*** Ideally, there would be sufficient personnel in place (both within NEPS and other services) to respond to a CI if and when one should occur. Current governmental guidelines hold that

> *"Following a CI, it is expected that there will be "normal" distress among a number of students, especially close friends or relatives. Within approximately 6 weeks, most students will have returned to normal functioning. However, if students continue to show significant signs of distress a number of weeks after the incident, they may need to be referred on".* (DES, 2016, p.30).

The findings of this study indicate that there are concerns among some school personnel regarding the capacity of current staffing levels within NEPS to meet the demands of CIs as they take place. This aligns with findings from previous Irish studies which have suggested that while NEPS provides excellent support, they are significantly understaffed as a service (Desforges & Lindsay, 2010; Downes et al., 2006). As previously discussed, outside

agencies such as CAMHS may not be able to see these students immediately due to significant deficits in staffing due to underfunding (Leahy & McNicholas, 2021; McNicholas et al., 2021). Referral demands frequently exceed availability and access to inpatient or outpatient care is often unacceptably delayed (McNicholas, 2018). For example, the most recently published Health Service Executive (HSE) performance report (HSE, 2021) shows that 2,948 children and young people were waiting to be seen by CAMHS psychologists, far exceeding the target of 2,308 for this period (O'Flanagan, 2019b). Lengthy wait times between the point of referral and first appointment are associated with exacerbation of psychological difficulties, increased non-attendance and premature dropout rates, which may be reflective of a lack of trust in the service and decreased motivation to participate (Kreyenbuhl et al., 2009; McGarry et al., 2008; Punton et al., 2022). It can be argued that students experiencing ongoing psychological distress in school following a CI do not have access to the appropriate level of support to meet their needs (O'Flanagan, 2019b). This critical issue deserves attention from policymakers (O'Flanagan, 2019b).

While CAMHS and Primary Care Psychology Services are well placed to address psychological difficulties in children and young people, healthcare professionals are tasked with many challenges in meeting these needs (Leahy et al., 2013; McNicholas, 2018). Limited financial resources and significantly under-resourced staffing levels cannot be ignored (Leahy et al., 2013; McNicholas & Moore, 2022). Engagement and collaboration are needed between consultants leading the services and those responsible for planning and funding to facilitate the necessary structural changes needed if healthcare professionals are to succeed in providing timely early intervention for young people with mental health difficulties (Doody et al., 2021; Leahy et al., 2013). It is important that this happens sooner, rather than later if NEPS and other services are to be able to provide longer-term support for individuals significantly impacted by a CI.

### *4.5.3 Implications for Future Research.*

The emotional support provided to school staff was found to be one of the most helpful components of the NEPS CI response. This included the guidance on self-care and the reassurance offered by NEPS psychologists. It was proposed that the ideal NEPS CI response would include additional support for staff. In the absence of focus group discussion, however, it was not possible to further explore what this support might involve e.g., additional reassurance, therapy etc., from NEPS post-CI. This is an area which could be addressed by future research to help inform NEPS response to future CIs. Future Irish research on school-based CIs should examine the perspective of school personnel on the CI response provided by school psychological services via focus groups or individual interviews. This may offer richer and more in-depth information on this topic and shed light on areas which have not yet been represented.

Another avenue of future research which warrants exploration is the perceptions of special school personnel of the CI response provided by EPs such as those working in NEPS. The perceptions of special school personnel were significantly underrepresented within this study. Eliciting and exploring their views about this topic might provide further insight into what is currently perceived to be working well as well as highlighting areas within the CI response which could be strengthened.

A key finding emerging from this study included how future, in-person CI training might be improved. It was suggested that the addition of role-play scenarios, case discussion, audience involvement with NEPS psychologist and question-and-answer time might be beneficial in this regard. Bennett et al., (2021) propose a CI training paradigm guided by sources of self-efficacy including vicarious experiences, social persuasion and guided mastery. Although intended for use by EPs, there are parallels which could reasonably be applied to inform CI training for school personnel including teaching staff. Future CI studies

should consider evaluating the impact of this CI training paradigm on the perceived self-efficacy of school personnel. This might provide useful insight into the most effective components of CI training and areas which could be further developed.

At the time of writing, NEPS had recently introduced their e-Learning course on CI training (DES, 2022). The DES (2022) states that this course is geared toward a school's CIMT but is open to all interested school staff. This eLearning course involves self-directed, self-paced learning (DES, 2022) which may increase the uptake of training as school personnel can complete the course in their own time (Somayeh et al., 2016). In time, it may be useful for researchers to explore the efficacy of this e-Learning course on the perceived self-efficacy of school personnel to respond to a CI. A comparative study of the respective outcomes of in-person versus online training may yield useful information in this instance.

This study only explored the perceptions of one CIMT team member from each school. Further studies should assess a larger, more representative, sample from each surveyed school. This may help determine existing strengths and weaknesses in the CI preparation and response procedures of NEPS and support the generalisability of subsequent findings.

### 4.6 Impact statement

This study is one of the first studies to explore the perspectives of school personnel regarding the CI response provided by NEPS and other services in Ireland. A notable strength of this study is that was conducted at a national level and sought to include the perceptions of school personnel across primary, post-primary and special schools. The findings of this study provide insight into the views of a previously underrepresented sample regarding the CI response provided by a school psychological service within the Irish context.

Adopting AI (Cooperrider & Whitney, 2000) as a conceptual framework allowed the researcher to sensitively promote inquiry around a sensitive and complex topic (Govender &

Edwards, 2009; Liebling et al., 2001). The use of AI facilitated the discovery of existing strengths within the current NEPS CI response and identified recommendations concerning how the model could be strengthened.

Due to the limitations and small sample size of this study, tentative recommendations can be extrapolated from the research findings. Implications for the practice of educational psychology include the provision of additional CI training, out-of-hours support, follow-up support and improved coordination of services involved in the CI response. The need for additional staffing, both in NEPS and other services, was also highlighted. This is essential for NEPS and other services to provide additional support for staff and longer-term-follow up support to persons in the school community deeply impacted by a CI.

Several suggestions were made regarding how NEPS CI training could be improved. This included the provision of whole-school training to equip a wider body of staff with the skills needed to respond to a CI. Recommendations were also made as to how the format of in-person CI training could be improved. This included increasing opportunities for interaction, both amongst the trainees and with the NEPS psychologist delivering training. It was also noted that it may be helpful to hear from other schools that have previously experienced a CI. This may help to enhance the perceived self-efficacy of school personnel to respond to a CI when one occurs (Benight & Bandura, 2004; Bennett et al., 2021).

The findings of this study suggest that the coordinated CI response currently provided by NEPS and other services could be improved. It was suggested that there can be a sense of disorganisation during CI responses due to the large number of individuals offering different services. According to the DES (2016b), NEPS are well-positioned to coordinate response efforts from a variety of services in the event of a CI. Similar to previous research (Hennessy, 2016), the descriptions of the coordinated CI response from school personnel in this study suggest that school personnel and other services may not be aware of NEPS.  capacity to

assume this role. Multi-agency training may be helpful in this regard, to ensure that each of the services likely to be involved in a CI response has knowledge of each other's roles and responsibilities (Posada, 2006). This may facilitate the alignment of a more streamlined multiagency CI response and expedite the delivery of support to those impacted by the CI.

Finally, the results of this study highlight the need for increased funding to be made available to alleviate the current staffing shortages across both NEPS and other services likely to be involved in the CI response (Desforges, 2010; McNicholas et al., 2021). This is essential to ensure that there is adequate staff available to provide support to a school following a CI, to facilitate the provision of longer-term follow-up support and to reduce the lengthy wait lists currently experienced in mental health services in Ireland (McNicholas et al., 2020).

In line with the final stage of the AI process which is concerned with bringing about change (Cooperrider, 2000), the researcher has concrete plans in place by which she hopes to disseminate the findings of this study. Preliminary research findings were presented at the 2021 Annual Psychological Society of Ireland Conference. Once academically reviewed, the principal researcher will present the findings of this study at a meeting which will be attended by members of CI management within NEPS. The findings of this study will also be presented to the National CI forum in Dublin in November 2022. Finally, it is hoped that this study will generate interest in the field of school-based CI research in Ireland and encourage future researchers to explore how the current response to CIs could be enhanced to best meet the needs of school communities that have experienced a CI.

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Yule, W., & Dyregrov, A. (2005). Impact on School Performance Scale (ISPS). In. Zhou, X., Wu, X., & Zhen, R. (2018). Self-esteem and hope mediate the relationship between social support and post-traumatic stress disorder and growth in adolescents following the Ya'an earthquake. *Anxiety, Stress, & Coping*, *31*(1), 32-45.

**Appendix A: Essential Elements of Immediate and Mid–Term Mass Trauma Intervention (Hobfoll, 2007; 2021)**

1. Promotion of safety

CIs by their very nature mean that members of the school community are forced to respond to a 'serious and significant event' that has significantly impacted their objective and perceived sense of safety (Beeke, 2021). Following a CI, it is of the utmost importance that steps are promptly taken to promote, maintain and restore a sense of both physical and psychological safety (Vernberg et al., 2016). Depending on the nature of the event, within the school environment, this may include ensuring that the school environment is safe (Beeke, 2021). The promotion of a sense of both physical and psychological safety can help to reduce the neurobiological fear responses and defy the fear-induced cognitive processes which can impede recovery (Hindley, 2015; Hobfoll et al., 2007; 2021). EPs such as NEPs aim to promote a sense of safety within school communities following a CI in several ways. For example, EPs can facilitate the mobilisation of support from outside agencies, support staff in formulating clear, appropriately worded information to detail the circumstances of the CI and assist school staff in identifying persons who may require additional support (Hindley, 2015).

2. Promotion of Calm

Exposure to trauma frequently results in short-term increases in intense emotions, physiological arousal, levels of anxiety and feelings of detachment (Hobfoll et al., 2007; Lawyer et al., 2006). Such responses are viewed as normal and to a certain degree, adaptive (Hobfoll et al., 2007). However, continued elevated levels of anxiety can interfere with daily life tasks such as sleeping, eating, concentration and social interaction (Beeke, 2021). Long-term continuation of such responses can leave affected individuals vulnerable to experiencing panic attacks and developing anxiety disorders which may eventually precipitate post-traumatic stress disorder (PTSD)(Shalev & Freedman, 2005). For these reasons, any

intervention post-CI must include the essential ingredient of calming (Hobfoll et al., 2007). Following a CI EPs such as NEPS offer support to affected members of the school community in several ways. For example, by offering reassurance and emotional containment through being physically and emotionally present in a calm and supportive way (Hindley, 2015). This might include providing guidance around the resumption of normal routines and attempting to manage media and social media coverage (Beeke, 2021). It might also include providing a listening ear to staff and normalising stress responses (Hindley, 2015). Some of the relaxation strategies recommended by Hobfoll et al., (2007; 2021), in this regard include therapeutic grounding, deep breathing exercises, yoga, muscle relaxation and mindfulness treatments.

3. Promotion of a sense of self and community efficacy

An important step in all disaster phases is promoting a sense of self-efficacy and collective efficacy (Vernberg et al., 2016; Hobfoll et al., 2007; 2021). Self-efficacy refers to perceptions an individual holds over their capacity to assert control over their lives (Bandura, 1997). According to Bandura (1997), perceptions of self-efficacy significantly influence the decisions that individuals make, their goals, levels of resilience and perseverance, susceptibility to mental health difficulties and respective accomplishments. Essentially, unless a person believes they have the power to produce desired results and avoid undesirable outcomes they have little incentive to take action or persist when faced with adversity (Fernández-Ballesteros et al., 2002). Collective efficacy contrastingly refers to a group's shared belief that conjoint capabilities and unified action can meet environmental demands to produce positive outcomes (Bandura, 1997; Fernández-Ballesteros et al., 2002). The subjective sense of helplessness inherent to a CI challenges both individual and community efficacy (Hindley, 2015). Indeed, the sudden and abrupt nature of CIs can often overwhelm the normal coping mechanisms of school personnel (Johnson, 2000), and can skew their

perceived capacity to solve problems arising from the CI (Beeke, 2021). Hindley (2015) provides several recommendations as to how EPs can promote perceptions of self-efficacy and community efficacy amongst members of the school community following a CI. These include supporting students and staff in understanding and gaining cognitive mastery over the situation to reduce feelings of helplessness. For example, EPs might consider providing staff briefings to promote discussion and answer questions to help guide teachers on how best to communicate with students about the situation in a manner conducive to their developmental level (Hindley, 2015).

