

Teacher mental health awareness and professional practice: An exploration of self-reported teacher understanding and practice regarding childhood trauma.

Kate Eastman

Bachelor of Health Science (Hearing and Speech) - University of Sydney

Master of Teaching (Primary) - University of Sydney

Postgraduate Certificate Educational Leadership (School Leadership) - Macquarie University

Supervisor: Dr Anne McMaugh

Macquarie University

Faculty of Human Sciences

Department of Educational Studies

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Abstract

This study explores the mental health and trauma-informed understanding, practices and professional development of primary school classroom teachers. Participants were 139 teachers who completed a mental health and trauma literacy assessment and also reported teaching experiences, professional development and implementation of practices to support children who may have experienced trauma. Significant correlations were found between teachers' mental health and trauma literacy, professional learning, and professional experience teaching children in their classes. Teacher perceptions of the effects of trauma on a child's life were assessed with an a priori framework of key themes developed from the literature. More than 100 teachers were able to identify poor behaviours such as externalising behaviours (77%), difficulties in forming relationships with peers and teachers (66%), and internalising responses (including disassociation) (58%). A similar a priori framework was established to identify trauma-informed practices. The most common practices included establishing a classroom environment that is structured and predictable (48%) and taking a student-centred individualised approach (45%). Fewer than half of teachers reported practices involving curriculum adjustments (46%), building intentional relationships with the child (39%) or engaging in the explicit teaching of social-emotional skills (37%). Half (57%) of all teachers had received formal mental health training ($M = 5.6$ hours), while fewer than half (45%) had received childhood trauma training ($M = 1.66$ hours). The implications for the development of classroom teacher trauma and mental health knowledge and practice are discussed.

Statement

I certify that the work in this thesis entitled “*Teacher mental health awareness and professional practice: An exploration of self-reported teacher understanding and practice regarding childhood trauma.*” has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree to any other university or institution other than Macquarie University.

The thesis is an original piece of research and it has been written by me.

Any help and assistance that I have received in my research work and the preparation of the thesis itself have been appropriately acknowledged.

All the information sources and literature used are indicated in the thesis.

The research presented in this thesis was approved by Macquarie University Ethics Review Committee, reference number: 5201831684469.

Kate Eastman

Student ID:

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Abbreviations

ABS - Australian Bureau of Statistics

ACARA - Australian Curriculum, Assessment and Reporting Authority

ADHD - Attention Deficit Hyperactivity Disorder

AITSL- Australian Institute for Teaching and School Leadership

ARTIC - Attitudes Related to Trauma-informed Care

COAG - Council of Australian Government

DSM-5 - Diagnostic and Statistical Manual of Mental Disorders- Fifth Edition

EMHLS - Educator Mental Health Literacy Scale

HEARTS - Healthy Environments and Response to Trauma in Schools

ICSEA - Index of Community Socio-Educational Advantage

IEP – Individual Education Plan

MHL - Mental Health Literacy

NAPLAN - National Assessment Program, Literacy and Numeracy

NSW - New South Wales

PTSD - Post Traumatic Stress Disorder

RAD - Reactive Attachment Disorder

SAMHSA - Substance Abuse and Mental Health Services Administration

TIP - Trauma-informed Practices

TIPE - Trauma-informed Positive Education

TMHLS - Trauma Mental Health Literacy Scale

TSES - Teacher's Sense of Efficacy Scale

1. Introduction

Childhood trauma and mental health conditions can have a significant influence in a child's life and on their classroom performance. Effects on the child's mental health and learning have been well established (Hertel & Johnson, 2013) along with serious concerns about the effect of trauma on attachment processes and neurobiological development (Morton & Berardi, 2018). However, despite the serious educational implications of childhood trauma, little is known about how teachers understand and respond to childhood trauma in the classroom.

The mental health of children and youth in Australia is currently an area of significant national concern. The Australian Mental Health of Children and Adolescent's Report (Lawrence et al., 2015) stated that 13.9% of all Australian children aged 4-17 were assessed as having a mental health disorder in the previous year. While this report did not provide detail of specific trauma related disorders, the interaction between mental health disorders and traumatic stressors in a child's life is of particular concern (Bendall et al., 2018). The Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5) defines traumatic stressors as, *"Any event (or events) that may cause or threaten death, serious injury, or sexual violence to an individual, a close family member, or a close friend."* (American Psychiatric Association (APA), 2013, online). These traumatic experiences could then lead to a Trauma- and Stressor-Related Disorder, including Post-traumatic Stress Disorder (PTSD) or Reactive Attachment Disorder (RAD) (APA, 2013). Significantly, exposure to traumatic stressors may also exacerbate the onset of mental health difficulties, increase the duration, severity and complexity of illness, and have an effect on the response to treatment (Bendall et al., 2018).

Although the prevalence of childhood trauma in Australia, as a subset of the mental health concerns, is difficult to determine, some indication of childhood trauma prevalence in Australia may be gleaned from other sources. The Australian Institute of Health and Welfare (AIHW, 2019) stated there were about 159,000 (28.7 per 1000 children) Australian children in child protection services and also noted the significant overrepresentation of Aboriginal and Torres Strait Islander children in this number (163.8 per 1000 children) (AIHW, 2019). A recent report of trauma and adversity among Australian children and adolescents attending a mental health support service found that two-thirds of these young people reported an adverse event in the previous 12 months, and many reported more than one event (Reay et al., 2015). In terms of the overall Australian population, Benjet et al. (2016) reported that

76.2% of Australians are likely to be exposed to a traumatic experience (as defined by the DSM-5) in their lifetime.