4. Promotion of connectedness

Hobfoll et al., (2007; 2021) assert that social support is one of the core tenets of psychological recovery following a disaster. Social connectedness increases opportunities for a host of social support activities, including practical problem-solving, emotional understanding and acceptance and normalisation of reactions and experiences (Hobfoll et al., 2007; 2021). The school environment offers opportunities for social support from peers and secondary attachment figures such as teachers and can play an important role in the ecosystem of children and young people following a CI (Beeke, 2021). Interventions which endeavour to promote social connectedness include those which identify and provide additional support to individuals who may lack strong social support or whose support system may provide undermining messages (e.g., blaming, minimalization) (Hobfoll et al., 2007; 2021). In the aftermath of a CI EPs such as NEPS can promote social connectedness in several ways. For example, by providing schools with guidance around memorials and commemorative events (Hindley, 2015). Such events may promote social connectedness as they help establish a community of bereavement (Fast, 2003), provide a "collective purpose" which may reduce feelings of powerlessness," (Wall, 2008, p. 218) and promote healing and bonding (Knox & Roberts, 2005).

5. Promotion of Hope

This principle is founded on research which has identified instilling hope as a critical component of CI intervention (Hobfoll et al., 2007; 2021). In general, people tend to believe that the world is a reasonably safe, predictable and benevolent place (Biruski et al., 2014). According to "shattered assumptions theory" (Janoff-Bulman, 1989), when a CI or traumatic event occurs, these worldviews are shattered. The subsequent states of vulnerability, fear and heightened awareness of one's mortality often give rise to the anxiety ad physiological reactivity that characterise PTSD (Edmondson et al., 2011). Following a CI, the promotion of hope is essential to helping survivors to overcome feelings of despair, futility, and resignation (Norris & Stevens, 2007). A vast body of research has indicated that in the aftermath of a traumatic event, an optimistic outlook is a robust predictor of psychological recovery, resiliency and positive outcomes (Liberto et al., 2020; Makwana, 2019; Zhou et al., 2018). Hope can be facilitated by a broad range of interventions including cognitive behavioural therapy approaches which aim to correct erroneous cognitions related to catastrophising, manage extreme avoidance behaviour, control self–defeating self-statements, and encourage positive coping behaviours (Hobfoll et al., 2007).

## Appendix B: Excluded Articles and Rationale for Exclusion

*Excluded Articles and Rationale for Exclusion*

| Excluded articles | Exclusion Criteria |
|---|---|
| 1. Akdağ, E. (2022) Exploring experienced teachers' attitudes to critical incidents, Reflective Practice, 23:1, 103-117, DOI: 10.1080/14623943.2021.1983422 | Criteria 5 |
| 2. Lenihan, M., Wayne, N. E., De Jong, D., Vermillion, S. D., Ossian, J., Aderhold, F. W., & Robinson, D. (2020). Superintendent perceptions of school safety and arming teachers in public schools in Nebraska. *Editorial Review Board*, 43. | Criteria 5 |
| 3. Ozkayran, S. E., Yetis Abali, A., & Abali, (2020). The Opinions of Teachers on Crisis Management in Guidance Services. Educational Process: International Journal, 9(4), 205-220, DOI: 10.22521/edupij.2020.94.2 | Criteria 5 |
| 4. Evans, N. J. (2020). Addressing the Emotional Needs of Students in the Classroom during Crisis. *About Campus*, *25*(3), 11-14. | Criteria 5 |
| 5. Cox, G. R., Bailey, E., Jorm, A. F., Reavley, N. J., Templer, K., Parker, A., & Robinson, J. (2016). Development of suicide postvention guidelines for secondary schools: A Delphi study. *BMC public health*, *16*(1), 1-11 | Criteria 5 |
| 6. Green, J. G., Xuan, Z., Kwong, L., Holt, M. K., & Comer, J. S. (2016). Teachers' reports of outreach to school-based providers of mental health services following the 2013 Boston marathon attack. *Children & Schools*, *38*(4), 227-234. | Criteria 5 |
| 7. Ali, N. S., Al-Joudi, T. W., & Snell, T. (2019). Teaching recovery techniques to adolescents exposed to multiple trauma following war and ongoing violence in Baghdad. *The Editorial Assistants–Jordan*, *30*(1), 25-33. | Criteria 4 |
| 8. Savelides, S., Mihiotis, A., & Koutsoukis, N. S. (2015). Crisis management for secondary education: a survey of secondary education teachers in Greece. *International Journal of Educational Management, 29*(1), 18-43 | Criteria 5 |
| 9. Momani, N. M., & Salmi, A. (2012). Preparedness of schools in the Province of Jeddah to deal with earthquake risks. *Disaster Prevention and Management: An International Journal*. | Criteria 5 |
| 10. Green, J. G., Holt, M. K., Kwong, L., Reid, G., Xuan, Z., & Comer, J. S. (2015). School and classroom-based supports | Criteria 5 |

| Excluded articles | Exclusion Criteria |
|---|---|
| for children following the 2013 Boston Marathon Attack and Manhunt. *School* mental health, 7(2), 81-91.# | |
| 11. Seyle, D. C., Widyatmoko, C. S., & Silver, R. C. (2013). Coping with natural disasters in Yogyakarta, Indonesia: A study of elementary school teachers. *School* Psychology International, 34(4), 387-404. | Criteria 5 |
| 12. Javed, M. L., & Niazi, H. K. (2015). Crisis Preparedness and Response for Schools: An Analytical Study of Punjab, Pakistan. *Journal of Education and Practice*, *6*(22), 40-47. | Criteria 4 |
| 13. O'Connor, P., & Takahashi, N. (2014). From caring about to caring for: case studies of New Zealand and Japanese schools post-disaster. *Pastoral care in education*, *32*(1), 42-53 | Criteria 4 |
| 14. Ubit, F., & Bartholomaeus, P. (2018). Teacher professional development at a tsunami-affected school in Banda Aceh. *International Education Journal: Comparative Perspectives*, *17*(2), 102-114. | Criteria 4 |
| 15. Eklund, K., Meter, L., & Bosworth, K. (2018). Examining the role of school resource officers on school safety and crisis response teams. *Journal of School Violence, 17*(2), 139-151 | Criteria 4 |
| 16. Berger, E., Carroll, M., Maybery, D., & Harrison, D. (2018). Disaster impacts on students and staff from a specialist, trauma-informed Australian school. *Journal of Child & Adolescent Trauma, 11* (4), 521-530 | Criteria 5 |

**Appendix C: Mapping the Studies: Participant Demographics**

| Authors | Objective(s) | Participants | Job Role | Location |
|---|---|---|---|---|
| Alsubie (2017) | To explore school personnel perceptions of CI readiness and recommendations to improve CI preparedness and CI intervention | 302 participants<br><br>Females (*n*=100) Males (*n*-202)<br><br>Average age = 37.13 years | Principal (*n*=18), Teacher (*n*=105), Counsellor (*n*=144), Other (*n=35*) | Riyadh, Saudi Arabia |
| Debes (2021) | To explore school personnel perspectives of CI preparedness and CI management in schools | 48 participants<br><br>Females (*n*=27) Males (*n*=21)<br><br>Average age= 37.46 | Teachers (*n=48*) | North Cyprus |
| Karasavidou & Alexopoulos (2019) | To explore school personnel perceptions of CI readiness and recommendations to improve CI preparedness and CI intervention | 249 teachers<br><br>Gender not specified<br><br>Ages 31-40 years | Teachers (*n=249*) | Central Macedonia, Greece |
| Le Brocque et al., 2017 | To explore school personnel perspectives on the effectiveness of a guide for teachers to support children affected by trauma following a CI | 364 participants<br><br>Gender not specified<br><br>Ages not specified | Education professionals (*n*=309), Mental health professionals (n=55) | Queensland Australia |

| Authors | Objective(s) | Participants | Job Role | Location |
|---|---|---|---|---|
| McBrayer et al., 2020 | To explore the perspectives of online school personnel on CI frequency and preparedness | 143 participants<br><br>Female (*n*=130), Male (*n*=13)<br><br>Ages not specified | Teachers (*n*=100), Administrators (*n*=28), Other (counsellor, school psychologist, family success liaison)(*n*=15) | South-eastern United States of America |
| Olinger Steeves, Metallo, Byrd, Erickson, & Gresham, (2017). | To explore the school personnel perceptions of CI preparedness, the content of school crisis plans, and the perceptions of school staff for improving crisis preparedness | 64 participants<br><br>Females (*n*=62) Males (*n*=2)<br><br>Ages not specified | Administrator (*n*=5), teacher (*n*=47), school counsellor (*n*=4), other (*n*=8) | South-eastern Louisiana, United States of America |

**Appendix D: Mapping the Field**

*RQ 2: Mapping the Field*

| Study authors | Study design | Measures applied | Validity and Reliability/Evidence of trustworthiness | Primary outcomes |
|---|---|---|---|---|
| Alsubie (2017) | A quantitative design using surveys which were administered in person | The 'Safe School Inventory' and 'Types of crisis and training competency survey.' Both surveys were developed for use in this study. | The survey was developed based on existing measures in the field of crisis management preparedness of school personnel (Adamson & Peacock, 2007; Mathai, 2002). Guidelines proposed by Onwuedbuzie and Nelson (2010) were used as part of the survey development and validation process.<br><br>The survey was reportedly examined for reliability. However, no specific information in relation to the same was provided.<br><br>The survey was piloted with a selected group of in-school counsellors, psychologists, principals and teachers. The number of participants who completed the pilot study was not specified. The authors did | 40.8% (*n*=108) of participants surveyed reported that they had never had any level of CI training. 18.5% (*n*=49*)* had received training of less than one day's duration and 9.8% of participants (*n*=26) had received one day of CI training<br><br>Overall, participants reported little confidence in their schools' competency to manage any type of CI. For example, over half of the participants (58.8%, *n*=160), felt that their schools would not be prepared to respond to suicide. Participants also reported that their school would be ill-equipped to respond to suicidal ideation (66.1%, *n*=183), homicide (67.2%, *n*=180), terrorism (70.3%, *n*=189) or death from illness (54.6%, *n*=148)<br><br>The resources identified by participants as most needed to improve their schools' competency to manage CIs included alarm systems (63.9%, *n*=188), building evacuation drills (62.1%, *n*=182), CIMPs (60.8%, *n*=177), curriculum/instruction programs (54.7%, *n*=158), electronic surveillance (54.1%, *n*=158), crime prevention/watch (53.6%, *n*=158), emergency kits (52.9%, *n*=154), access |

| Study authors | Study design | Measures applied | Validity and Reliability/Evidence of trustworthiness | Primary outcomes |
|---|---|---|---|---|
| | | | not report modifications made to the survey following the pilot study or whether pilot data were excluded from the data analysis. | control (52.9%, *n*=126), drug testing (51.7%, *n*=150), and codes of conduct (51.4%, *n*=151). |
| Debes (2021) | A quantitative design using surveys | The 'Crisis Intervention Scale' which was developed by (Debes, 2020) | No psychometric properties for this instrument were reported, nor was information provided in relation to pilot testing, expert review, or reliability or validity. | Participants indicated that they have received in-service training CI in relation to a host of potential CIs including the following: bomb threats (83.3%, *n*= 40), student suicide attempts (79.2%, *n*=38), student death (77.1%, *n*=37), staff death (62.5%, *n*=30) and natural disaster (27.1%, *n*=13).<br><br>Participants reported that with sufficient practice, they would feel competent in their capacity to manage CIs.<br><br>Participants reported that they would require a significant amount of in-service training to equip them with the skills to safely respond to the types of CIs which might occur within or external to the school setting. |

| Study authors | Study design | Measures applied | Validity and Reliability/Evidence of trustworthiness | Primary outcomes |
|---|---|---|---|---|
| Karasavidou & Alexopoulos (2019) | A mixed methods design using surveys. | A survey developed for use in this study | The survey was developed based on existing theoretical information, literature and discussion with experts in the field<br><br>The survey was piloted with 32 teachers whose data was removed from the final data analysis.<br><br>Internal consistency was examined (Cronbach's alpha coefficient of consistency: 0.801), thus the research findings were valid and reliable. | Participants reported that they have not been trained (62.4%, *n*=155), and do not have practical experience implementing CI interventions (54.7%, *n*=136). Participants also reported that they have not been informed (74%, *n*=184) or trained on the proper use of the available resources for handling CIs (71.3%, n=178). In terms of CI preparation participants indicated that their schools typically focused on responding to earthquakes (91.7%, *n=228*), and student aggression/bullying (62.4%, *n*=155).<br><br>In terms of the readiness level of school buildings to respond to a CI, participants indicated that schools are mainly equipped with fire hoses (84.4%, *n*=211), fire extinguishers (77.1%, *n*= 192) and first aid kits that are easily accessible (87.2%, *n*=217). Participants indicated that CI equipment such as fireproof gloves/uniforms (89%, *n*=222), raincoats, blankets (88.1%, *n*=219) emergency exits (53.2%, *n*=132) etc for critical event management were lacking. Participants also highlighted the absence of automated fire safety systems (e.g. a fire alarm, 74.3%, *n*=185) and windows with safety glass (65.1%, *n*=162). Health and safety examinations of the school building were reportedly conducted upon the school principal's written request (62.4%, *n*=155). Annual health and safety |

| Study authors | Study design | Measures applied | Validity and Reliability/Evidence of trustworthiness | Primary outcomes |
|---|---|---|---|---|
| | | | | inspections of school buildings were reported to be extremely low (17.4%, *n*=43).<br><br>Recommendations were provided in relation to how CI preparedness could be improved. Suggested strategies included the delivery of CI training on school premises (62.8%, *n*=156), the design of concise CI action plans (53.5%, *n*=133), employing psychologists and nurses at schools (20%, *n*=49), reducing the number of students in large schools (20%, *n*=49), and in school training on first aid services (13.8%, *n=34*). |
| Le Brocque et al., 2017 | A mixed methods design using surveys which were administered in person | A survey developed for use in this study | No psychometric properties for this instrument were reported, nor was information provided in relation to pilot testing, expert review, or reliability or validity | Participants described the CI intervention training as useful (89.5%, *n*=325) and reported that they would be able to apply the information presented in this training in their professional practice (92.5%, *n*=337). There were mixed responses regarding participants' perceptions of an improved understanding of trauma reactions in childhood. Many of the mental health professionals reported that were already familiar with the information provided in the training. Educational professionals (84.5%, *n*=308), contrastingly, reported that attending the training improved their understanding of childhood trauma reactions.<br><br>When asked to identify how the CI intervention training might be improved participants provided |

| Study authors | Study design | Measures applied | Validity and Reliability/Evidence of trustworthiness | Primary outcomes |
|---|---|---|---|---|
| | | | | the following recommendations: increased audience interaction time and discussion time as part of training, Participants also recommended that consideration be given to how educational professionals might best support persons from minority backgrounds who may experience trauma differently. Additional recommendations included the provision of information for parents regarding coping strategies, referral procedures and information on parental reactions to trauma |
| McBrayer et al., 2020 | A quantitative design using surveys which were emailed to participants | The 'Crisis Event Perception Survey,' a survey developed for use in this study | The survey was developed based on an expert review. No information was provided in relation to a review of literature in the field or pilot testing. The survey was reported to adhere to the needed validity and reliability of survey research (Tysinger et al., 2016). | In terms of CI, training participants reported having received training in detecting and/or responding to the following: suicidal ideation (91.5%, *n*=131), homicidal ideations in students (45%, *n*=65), the unexpected death of a student, (25.2%, *n*=36), the unexpected death of a teacher (11.9%, *n*=17) atypical emotional responses students following a natural disaster (11.9%, *n*=17), and atypical emotional responses to terrorist threats (14%, *n*=20)<br><br>The only area where more than 50% of participants felt very prepared to respond to a CI was in the area of detecting and responding to suicidal ideation (53.1%, n=76). Just 18.9% (*n*=27), of participants, reported feeling prepared to respond to homicidal ideation and 18.9%, (*n*=27), of participants, felt prepared to respond to natural disasters. Only 9.8% |

| Study authors | Study design | Measures applied | Validity and Reliability/Evidence of trustworthiness | Primary outcomes |
|---|---|---|---|---|
| | | | | (*n*=14) of participants reported feeling prepared to respond to the unexpected death of students and less than 10% of participants indicated feeling prepared to effectively respond to CIs including the unexpected death of a teacher (7.7%, *n*=11), and terrorist threats (7.7%, *n*=11). |
| Olinger Steeves et al., (2017) | A quantitative design using surveys which were mailed to participants | 'School Crisis Survey,' a survey created for use in this study. | The survey was developed based on literature in the field and following the uptake of feedback gathered from pilot testing. No information was provided regarding expert review or reliability. | The majority of participants (90%, *n*=58) reported that their school had held CI training in the last year. Self-reported attendance at these training varied between urban and rural districts. Overall, 68.8% (n=44) reported attending CI training.<br><br>Findings indicated that 82.8% of participants (n=53) could report the location of the CIMP. However, only 64.1% of participants (*n*=41), had read their school CIMP.<br><br>The majority of participants (89%-98.5%, *n*=57-63) reported feeling as though their schools were at least somewhat prepared to respond to CIs including fires, bomb threats, suicide, the death of a school community member, severe weather emergency or an intruder on campus. Having read the school CI plan significantly predicted participants' feelings of preparedness for fire, death, suicide and extreme weather events. |

| Study authors | Study design | Measures applied | Validity and Reliability/Evidence of trustworthiness | Primary outcomes |
|---|---|---|---|---|
| | | | | Participants provided the following responses when asked to indicate what would help improve crisis preparedness in their respective schools: More practice drills (59.4%, *n=38*), more specific training for staff members (39.1%, *n*=25), more accessible or updated crisis plans (26.6%, *n*=17), and alterations to the physical school building (7.8%, *n*=5). |

**Appendix E: Sample WoE A Article Appraisal**

Critical appraisal checklist for a questionnaire study. Adapted from the British Medical Journal (2004)
Article Reference: McBrayer, J. S., Tysinger, D., Tysinger, J., Diamanduros, T., & Fallon, K. (2020). Keeping our schools safe: examining perceptions of crisis frequency and preparedness of educators in a statewide online charter school. *Journal of Online Learning Research*, *6*(2), 107-128

Research question and study design

**1. Was a questionnaire the most appropriate method?**

| | |
|---|---|
| Yes | X |
| No | |
| N/A | |

Unknown/Unable to Code ☐

Validity and reliability

**2. Have claims for validity been made, and are they justified? (Is there evidence that the instrument measures what it sets out to measure?)**

| | |
|---|---|
| Yes | X |
| No | |
| N/A | |

Unknown/Unable to Code ☐

**3. Have claims for reliability been made, and are they justified? (Is there evidence that the questionnaire provides stable responses over time and between researchers?**

| | |
|---|---|
| Yes | X |
| No | |
| N/A | |

Unknown/Unable to Code ☐

**4. Are example questions provided?**

| | |
|---|---|
| Yes | |
| No | X |
| N/A | |

Unknown/Unable to Code [ ]

**5. Did the questions make sense, and could the participants in the sample understand them? Were any questions ambiguous or overly complicated?**

| | |
|---|---|
| Yes | |
| No | |
| N/A | |

Unknown/Unable to Code [X]

Piloting

**6. Are details given about the piloting undertaken?**

| | |
|---|---|
| Yes | |
| No | X |
| N/A | |

Unknown/Unable to Code [ ]

**7. Was the questionnaire adequately piloted in terms of the method and means of administration, on people who were representative of the study population?**

| | |
|---|---|
| Yes | |
| No | X |
| N/A | |

Unknown/Unable to Code [ ]

Sampling

**8. Was the sampling frame for the definitive study sufficiently large and representative?**

| | |
|---|---|
| Yes | X |
| No | |
| N/A | |

Unknown/Unable to Code ☐

Distribution, administration and response

**9. Was the method of distribution and administration reported?**

| | |
|---|---|
| Yes | X |
| No | |
| N/A | |

Unknown/Unable to Code ☐

**10. Were the response rates reported, including details of participants who were unsuitable for the research or refused to take part?**

| | |
|---|---|
| Yes | X |
| No | |
| N/A | |

**11. Have any potential response biases been discussed?**

| | |
|---|---|
| Yes | X |
| No | |
| N/A | |

Unknown/Unable to Code ☐

Coding and Analysis

**12. What sort of analysis was carried out and was this appropriate? (e.g. correct statistical tests for quantitative answers, qualitative analysis for open-ended questions)**

| | |
|---|---|
| Yes | X |
| No | |
| N/A | |

Unknown/Unable to Code ☐

Results

**13. Were all relevant data reported?**

| | |
|---|---|
| Yes | X |
| No | |
| N/A | |

Unknown/Unable to Code ☐

**14. Are quantitative results definitive (significant), and are relevant non-significant results also reported?**

| | |
|---|---|
| Yes | X |
| No | |
| N/A | |

Unknown/Unable to Code ☐

**15. Have qualitative results been adequately interpreted (e.g. using an explicit theoretical framework), and have any quotes been properly justified and contextualised?**

| | |
|---|---|
| Yes | |
| No | |
| N/A | X |

Unknown/Unable to Code ☐

Conclusions and recommendations

**16. Have the researchers drawn an appropriate link between the data and their conclusions?**

| | |
|---|---|
| Yes | X |
| No | |
| N/A | |

Unknown/Unable to Code ☐

**17. Have the findings been placed within the wider body of knowledge in the field (e.g. via a comprehensive literature review), and are any recommendations justified?**

| | |
|---|---|
| Yes | X |
| No | |
| N/A | |

Unknown/Unable to Code ☐

Average WoE A across the judgement areas
Sum of X/N = 12/17=71%
X = total quality ratings across judgement areas
N = Number of judgement areas

| WoE A Score | Criteria |
|---|---|
| High (3) | Average score of 0.67-1 across the judgement areas |
| Medium (2) | Average score of 0.34-0.66 across the judgement areas |
| Low (1) | Average score of 0-0.33 across the judgement areas |

Overall rating of evidence:

| 3 | 2 | 1 | 0 |
|---|---|---|---|
| X | | | |

Summary of Weight of Evidence A Scoring and Weighting

WoE A Weighting

| Study | High | Medium | Low |
|---|---|---|---|
| Alsubie 2017) | | 2 (53%) | |
| Debes (2021) | | | 1 (24%) |
| Karasavidou & Alexopoulos (2019) | | 2 (53%) | |
| Le Brocque et al., (2017) | | 2 (35%) | |
| McBrayer et al., (2020) | 3 (71%) | | |
| Olinger Steeves et al., (2017) | | 2 (59%) | |

| WoE A Score | Criteria |
|---|---|
| High (3) | Average score of 0.67-1 across the judgement areas |
| Medium (2) | Average score of 0.34-0.66 across the judgement areas |
| Low (1) | Average score of 0-0.33 across the judgement areas |

**Appendix F: Weight of Evidence B (WoE B)**

WoE B is a score assigned to a study based on the appropriateness of the study design and its overall relevance to the review question (Gough, 2007). Scores were assigned based on Petticrew & Roberts's (2003) typology of evidence criteria. This review was concerned with participants' perceptions of the effectiveness of CI prevention and interventions. a's (2003), assert that qualitative studies and survey studies are the most appropriate design for research questions about "satisfaction." Therefore, studies which employed either of these methodologies received a high WoE B rating. Study designs considered less appropriate included case-control studies and cohort studies. Designs considered the least appropriate to answering the review question included e.g. quasi-experimental designs or randomised controlled trials

*WoE B Criteria and Weighting*

| WoE B Weighting | Description |
|---|---|
| 3 (High) | The study uses a survey or interview to address the research question or hypothesis. |
| 2 (Medium) | The study uses a case-control or cohort design to address the research question or hypothesis. |
| 1 (Low) | The study uses a randomised control trial, non-experimental design, or quasi-experimental design to address the research question or hypothesis. |

*WoE B Scoring*

| Study | High | Medium | Low |
|---|---|---|---|
| Alsubie (2017) | 3 | | |
| Debes (2021) | 3 | | |
| Karasavidou & Alexopoulos (2019) | 3 | | |
| Le Brocque et al. (2017) | 3 | | |
| McBrayer et al. (2020) | 3 | | |
| Olinger Steeves et al. (2017) | 3 | | |

**Appendix G WoE C Criteria and Scoring**

WoE C is concerned with the relevance of the focus of the study to the review question (Gough, 2007). This review is concerned with the ways in which other countries evaluate the impact of CI interventions on school communities. Weightings were assigned to studies based on the degree to which they helped to answer this question. The following table outlines WoE C criteria and scoring.

*WoE C Criteria, Weighting and Rationale*

| WoE C Weighting | WoE C Weighting | Rationale |
|---|---|---|
| Participants' perspectives on both CI preparedness and the effectiveness of CI preparation strategies and CI interventions | 3. Information is provided on participants' perspectives of both CI preparedness and the perceived effectiveness of CI preparation strategies and CI interventions<br>2, Some information is provided on participants' perspectives of either CI preparedness or the perceived effectiveness of CI preparation strategies or CI interventions<br>1. Little to no information is provided on participants' perspectives of either CI preparedness or the perceived effectiveness of CI preparation strategies or CI interventions | Where an intervention is construed to be functional and effective, it is more likely to be implemented (Gutkin & Curtis, 1999). Participants' perceptions of the strengths and limitations of strategies for CI preparation or interventions may shed light on what works on a practical level |
| Participants' perspectives on how CI preparedness and CI interventions could be improved | 3. Information is provided in relation to participants' views of how CI preparedness and CI interventions might be improved.<br>2. Some information is provided in relation to participants' views of how CI preparedness or CI interventions might be improved.<br>1. Little to no information is provided in relation to participants' views of how CI preparedness or CI interventions might be improved. | Participants' perceptions of how CI preparedness and CI interventions might be improved may provide helpful insight into how schools can concentrate their efforts to help improve school personnel perceptions of CI preparedness as well as strengthen their capacity to respond to CIs effectively. |

| WoE C Weighting | WoE C Weighting | Rationale |
|---|---|---|
| Country of study | 3. Studies conducted in Ireland or the United Kingdom<br>2. Studies conducted in OECD member countries<br>1. Studies conducted in non-OECD member countries | This review is concerned with the generalisability of findings to an Irish context. |
| Percentage of school personnel | 3. Studies with a higher percentage of school personnel than that which would be found within an Irish school e.g., teachers, principals, school counsellors<br>2. Studies with a lower percentage of school personnel similar to that which would be found within an Irish school<br>1. Studies with a much lower percentage of school personnel similar to that which would be found within an Irish school e.g., a study which predominantly included mental health professionals. | The focus of the review is on exploring school personnel perspectives on the effectiveness of CI interventions. |

## Appendix H: Overall WoE C Ratings

*WoE C Ratings*

| Study | Participants' perspectives on the strengths and limitations of the CI preparation strategy or CI intervention | Participants' perspectives on how CI preparedness and CI interventions could be improved | Country of study | Percentage of school personnel | Overall WoE C rating |
|---|---|---|---|---|---|
| Alsubie (2017) | 2 | 2 | 1 | 2 | 1.75 |
| Debes (2021) | 1 | 1 | 1 | 3 | 1.5 |
| Karasavidou & Alexopoulos (2019) | 2 | 2 | 2 | 3 | 2.25 |
| Le Brocque et al.(2017) | 2 | 2 | 2 | 1 | 1.75 |
| McBrayer et al. (2020) | 2 | 1 | 2 | 2 | 1.75 |
| Olinger Steeves et al.(2017) | 2 | 2 | 2 | 3 | 2.25 |

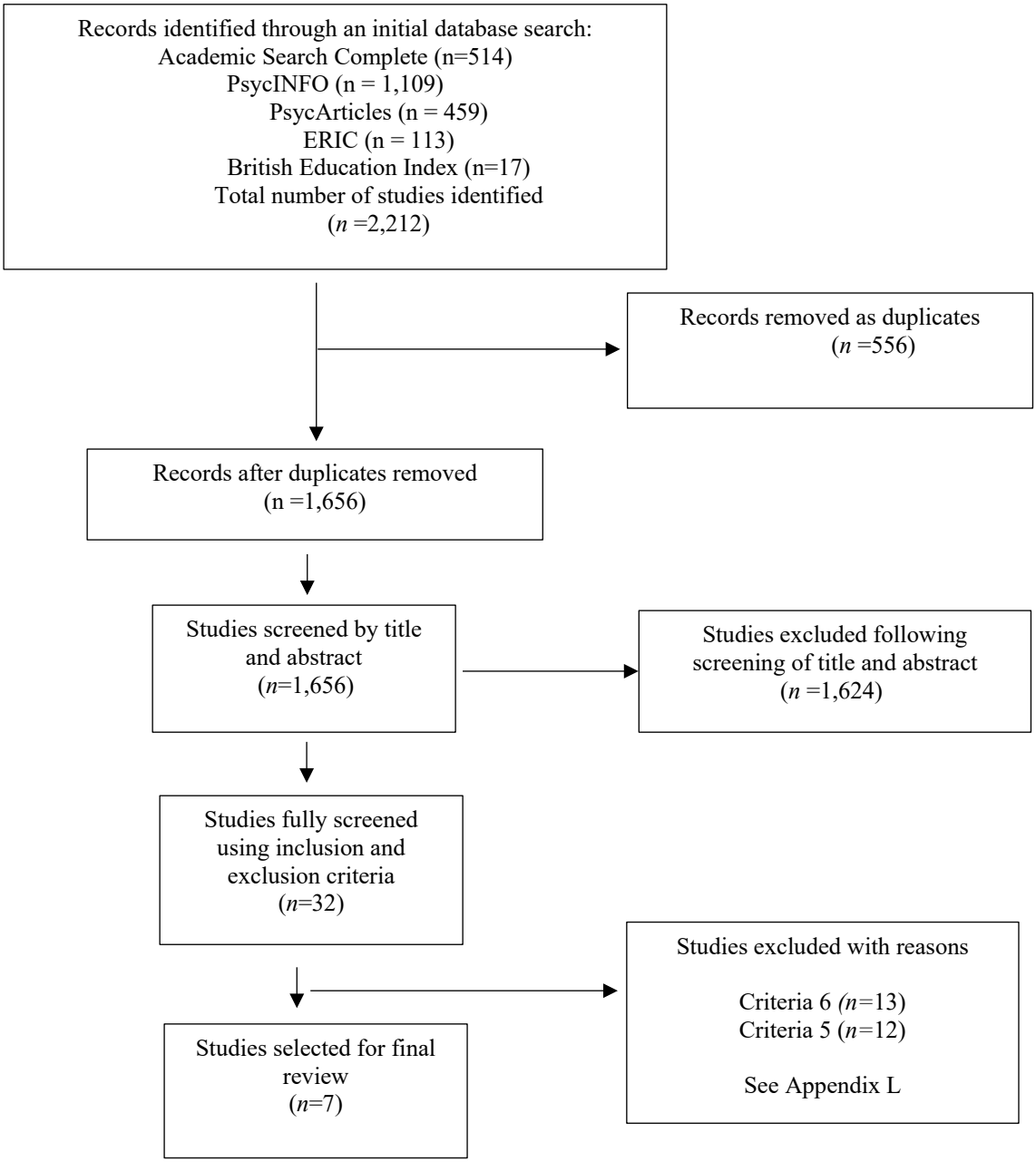
Note 1.5 or less = low, 1.51-2.50 = medium, 2.51-3 = high

## Appendix I: Overview of Search Strategy

*Database Searches*

| Databases | Search Terms |
|---|---|
| Academic Search Complete, British Education Index, ERIC, APA PsycArticles, APA PsycInfo | "crisis intervention or critical intervention" AND "school" |

***Flow Chart of Screening and Selection Process***



## Appendix J: Inclusion and Exclusion Criteria with Rationale

*Inclusion and Exclusion Criteria with Rationale*

| | Factor | Inclusion criteria | Exclusion criteria | Rationale |
|---|---|---|---|---|
| 1. | Publication category | Peer-reviewed journal | Literature that has been retrieved in a non-peer-reviewed journal | To ensure quality and methodological rigour |
| 2. | Publication date | Study must have been published between January 2000-March 2022 | Any study published before January 2012 | To ensure studies are relevant and up to date |
| 3. | Language | English only | Any other language | The use of a transcription service was not feasible given the time constraints of this study |
| 4. | Participants | School personnel including mainstream and/or special education teachers and school counsellors, school social workers, principals, classroom aides, school psychologists or students) | Persons outside the school community e.g., law enforcement, emergency medical personnel etc. | To examine the perspectives of the aforementioned specific population cohorts |
| 5. | Focus of study | Explores perspectives of CIs interventions implemented post-CI within an educational setting | Any intervention which is not directly related to a CI e.g. one which targets mental health/self-harm | To examine the perspectives of CI intervention strategies within a school context |
| 6. | Data | The study provides primary, empirical data | The study does not provide empirical data (e.g. reviews, commentaries) | Empirical data allows the reviewer to investigate the CI approaches being used. |

## Appendix K: Articles Selected for Inclusion

*Articles Selected for Inclusion*

| No. | Reference |
|---|---|
| 1. | Adamson, A. D., & Peacock, G. G. (2007). Crisis response in the public schools: A survey of school psychologists' experiences and perceptions. *Psychology in the Schools*, *44*(8), 749-764. |
| 2. | Barron, I. G., Abdallah, G., & Smith, P. (2013). Randomized control trial of a CBT trauma recovery program in Palestinian schools. *Journal of Loss and Trauma*, *18*(4), 306-321. |
| 3. | Baum, N. L., Rotter, B., Reidler, E., & Brom, D. (2009). Building resilience in schools in the wake of Hurricane Katrina. *Journal of Child & Adolescent Trauma*, *2*(1), 62-70 |
| 4. | Crepeau-Hobson, F., & Summers, L. L. (2011). The crisis response to a school-based hostage event: A case study. *Journal of School Violence*, *10*(3), 281-298. |
| 5. | Morrison, J. Q. (2007a). Perceptions of teachers and staff regarding the impact of the critical incident stress management (CISM) model for school-based crisis intervention. *Journal of School Violence*, *6*(1), 101-120. |
| 6. | Morrison, J. Q. (2007b). Social validity of the critical incident stress management model for school-based crisis intervention. *Psychology in the Schools*, *44*(8), 765-777. |
| 7. | Nickerson, A. B., & Zhe, E. J. (2004). Crisis prevention and intervention: A survey of school psychologists. *Psychology in the Schools*, *41*(7), 777-788. |

**Appendix L: Excluded Studies and Rational for Exclusion**

*Excluded Articles and Rationale for Exclusion*

| Excluded articles | Exclusion Criteria |
|---|---|
| 1. Knox, K. S., & Roberts, A. R. (2005). Crisis intervention and crisis team models in schools. *Children & Schools, 27*(2), 93-100 | Criteria 6 |
| 2. Pierce, D. (2016). Managing a crisis. Community College Journal, 86(6), 18 | Criteria 6 |
| 3. Nickerson, A. B., Brock, S. E., & Reeves, M. A. (2006). School crisis teams within an incident command system. *The California School Psychologist*, *11*(1), 63-72. | Criteria 6 |
| 4. Brown, C. H. (2020). School counselors' response to school shootings: Framework of recommendations. *Journal of Educational Research and Practice*, *10*(1), 18. | Criteria 6 |
| 5. Ozkayran, S. E., Yetis Abali, A., & Abali, A. (2020). The Opinions of Teachers on Crisis Management in Guidance Services. *Educational Process: International Journal*, *9*(4), 205-220. | Criteria 5 |
| 6. Wei, Y., Szumilas, M., & Kutcher, S. (2010). Effectiveness on mental health of psychological debriefing for crisis intervention in schools. *Educational Psychology Review*, *22*(3), 339-347. | Criteria 6 |

| Excluded articles | Exclusion Criteria |
|---|---|
| 7. Nickerson, A. B., Serwacki, M. L., Brock, S. E., Savage, T. A., Woitaszewski, S. A., & Louvar Reeves, M. A. (2014). Program evaluation of the PREP a RE school crisis prevention and intervention training curriculum. *Psychology in the Schools*, *51*(5), 466-479. | Criteria 5 |
| 8. Allen, M., & Ashbaker, B. Y. (2004). Strengthening schools: Involving paraprofessionals in crisis prevention and intervention. *Intervention in School and Clinic*, *39*(3), 139-146. | Criteria 6 |
| 9. Crepeau-Hobson, F., Sievering, K. S., Armstrong, C., & Stonis, J. (2012). A coordinated mental health crisis response: Lessons learned from three Colorado school shootings. *Journal of School Violence*, *11*(3), 207-225. | Criteria 5 |
| 10. Jaksec, C. M., Dedrick, R. F., & Weinberg, R. B. (2000). Classroom teachers' ratings of the acceptability of in-class crisis intervention services. *Traumatology*, *6*(1), 9-23. | Criteria 5 |
| 11. Gainey, B. S. (2010). Crisis management in public school districts. *Organization Development Journal*, *28*(1), 89. | Criteria 6 |
| 12. Wolmer, L., Hamiel, D., Barchas, J. D., Slone, M., & Laor, N. (2011). Teacher-delivered resilience-focused intervention in schools with traumatized children following the second Lebanon war. *Journal of traumatic stress*, *24*(3), 309-316. | Criteria 5 |

| Excluded articles | Exclusion Criteria |
|---|---|
| 13. Szumilas, M., Wei, Y., & Kutcher, S. (2010). Psychological debriefing in schools. *Cmaj*, *182*(9), 883-884. | Criteria 6 |
| 14. Meilman, P. W., & Hall, T. M. (2006). Aftermath of tragic events: The development and use of community support meetings on a university campus. *Journal of American College Health*, *54*(6), 382-384. | Criteria 6 |
| 15. DiLeo, P., Rowe, M., Bugella, B., Siembab, L., Siemianowski, J., Black, J., & Styron, T. (2018). The 2012 Sandy Hook Elementary School shooting: Connecticut's department of mental health crisis response. *Journal of school violence*, *17*(4), 443-450. | Criteria 6 |
| 16. Kirk, A. B., & Madden, L. L. (2003). Trauma-related critical incident debriefing for adolescents. *Child and Adolescent Social Work Journal*, *20*(2), 123-134. | Criteria 6 |
| 17. Dwyer, K. P., Osher, D., Maughan, E. D., Tuck, C., & Patrick, K. (2015). Team crisis: School psychologists and nurses working together. *Psychology in the Schools*, *52*(7), 702-713. | Criteria 6 |
| 18. Morris, C. A. W., & Minton, C. A. B. (2012). Crisis in the curriculum? New counsellors' crisis preparation, experiences, and self-efficacy. *Counselor Education and Supervision*, *51*(4), 256-269 | Criteria 5 |

| Excluded articles | Exclusion Criteria |
|---|---|
| 19. Westefeld, J. S., Jenks Kettmann, J. D., Lovmo, C., & Hey, C. (2007). High school suicide: Knowledge and opinions of teachers. *Journal of Loss and Trauma*, *12*(1), 33-44. | Criteria 6 |
| 20. O'Neill, J. C., Marraccini, M. E., Bledsoe, S. E., Knotek, S. E., & Tabori, A. V. (2020). Suicide postvention practices in schools: School psychologists' experiences, training, and knowledge. *School psychology*, *35*(1), 61. | Criteria 5 |
| 21. Allen, M., Jerome, A., White, A., Marston, S., Lamb, S., Pope, D., & Rawlins, C. (2002). The preparation of school psychologists for crisis intervention. *Psychology in the Schools*, *39*(4), 427-439 | Criteria 5 |
| 22. Murtonen, K., Suomalainen, L., Haravuori, H., & Marttunen, M. (2012). Adolescents' experiences of psychosocial support after traumatisation in a school shooting. *Child and Adolescent Mental Health*, *17*(1), 23-30. | Criteria 5 |
| 23. Brock, S. E., Nickerson, A. B., Reeves, M. A., Savage, T. A., & Woitaszewski, S. A. (2011). Development, evaluation, and future directions of the PREP a RE school crisis prevention and intervention training curriculum. *Journal of School Violence*, *10*(1), 34-52. | Criteria 5 |
| 24. Astor, R. A., Pitner, R. O., Meyer, H. A., & Vargas, L. A. (2000). The most violent event at school: A ripple in the pond. *Children & Schools*, *22*(4), 199-216. | Criteria 5 |
| 25. Gelkopf, M., & Berger, R. (2009). A school-based, teacher- | Criteria 5 |

| Excluded articles | Exclusion Criteria |
| --- | --- |
| mediated prevention program (ERASE-Stress) for reducing terror-related traumatic reactions in Israeli youth: A quasi-randomized controlled trial. *Journal of Child Psychology and Psychiatry*, *50*(8), 962-971 | |

## Appendix M: Mapping the Field (Demographics)

*Mapping the Studies: Participant Demographics*

| Authors | Objective(s) | Participants | Job Role | Location |
|---|---|---|---|---|
| Adamson & Peacock, (2007). | To examine: specific details of schools CI plans/teams, schools use of specific crisis intervention techniques, school psychologists experience of CIs and explore the perceptions of school psychologists of how schools can improve their response to future CIs | 228 Participants<br><br>Female (*n*=138).<br>Males (*n*=90)<br><br>Ages: 26-78 years | School psychologists | United States of America (36 states represented, exact geographical locations not specified) |
| Barron et al., (2013). | To assess the efficacy of the Teaching Recovery Techniques (TRT) trauma recovery program in reducing PTSD and other symptoms of trauma among children who are experiencing ongoing violence | 140 students<br>(intervention group, *n*=90)<br>(wait-list, *n*=50) | N/A | Nablus, Palestine |
| Baum et al., (2009) | To assess the efficacy of the Building Resilience Project (BRP), a teacher-based intervention in improving the perceived capacity of teachers to cope with their stressors and their students' stress following a traumatic incident | 21 participants<br><br>Ages not specified<br><br>Gender not specified | 21 teachers | Biloxi, Mississippi, United States of America |

| Authors | Objective(s) | Participants | Job Role | Location |
|---|---|---|---|---|
| Crepeau-Hobson and Summers (2011). | To explore the experiences of a CI response team that provided CI support to a public high school following a shooting and hostage situation. | 6 participants | 6 School counsellors | A small town (exact location not specified) in the United States of America |
| Morrison (2007a) | To examine the effectiveness of the CISM Model for school-based crisis intervention as perceived by principals, teachers and school staff. | 140 participants<br><br>Ages not specified<br><br>Gender not specified | Principals, teachers and other staff members | Midwest of United states of America (exact location not specified) |
| Morrison (2007b) | To examine the social validity of the CISM model (Mitchell, 1983), from the perspective of school psychologists and social workers who have received training in the application of the model | 28 participants<br><br>Female (*n*=22), Males (*n*=6)<br><br>Ages not specified | School psychologists: 18; school social workers: 10) | Midwest United states of America (exact location not specified) |
| Nickerson & Zhe (2004). | To examine the types of CIs with which school psychologists have experience, school psychologists' use and perceived effectiveness of CI prevention and intervention strategies, school psychologists' role in developing, implementing and evaluating such interventions, and school psychologists' perceptions of how CI prevention and intervention might be improved | 197 participants<br><br>Ages not specified | School psychologists | United States of America (Northeast, Southeast, North Central. West Central and West) |

**Appendix N: Mapping the Field (Design and Outcomes)**

*Mapping the studies: research design, measures applied, validity and reliability, primary outcomes*

| Study authors | Study design | Measures applied | Validity and Reliability | Primary outcomes |
|---|---|---|---|---|
| Adamson & Peacock, (2007). | A mixed methods design using surveys which were mailed to participants | A survey developed for use in this study | The survey was developed based on existing theoretical and empirical information in the field. The preliminary version was reviewed by faculty members and graduate psychology students who provided feedback about the content. Once feedback from this review was incorporated into the study the revised survey was piloted with 18 individuals. | When asked to evaluate how well their school(s)/district(s) handled crises, school psychologists described their schools as being very good to superb in their handling of crisis events (56.4%, *n*= 125), fair (21.2%, *n*=47), and not good at all (1.4%, *n*=3)<br><br>The most frequently employed form of support provided to students by school staff and the CI team immediately after a CI was PFA, which was provided by 84% of participants. This was followed by contacting parents (64%) and making contact with community emergency services (52.4%). In the days and weeks after the CI, 49.1% of participants reported providing generic psychological debriefing and 12.3% of participants provided CISD to individuals impacted by the CI. Recipients of CISD included school staff (40.6%), students (30.7%) and parents (13.2%).<br><br>To improve their response to crises school psychologists suggested that their schools could consider implementing frequent ongoing training and regular enactment of crisis plans. The researchers also reported that some respondents |

| Study authors | Study design | Measures applied | Validity and Reliability | Primary outcomes |
|---|---|---|---|---|
| | | | | described their administrators as lacking in leadership for crisis preparedness and response. |
| Barron et al., (2013) | Randomized controlled trial<br><br>Pre-post intervention questionnaires<br><br>Focus group interview | The Children's Revised Impact of Events Scale (CRIES-13; Smith et al., 2003), the Depression Self-rating Scale for Children (DSRS; Birleson, 1981), Traumatic Grief Inventory for Children (TGIC; Dyregrov, 2001) the impact on school performance scale (ISPS, Yule & Dyregrov, 2005) the Strength and Difficulties Questionnaire (Goodman, 1997) and the Exposure to War Stressors Questionnaire (EWSQ; Smith et al., 2002) | The reliability of the battery of translated measures was mostly high, with Cronbach alpha coefficients as follows: CRIES-13 (.93), EWSQ (.94), TGIC (.91), ISPS (.88), and SDQS (.82). The alpha coefficient for the DSRS was .64. The SDQT and SDQP had low alpha coefficients of .19 and .46 and therefore they were excluded from any further analyses.<br><br>In terms of validity questionnaires and focus group data were translated into Arabic by one experienced Palestinian interpreter and then blind back-translated (Bracken & Barona, 1991) into English by another interpreter<br><br>Participants were blindly assigned to either an intervention or wait-list control group | In terms of the perceived effectiveness of the program, students reported that they valued feeling included and appreciated the opportunity to share their respective experiences. Prior to the intervention students indicated that they experienced fear and anxiety; however, these feelings stabilised throughout the intervention and students reported feeling hopeful for the future.<br><br>In terms of the intervention outcomes, from pre-post-test, the TRT program led to nearly a 50% reduction in students' likelihood of suffering from PTSD, a significant reduction in student depression (84.3% to 25.3%), a substantial reduction in traumatic grief and improved student perception of learning capacity |

| Study authors | Study design | Measures applied | Validity and Reliability | Primary outcomes |
|---|---|---|---|---|
| Baum et al., (2009) | Quantitative<br><br>Surveys were administered at post-test and 6 months follow-up following a teacher training program | A survey developed for use in this study | No information was provided in relation to the piloting or the development of the questionnaire. No information was provided in relation to how the survey data was analysed. | At post-test, on a scale of 1–10, a mean of 8.95 was reported when participants were asked how much they learned about trauma, and a mean of 9.14 when asked how much the training contributed to participants' perceived confidence in implementing resilience-building tools in the classroom<br><br>At 6 month follow-up, participants were asked to rate to what extent their work and perceived coping skills had improved after the training on a scale of one to ten.<br>The most gains were reported in teachers' perceived ability to interact with their students (7.06), to respond with empathy to students (7.82), and to speak with students about difficult topics in the classroom (7.35). Participants reported improvements in their understanding of resilience and awareness of typical trauma responses. Participants also reported improved confidence when dealing with students' feelings and mental health concerns (7.29).<br>When asked about the perceived utility of the workshop the two most useful skills reported were developing self-awareness (100% reported gains) and learning coping and stress management skills (94%). Other skills that participants found helpful were working on expressing feelings and developing empathy (81%), developing |

| Study authors | Study design | Measures applied | Validity and Reliability | Primary outcomes |
|---|---|---|---|---|
| | | | | confidence to speak about difficult issues in class (80%), and learning self-care tools (71%). |
| Crepeau-Hobson and Summers (2011). | Qualitative Case study Semi-structured interview | A semi-structured interview which was informed by CI literature e.g., (Brock et al., 2009; 2001) | To establish adequacy, data was collected through a host of sources to justify the themes identified. The researchers examined contrary information presented to establish the credibility of the account for the audience throughout the data analysis process.<br><br>Triangulation, member checks, peer examination, and submersion in the research situation were incorporated as part of the data analysis process | General themes across school responders which were described as important to the CI response included; familiarity with the school system, the need for prior training in crisis response, the need to address the needs of all those impacted including the adults, the importance of seeing the scene or site of the incident, need for flexibility in the role of the responder, need for follow-up and long-term intervention for those impacted, need for evaluation of the response, recognition of turf issues with other responders, recognition of the personal impact of responding, need for self-care and social support, including opportunities to debrief |
| Morrison (2007a) | Mixed methods<br><br>A cohort study using surveys completed at baseline and following the intervention of the CISM model | 'Evaluation of Crisis Intervention Services Questionnaire,' a survey developed for use in this study | This survey was based on a similar instrument used to measure the effectiveness of crisis intervention efforts (Poland, 1995). No psychometric properties for this instrument were reported and no information was provided in relation to pilot testing, expert review, or reliability. | The implementation of the CISM Model was reported to impact school personnel ratings of the effectiveness of crisis intervention services to varying degrees in several areas.<br><br>Relative to baseline levels, school personnel reported significantly high ratings of perceptions of the support provided by crisis intervention providers (CIP) in relation to informing students about the crisis and meeting with school staff regarding the CI. |

| Study authors | Study design | Measures applied | Validity and Reliability | Primary outcomes |
|---|---|---|---|---|
| | | | | A medium effect size was reported across staff perceptions in relation to whether CIP supported the school in informing parents about the crisis, whether on-site materials were provided by the CIP or whether the CIP assisted the school in developing a school-based action plan to respond to the CI.<br><br>Little to no effect size was found across school personnel perceptions of whether the support provided to teachers in dealing with the CI or the individual or group counselling offered to students helped students to deal with the CI. In addition, the CISM model was found to have little to no effect on school personnel perceptions of the degree to which follow-up services were provided to students and staff. |
| Morrison (2007b) | Qualitative<br><br>A single group design using face-to-face semi-structured interviews | Participants' perceptions of the acceptability of the CISM model were measured using a semi-structured interview comprised of open-ended and closed questions). | No information was provided in relation to the piloting of the questionnaire or the relationship of the interviewer to the interviewees. The transcripts were separately reviewed and coded by three individual reviewers however exact inter-reliability scores were not provided. | Participants (85.7%, *n*=24) reported positive perceptions of the goal of the CISD and CISM model.<br><br>Overall, several themes regarding the perceptions of the acceptability of the CISM procedures were identified from participant responses.<br><br>Positive perceptions expressed by school psychologists and social workers who attended CISM training included the value of having a structured framework for crisis intervention |

| Study authors | Study design | Measures applied | Validity and Reliability | Primary outcomes |
|---|---|---|---|---|
| | | | | service delivery and increased knowledge about crisis intervention delivery. Participants also expressed the view that CISM resulted in socially significant outcomes for children and young people following a CI, including the identification of students in need of onward referral and mobilisation of school resources to support students in need<br><br>Negative perceptions included the suitability of the CISM model for school-aged populations along with the perception that the CISM model would be more appropriate for adults in first responder professions. Concerns were also raised in relation to the capacity of the CISM model to meet the needs of children and young people from different cultural backgrounds.<br>Some participants articulated the potential of the CISM provider to inadvertently cause harm when delivering the CISM model to students if they were not appropriately trained or were overly emotional during a crisis. |
| Nickerson & Zhe (2004). | A quantitative design using surveys which were mailed to participants | 'School psychologists' involvement in crisis prevention and intervention' is a survey created | The survey was developed based on existing theoretical and empirical information in the field. Six experts reviewed a preliminary version of the study and provided feedback about the content. Once these adaptations | The most effective crisis prevention and preparation strategies as perceived by school psychologists were: The crisis response team, anger management/social skills programs, police resource officers, crisis plans, crisis drills, peer mediation, and violence prevention programs. The |

| Study authors | Study design | Measures applied | Validity and Reliability | Primary outcomes |
|---|---|---|---|---|
| | | for use in this study. | were made, the survey was pretested on 15 participants to assess issues around the length and wording of questions. The survey was revised once again, and this feedback was incorporated. Finally, the survey was pilot-tested once more with 21 school psychologists before its circulation. No information was provided in relation to reliability. | least effective strategies included the use of mental detectors.<br><br>Crisis intervention strategies perceived to be the most effective included providing teachers with information regarding the onward referral of students and providing general information about the crisis, reinstating routines, helping students to process the event, facilitating groups to process the event, triaging, providing psychological first aid and individual counselling, helping families secure resources, debriefing, referring for mental health services.<br><br>Strategies perceived to be the least effective in crisis intervention included: engaging students in activities to draw their attention away from the event, hosting memorials and facilitating parent support groups.<br><br>Perceived barriers to involvement in crisis prevention and intervention activities were lack of time and not being in the same school every day.<br><br>Perceived resources needed to inform crisis prevention and intervention work included local training, on-site consultation., and crisis books/manuals. Respondents also reported that empirical studies were needed to guide this work. |

**Appendix O: Overview of adaptations made to Beeke's (2013; 2011) questionnaire**

While Beeke (2013; 2011) explored the views of educational psychologists on their response to CIs this study explored the perceptions of school personnel of the response provided by school psychological services and other services to CIs.

Demographic information sought in this study included information regarding participants' professional roles, school setting, type of school (e.g., primary, post-primary or special), and participants' role within the school CIMT. Beeke (2013; 2011), contrastingly, asked questions pertaining to EP training, number of years in practice and role within the CI response.

In terms of CI policy, Beeke (2013; 2011), explored the psychological models and theories underpinning the policy, participant familiarity with the policy and the accessibility of the policy to participants. Participants were also asked if they consulted the policy document when responding to a CI and to indicate how helpful they found the policy guidance. Participants in this study were asked questions pertaining to whether the school had a CI policy in place and the accessibility of the policy to staff.

Participants in the study by Beeke (2013; 2011), were asked to indicate to what extent their professional training prepared them to respond to a CI and to what extent they felt competent to respond to CIs. They were also asked when they had last received training in responding to CIs. Finally, participants were asked to indicate their most recent CI training provider and the psychological models and approaches which best describe their most recent training. In this study, participants were asked to report whether they had attended training, the medium through which training was delivered and how long ago they received training from NEPS. They were also asked to indicate to what extent the CI training provided by NEPS prepared their school to respond to a CI. Finally, participants were also asked to rate

their opinion of the effectiveness of each training component in helping their school respond to a CI.

As regards the CI response provided following a CI, participants in the study by Beeke (2013; 2011), were asked to indicate how many times they had responded to specific CIs, the types of CIs they had responded to, and to describe their most recent response to a CI. They were also asked to indicate the interventions that they had offered to families, pupils and school staff who were either directly or indirectly involved in the CI and to rate their perceived effectiveness. In this study, participants were asked to report the type of CI most recently experienced by their school and whether the CI s) had a high media profile. They were asked to indicate to what extent they felt the CI response provided by NEPS following the CI had met their needs. Participants were also asked to indicate how helpful they found each of the CI interventions offered by NEPS and to indicate how helpful they found each of the CI interventions offered by NEPS in facilitating the support of students following the CI.

In terms of the CI response provided by other services Beeke (2013; 2011), asked participants to indicate what other services were involved in the CI response provided to the school. Participants were also asked to report how successful they felt this intervention was in providing support to the school community following the CI. In this study, participants were asked to indicate what other services provided support to their school following the CI. They also were asked to indicate to what extent they thought the CI response offered by NEPS and other services was well coordinated. Finally, participants were asked to indicate to what extent they felt the C response provided by other services following the CI had met their needs.

## Appendix P: Braun and Clarke's (2006) Six-Phase Approach to Thematic Analysis

*Braun and Clarke's (2006) Six Phase Approach to Thematic Analysis as compared to the current research*

| Phase and Description | Process |
|---|---|
| **Phase 1: Data familiarisation** | • Responses to open-ended questions were read several times and thoughts were noted. |
| **Phase 2: Generating initial codes** | • Responses were read across each open-ended questionnaire item and relevant data was coded by hand.<br>• Transcripts were then re-read and codes were given more accuracy.<br>• Data could be given more than one code. |
| **Phase 3: Searching for Themes** | • Codes were collated into groups of similar themes using Microsoft Word.<br>• Codes and Themes were categorised according to their Research Questions.<br>• Some initial codes went to form main themes, whereas others formed sub-themes, and others were discarded. |
| **Phase 4: Reviewing Themes** | • Collating codes into potential themes, gathering all data relevant to each potential theme.<br>• Merged, moved or deleted subthemes where necessary.<br>• Created an initial thematic map. |
| **Phase 5: Defining and naming themes** | • All theme titles were reviewed, refined and defined to ensure that they best represented the data, capturing something meaningful about the data.<br>• All subthemes were reviewed, refined and defined to ensure the best representation of the data. |
| **Phase 6: Producing the report:** | • The researcher uses extract examples that relate to the themes, research question and literature.<br>• Data extracts were selected to provide evidence of themes and subthemes generated.<br>• A thematic map was used to show links between themes and the research questions.<br>• Feedback was sought from the thesis supervisor.<br>• Production of the final report. |

## Appendix Q: Braun and Clarke's (2021) Fifteen Point Checklist for Good Thematic Analysis

*Clarke and Braun's (2021) Fifteen-Point Checklist for Good Reflexive Thematic Analysis as applied to the Current Study*

| Process | No. | Criteria | Current Study |
|---|---|---|---|
| Transcription | 1 | The data have been transcribed to an appropriate level of detail, and the transcripts have been checked against the tapes for "accuracy" | Quantitative and qualitative information generated from the questionnaire was exported from Qualtrics and checked by the researcher for accuracy. |
| Coding | 2 | Each data item has been given equal attention in the coding process | Prior to starting the coding process, each survey response was read a least three times. Following this, each item was coded at least twice. |
| | 3 | Themes have not been generated from a few vivid examples (anecdotal approach), but instead, the coding process has been thorough, inclusive, and comprehensive | Themes represent the overarching narrative of the extracts that have been grouped under different codes. |
| | 4 | All relevant extracts for each theme have been collated | See the sample in Appendix R |
| | 5 | Themes have been checked against each other and back to the original data | Yes |
| | 6 | Themes are internally coherent, consistent, and distinctive | Yes |
| Analysis | 7 | Data have been analysed- interpreted, made sense of- rather than just paraphrased or described | The qualitative analysis of open-ended questions included a two-stage hybrid approach of inductive and deductive TA |
| | 8 | Analysis and data match each other- the extracts illustrate the analytic claims | Yes |
| | 9 | Analysis tells a convincing and well-organised story about the data and topic | The study's findings are presented in relation to each research question and accordance with the AI framework. |

| | | | |
|---|---|---|---|
| | 10 | A good balance between analytical narrative and illustrative extracts is provided | Yes- examples of supporting quotations which support themes and subthemes are included throughout the write-up of results. |
| Overall | 11 | Enough time has been allocated to complete all phases of the analysis adequately, without rushing a phase or giving it a once-over-lightly | The researcher's approach to TA, which includes an overview of theoretical positioning, is described in detail. |
| Written Report | 12 | There is consistency between the outlined method and the reported analysis | Following a two-stage hybrid approach of inductive and deductive TA results are presented in relation to each distinct research question. |
| | 13 | There is consistency between the outlined method and the reported analysis | For a comparison of the current research with the Six Phase Approach to TA outlined by Braun and Clarke (2006), see Appendix P |
| | 14 | The language and concepts used in the report are consistent with the epistemological position of the analysis | The results and discussion sections of the study include the researcher's interpretation of the data. |
| | 15 | The researcher is positioned as active in the research process; themes do not just "emerge" | Yes, themes were produced by the researcher's interpretation of participants' responses to questionnaire items. |

## Appendix R: Inductive and Deductive Themes and Corresponding Appreciative Inquiry Stage

| Appreciative Inquiry stage and R | Theme | Subtheme | Code |
|---|---|---|---|
| Research Question 1:<br><br>'Dream' and 'Design'<br>What would the ideal CI Training look like and how could NEPS improve this training | Increased interaction | Opportunities for interaction during training | Role plays<br><br>More time for questions<br><br>workshop best |
| | | Shared learning | Presentations from other schools on experiences<br><br>Hearing other people's experiences<br><br>hearing real-life examples from other principals |
| Research Question 2:<br><br>'Dream' and 'Design'<br>What would the ideal CI Response from NEPS look like and what would NEPS need to do to bring about these changes | Additional support for staff | Additional guidance for teachers in relation to supporting students | More resources to support bereavement discourse<br><br>More specific information<br><br>provide info on other relevant agencies<br><br>How to refer to other agencies |
| | | Support for staff as well as students | Support for Trauma<br><br>more support for staff concerning their trauma experience |

**Appendix S: Initial email from NEPS to school principals**

**The initial email from NEPS to school principals**

Dear Principal,

I hope this finds you well and that you are looking forward to a well-deserved break over the midterm. I am contacting you to request your participation in an important piece of research for us in NEPS in the area of critical incident response.

As you may know, NEPS has been supporting schools for many years to respond to critical incidents that affect their school community. We also provide training to schools to help with critical incident preparation and planning.

In reviewing our critical incident policy and practice, we are keen to gather feedback from schools about the response provided to them by NEPS following a critical incident. To do this objectively and impartially we have collaborated with a Trainee Educational Psychologist, X, who is completing this research as part of her Doctorate in Educational and Child Psychology at Mary Immaculate College, Limerick.

Your school is being contacted because our records show that your school received a critical incident response from NEPS in the timeline period for this research; - i.e. between September 2017 and March 2020. Therefore, we would be extremely grateful if you, or another member of your critical incident team, could complete a short questionnaire (approximately 20 minutes). The link to the questionnaire and all information for participants can be found here:

https://micquality.qualtrics.com/jfe/form/SV_1Te53Zekbi4fWAK

In this link, X has outlined how all data will be gathered, processed, kept confidential, anonymous, not connected to any identifying information, and ultimately destroyed. She also details other ethical considerations.

It should also be noted that NEPS will not have access to any of the original data, but we hope to use the overall findings to inform our policy and practice in the area of critical incident response to schools in the future.

The survey will close at midnight on Monday 15th November.

Your participation in this survey is, of course, completely voluntary.

In advance, I sincerely appreciate you giving your time to support this important research for NEPS.

Yours sincerely,

…….

## Appendix T: Participant Information Sheet for Questionnaire

### Participant Information Sheet for Questionnaire

You are invited to take part in this study which will explore:

- The perceptions of school personnel of the critical incident (CI) training provided by the National Educational Psychological Service (NEPS).
- The CI response provided by NEPS, and other services.
- The coordinated response provided by NEPS and other services following a CI.

This information sheet provides an overview of my study. The reason for sharing this information is to ensure that you can give informed consent, should you agree to participate.

**Title of study:**
"The perceptions of Irish school personnel of critical incident training and critical incident response from school psychological services and other services: an appreciative inquiry."

**Who am I?**
My name is X, and I am a trainee educational psychologist attending Mary Immaculate College, Limerick. I am presently completing a study under the supervision of X and X. The current study will form part of my doctoral thesis.

**What is the purpose of the research?**
A critical incident (CI) has been defined as "any incident or sequence of events which overwhelms the normal coping mechanisms of the school," (Department of Education and Skills, 2016). The aim of this research is to explore school personnel perceptions of the current preparation for a CI (CI training) and the CI response provided by NEPS and other services following a CI. The research will also explore school personnel perceptions' of the coordinated response provided by NEPS and other services following a CI.

**What will taking part involve?**
Taking part in this study will involve completing an online questionnaire. This questionnaire will include questions about your role within the CI team, the type of CI which occurred, the CI training provided by NEPS, and the response received from NEPS and other services. It will also include questions on the coordinated CI response from NEPS and other services following the CI. This questionnaire comprises 34 questions and should take no longer than 20-25 minutes to complete.

**Why have you been invited to take part?**
You have been invited to take part in this research study as your school experienced a CI within the timeframe identified for this study, i.e. between September 2017 and May 2020. As a CI team member, you have valuable experiences and insight to offer which may be used to support the improvement of the CI training and response provided by school psychological services and other services following a CI.

**What are the potential benefits?**
The information gathered in this study may inform future CI training and improve the support provided to schools following a CI. To date, there has been a lack of research conducted exploring this area in Ireland. Gaining your perspective in this project will be extremely helpful.

**What are the possible risks?**
This research is centred around CIs which can be of a sensitive nature. The recollection of CIs may be upsetting for you and may elicit feelings of discomfort during or after the completion of the questionnaire. If you experience discomfort at any point before or during the completion of the questionnaire you are free to withdraw at any time without providing an explanation. If you feel that his request is too soon after your CI, please opt out at this point.

**What should you do if you feel adversely affected by having taken part in this study?**
If you feel you have been adversely affected by taking part in this study, there are a range of support services which you can consider contacting, such as the Employee Assistance Service (https://www.spectrum.life/eap). This service provides a range of confidential counselling services to school personnel.

**What if you do not want to take part?**
Participation is voluntary, you do not have to take part. It is important to note that your decision to participate will have no bearing on any current or future dealings your school has with NEPS.

**What happens to the information?**
The data collected will be combined with that of other participants and used to form the results section of this thesis. All information gathered will remain confidential and stored securely and safely on the researcher's password-protected computer. The computer will be stored in a locked room. While individual quotations may be used in the results section, no identifying participant or school information will appear on any findings linked to this research. A random ID number will be generated for each participant, and it is this number rather than the participant's name which will be held with their data to maintain their anonymity. In line with the Mary Immaculate College data retention policy data will be stored securely and destroyed after three years

**What happens if you should change your mind in relation to participating in the study?**
You have the right to withdraw before the completion of the online questionnaire. You can withhold data up until the survey is submitted. It will not be possible to withdraw participant data from the research after the survey has been submitted as it will be anonymised.

**What will happen to the findings of the study?**
All data gathered during this study will remain anonymous. The findings and recommendations of this study will be shared with NEPS who may use the information gathered to inform future CI training or models of response to CIs. Analysed data will be used for the findings of this thesis and may be disseminated to others in research articles or other formats.

**Thank you for taking the time to read this. I would be extremely grateful if you would consider participating in this study. If anyone in your school would like to participate in this study or you have any further queries, please feel free to email the principal investigator at the above address.**

Yours sincerely,

……

X (Trainee Educational Psychologist)

**Appendix U: Participant Consent Form**

## Participant Consent Form

**Title of Project:** "The perceptions of Irish school personnel of critical incident training and critical incident response from school psychological services and other services: an appreciative inquiry."

**Please tick the boxes and sign below to indicate your consent:**

Should you consent to participate in this study please read the statements below and if you agree to them, please tick the boxes, **AND** sign the consent form.

| | |
|---|---|
| 1. I confirm that I have read and understood the information sheet for the research outlined above and have had the opportunity to ask questions. | |
| 2. I confirm that I feel ready to discuss experiences related to the Critical Incident which was experienced by my school in this online questionnaire. | |
| 3. I understand what the project is about, how data will be collected and what the results will be used for. | |
| 4. I am aware that all information relating to my participation will be kept confidential. | |
| 5. I am aware of what I will be asked to do, and of any risks and benefits of the study. | |
| 6. I know that I can stop taking part in the study at any stage without giving any reason to the researchers. | |
| 7. I understand that the information collected in this study will be shared with the National Educational Psychological Service (NEPS) and may be used to inform future Critical Incident training and/or resources for schools and/or NEPS response to Critical Incidents. | |
| 8. I understand what will happen to the data collected and/or recordings once the study is finished. | |
| 9. I am aware that my participation in this study is entirely voluntary, and I am agreeing to participate entirely of my own volition. | |

I agree to the statements above and I consent to take part in this research study.

**Signature of research participant**
**……**
**Signature of researcher**
**……..**
**Date**
**……..**

**Appendix V: Questionnaire for Participants**

## Questionnaire for participants

### Section 1: Demographic information

*Please provide a little information about you and your role*

1. **What is your role within the school?**

- ☐ Teacher
- ☐ Guidance Counsellor
- ☐ Vice Principal
- ☐ Principal
- ☐ Other (please specify)

2. **Which of the following best describes the location of your school?**

- ☐ Rural (school in a village/small town)
- ☐ Urban (school in a large town)
- ☐ Suburban (school on the edge of a large town or city)
- ☐ Inner city (school in a large city)
- ☐ Other (please specify)

3. **Which of the following best describes your school?**

- ☐ Primary School
- ☐ Secondary School
- ☐ Special School

**4. Does your school have a Critical Incident Management team?**

- [ ] Yes
- [ ] No

**5. Are you a part of this Critical Incident Management team?**

- [ ] Yes
- [ ] No

**6. If so, what is your role within the Critical Incident Management team?**

- [ ] Team Leader
- [ ] Garda liaison
- [ ] Staff Liaison
- [ ] Student liaison
- [ ] Parent liaison
- [ ] Community/Agency Liaison
- [ ] Media Administrator
- [ ] Other (please specify)

**7. Does your school have a Critical Incident Management Policy in place?**

- [ ] Yes
- [ ] No

**8. Is the Critical Incident Management Policy readily available to you?**

- [ ] Yes
- [ ] No

## Section 2: NEPS Critical Incident Training

**9. Have you attended NEPS Critical Incident training?**

- ☐ Yes, I attended training
- ☐ No

**If you answered '<u>YES</u>' to the previous question, please continue to answer questions within this section.**
**If your answer to the previous question was '<u>NO</u>' please skip to section 3.**

**10. Was the Critical Incident training completed via:**

- ☐ An E-learning training module
- ☐ Face-to-face training

**11. When did you last receive training from NEPS in responding to Critical Incidents?**

- ☐ Within the last year
- ☐ Between 1 year and 3 years ago
- ☐ More than 3 years ago
- ☐ Other (please specify)

**12. Did you have Critical Incident training prior to the Critical Incident(s)?**

- ☐ Yes
- ☐ No

**13. Have you had Critical Incident training since the Critical Incident(s)?**

- ☐ Yes
- ☐ No

**14. Please indicate to what extent you agree with the following statement: 'The Critical Incident training NEPS provided to our school prepared us to respond to a Critical Incident?'**

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly Disagree

## Critical Incident training

**15. Please rate your opinion of the helpfulness of each training component in preparing your school to respond to a Critical Incident.**

| Intervention | Very helpful | Helpful | Neither helpful nor unhelpful | Not helpful | Not at all helpful | N/A |
|---|---|---|---|---|---|---|
| Providing information on the development of a Critical Incident Management team | | | | | | |
| Providing information on the development of a Critical Incident Management Plan | | | | | | |
| Providing information on the development of a Critical Incident Management Policy. | | | | | | |
| Providing information on how to respond to a Critical Incident. | | | | | | |

**16. What aspects of the Critical Incident training could be changed, if anything, for it to be more effective?**

**17. What would the ideal Critical Incident training look like?**

## Section 3: Critical Incident Response from NEPS

*Please provide some information about the Critical Incident response your school received from NEPS following the most recent Critical Incident(s) experienced by your school.*

**18. Which of the following best describes the most recent Critical Incident(s) experienced by your school?**

- ☐ Suspected suicide
- ☐ Suspected attempted suicide
- ☐ Road traffic accident
- ☐ Sudden death/illness
- ☐ Serious illness
- ☐ A violent death
- ☐ Other (please specify)

**19. Did your most recent Critical Incident(s) have a high media profile or involve a number of schools?**

- ☐ Yes
- ☐ No

**20. Please indicate to what extent you agree with the following statement: 'The Critical Incident response provided by NEPS following the Critical Incident met our needs.'**

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly Disagree

**21. NEPS use a variety of Critical Incident interventions to support schools depending on the type of Critical Incident which has occurred. The following lists a number of such interventions. Please rate how helpful you feel these interventions were to staff in supporting them to respond to the Critical Incident in your school.**

**Please tick the appropriate response in the space provided. If your school did not receive a specific intervention, please select N/A.**

| Intervention | Very helpful | Helpful | Neither helpful nor unhelpful | Not helpful | Not at all helpful | N/A |
|---|---|---|---|---|---|---|
| Providing support in assessing the significance of the event. | | | | | | |
| Providing support in establishing a response plan. | | | | | | |
| Providing support in mobilising school resources. | | | | | | |
| Providing support in accessing other support services. | | | | | | |
| Consulting with school staff on how best to support students. | | | | | | |
| Support in developing procedures to identify students most in need of support. | | | | | | |
| Providing support in identifying onward where onward referral was required. | | | | | | |
| Any other intervention not listed above (please specify) | | | | | | |

**22. Following a Critical Incident, the primary role of NEPS is to support the staff in their support of students. The following outlines several strategies which NEPS might provide to teachers to help them to support students. Please rate how helpful you feel these strategies were to teachers supporting students following the CI.**

**Please tick the appropriate response in the space provided. If your school did not receive a specific teacher strategy, please select N/A.**

| Teacher strategy. | Very helpful | Helpful | Neither helpful nor unhelpful | Not helpful | Not at all helpful | N/A |
|---|---|---|---|---|---|---|
| Providing teachers with information on how to support students | | | | | | |
| Providing teachers with support in planning a classroom session. | | | | | | |
| Providing teachers with information on cultural sensitivity and awareness. | | | | | | |
| Providing teachers with information on how to support students with learning difficulties. | | | | | | |
| Providing teachers with information on the stages of grief. | | | | | | |
| Providing teachers with information on grief after suicide. | | | | | | |
| Providing teachers with information on normal reactions to a CI. | | | | | | |
| Any other strategy not listed above (please specify) | | | | | | |

**23. What could NEPS have done differently, if anything, in helping you to respond to your Critical Incident?**

**24. What could NEPS do to provide the ideal Critical Incident response to schools in the future?**

**25. If there was any other aspect of NEPS' involvement in your Critical Incident that you considered to be particularly helpful (and that has not already been mentioned), please note it below:**

## Section 4: Critical Incident Response from other services

***Sometimes other services or agencies may offer assistance to schools following a Critical Incident. Such support might include direct work with children and young people, providing consultation as needed to parents, carers, staff, and the wider community, providing follow-up bereavement support, parental support etc. It might also include working with parents, carers, staff, and the wider community to identify children and families who are most in need of additional support.***

***If applicable, please provide some information about the response your school received from other services following a critical incident. If your school DID NOT receive a critical response from a service OTHER THAN NEPS, please skip to Section 5: Additional information.***

**26. Please select which of the following services (if any) provided support to your school following the Critical Incident.**

- ☐ HSE Primary Care Psychology Services
- ☐ CAMHS
- ☐ Barnardo's
- ☐ National office for suicide prevention
- ☐ Tusla
- ☐ Children and Young Peoples Services Committees (CYPSC)
- ☐ Other (please specify),

**27. What aspects of the Critical Incident response provided by OTHER SERVICES were most helpful in supporting the school following the CI?**

**28. Please indicate to what extent you agree with the following statement: 'The Critical Incident response provided by NEPS and <u>OTHER SERVICES</u> following the CI was well-coordinated.'**

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly Disagree

**29. Please indicate to what extent you agree with the following statement: 'The Critical Incident response provided by <u>OTHER SERVICES</u> following the Critical Incident met our needs.'**

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly Disagree

**30. What might the ideal Critical Incident response look like?**

**31. What could <u>OTHER SERVICES</u> have done differently, if anything, in helping you to respond to your Critical Incident?**

**32. What could <u>OTHER SERVICES</u> do differently, if anything, to help schools respond to Critical Incidents in the future?**

## Section 5: Additional Information

**33. Experiencing a Critical Incident can be very traumatic for schools. Reviewing the perceptions of school personnel of the Critical Incident response provided by school psychological services might provide insight into what is working well within the current Critical Incident response, and what might be improved upon. However, at present, there is no timeframe in the literature which illustrates at what point a school community might feel ready to discuss a Critical Incident. Having experienced a Critical Incident, when do you feel you would have been ready to review the response provided by school psychological services following the CI with a NEPS psychologist? Your response may inform NEPS in reviewing how they support schools in the longer term.**

**34. Is there anything that you would like to add in relation to this topic, that you feel has not been mentioned?**

**Appendix W: Debriefing Document**

## Debriefing Document

Thank you very much for taking the time to complete this questionnaire. As a Critical Incident team, you have valuable experiences and insight to offer which may be used to support the improvement of the Critical Incident training and response provided by school psychological services and other services following a Critical Incident.

**What are the potential benefits of this study?**
The information gathered in this study may inform future Critical Incident training and improve the support provided to schools following a Critical Incident. There has been a lack of research conducted exploring this area in Ireland and gaining your perspective on this project will be extremely helpful

**What should I do if I feel adversely affected by having taken part in this study?**
If you feel you have been adversely affected by taking part in this study, there are a range of support services which you can consider contacting, such as the Employee Assistance Service (https://www.spectrum.life/eap). This service provides a range of confidential counselling services to school personnel.

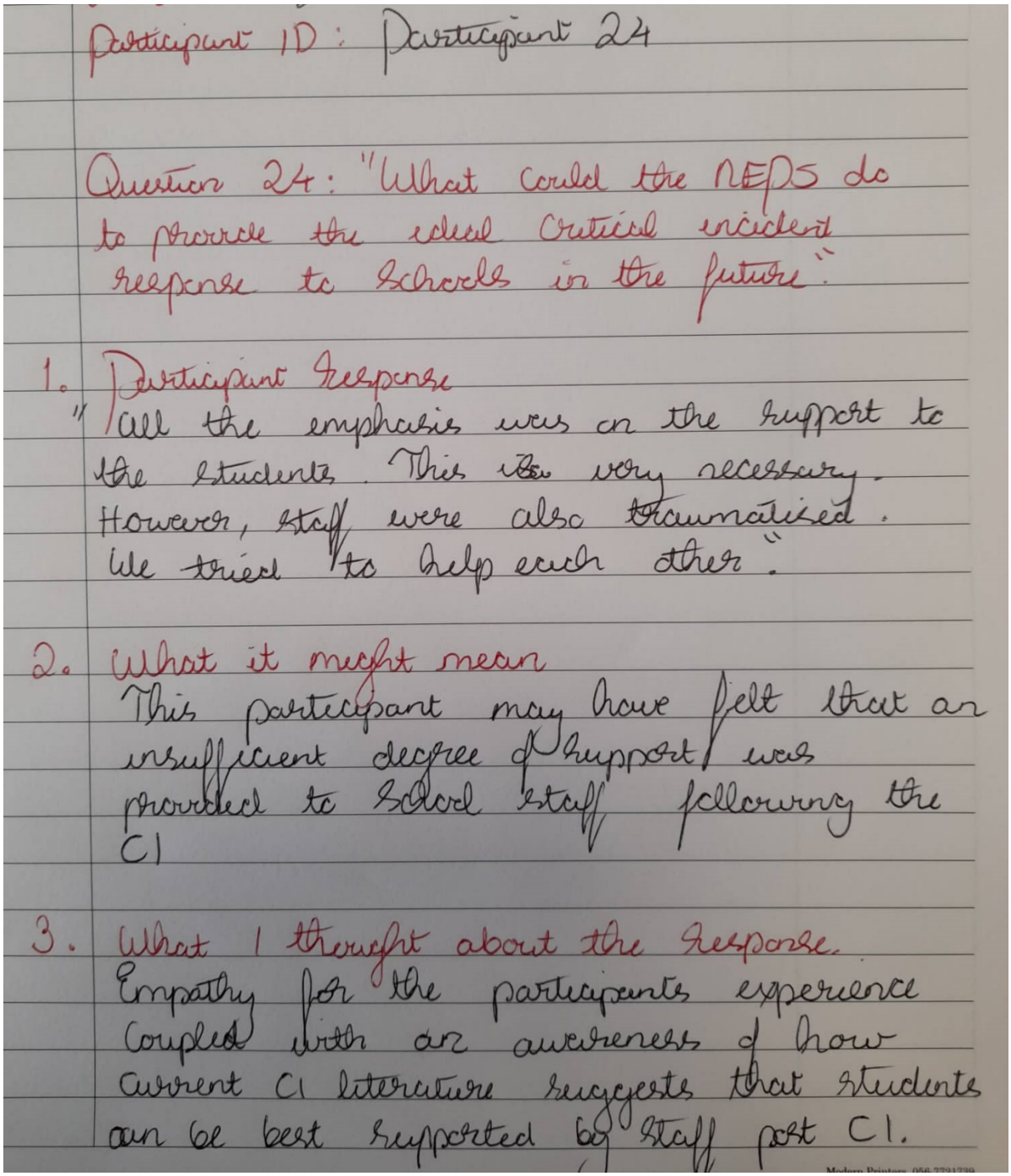
**Who can I contact if I have any questions or concerns about this study?**
If you have any questions or concerns about this study, you are free to contact the principal investigator using the following contact information.

Yours sincerely,

……

**Appendix X: Sample from Researcher's Field Notes**

**Sample from Researcher's Field Notes**



Participant ID: Participant 24

Question 24: "What could the NEPS do to provide the ideal Critical incident response to Schools in the future"

1. Participant Response

"All the emphasis was on the support to the students. This is very necessary. However, staff were also traumatised. We tried to help each other."

2. What it might mean

This participant may have felt that an insufficient degree of support was provided to School staff following the CI

3. What I thought about the Response.

Empathy for the participants experience coupled with an awareness of how current CI literature suggests that students can be best supported by staff post CI.