Despite the difficulty in assessing the prevalence of childhood trauma within the Australian population, there is strong evidence supporting the pervasiveness of traumatic stressors (such as abuse, neglect and mental health concerns) in the child population. This knowledge of mental health concerns can be coupled with knowledge of other pervasive stressful events such as natural disasters, including bushfires, floods, cyclones or the recent drought in rural Australia, which are well known sources of potential trauma in the Australian context (e.g. Berger, Carroll, Maybery, & Harrison, 2018; Gibbs et al., 2015). It is also important to acknowledge that not all children who experience a traumatic event will develop symptoms of a trauma related disorder (Reinbergs & Fefer, 2018). The child's response to traumatic experiences and the impact on their mental health may vary significantly. Whether diagnosed as a disorder or not, traumatic experiences can nonetheless have a significant effect on a child's life which may flow into their schooling experience.

Several key insights about the effects of trauma exposure hold specific significance for children and their wellbeing during the school years. First, the findings from the benchmark Adverse Childhood Experiences Study (Felitti et al., 1998) highlighted the substantial developmental and health consequences stemming from adverse childhood experiences, such as domestic violence, abuse and neglect. This early landmark report and subsequent studies have indicated that cumulative exposure to traumatic stressors increases the likelihood of poorer developmental outcomes in childhood (Anda et al., 2006; Daignault & Hebert, 2009; Porche, Costello & Rosen-Reynoso, 2016). This can be because these experiences often occur during developmentally vulnerable periods of the child's life where many central nervous system organisational changes are taking place (Anda et al., 2006; Australian Childhood Foundation, 2010; Kavanaugh, Dupont-Frechette, Jerskey, & Holler, 2017; Morton & Berardi, 2018; Tobin, 2016). Further insights have emerged about individual child responses to stress and trauma indicating that the effect of trauma on a child is also dependent upon the child's perception and interpretation of stressors (Blaustein, 2013; Hertel & Johnson, 2013; O'Neill, Guenette, & Kitchenham, 2010; Vanaelst, De Vriendt, Huybrechts, Rinaldi & De Henauw, 2012). For example, if the child views the adverse experience as exceeding their resources and endangering their wellbeing, the consequences may be more developmentally harmful (Vanaelst et al., 2012). These developmentally significant effects of trauma are likely to be evident during the child's school years.

However, it is also possible that safe and protective school contexts could support healthy and adaptive child responses to adverse events and stressors.

The school context has been well acknowledged as a potential avenue for intervention and support of the traumatised child. Recent reports have pointed out that teachers are uniquely placed to support children with trauma-related mental health concerns (Berger et al., 2018; Brunzell, Stokes & Waters, 2018; Pataky, Baez & Renshaw, 2019; Sundborg, 2019). In a study of teacher knowledge about child sexual abuse, Goldman and Bradley (2011) emphasised that there are no other professionals who have such close daily interaction in the lives of traumatised children. Similarly, Toros and Tiirik (2016) in a study of pre-school teachers' perceptions of child abuse, asserted that teachers are in an advantageous position to support children with trauma. More specifically, Morton and Berardi (2018) discuss that teachers have the opportunity to make early identification and provide intervention for trauma-related stress reactions. As such, teachers are widely perceived as well placed to support children exposed to traumatic experiences, while schools and classrooms are a major day-to-day context for children experiencing trauma related conditions.

Despite this perception about the role of the school and the teacher, relatively little is known about primary school teacher knowledge of childhood trauma or their capacity for and use of trauma-informed practices. This term *trauma-informed practices*, was explained by the US-based Substance Abuse and Mental Health Services Administration (SAMHSA) (2014), in a framework for practice that includes: “(a) a realization of the widespread prevalence and impact of trauma, (b) a recognition of the signs of traumatic exposure and (c) a response grounded in evidence-based practices that (d) resists re-traumatization of individuals.” (p. 9). This aligns with the description provided by Cole, Eisner, Gregory and Ristuccia (2013), of a trauma-sensitive school. Here, trauma-informed classroom and teacher practices incorporate both behavioural and educational trauma perspectives to address students' individual needs for support. This framework also embraces a system-wide culture of understanding the effects of trauma on learning, while ensuring all students experience support and safety. In a review of trauma-informed practices in schools, Thomas, Crosby and Vanderhaar (2019) comment that teachers are under-examined in this field, with limited empirical work informing trauma-informed teaching practices. Significantly, Morton and Berardi (2018) claim that trauma related difficulties are often ignored in schools due to these schools and teachers being ill-equipped to understand and respond to student needs.

Internationally, the examination of trauma-informed practices has been approached through different perspectives. Researchers have examined potential frameworks for practice (e.g. Chafouleas, Koriakin, Roundfield & Overstreet, 2018; Reinbergs & Fefer, 2018), specific interventions by trauma-specialists within school settings (e.g. Hoover et al., 2018; Mendelson, Tandon, O'Brennan, Leaf, Ialongo, 2015), analysed the implementation of programs within schools (e.g. Dorado, Martinez, McArthur & Leibovitz, 2016; Perry & Daniels, 2016) or assessed trauma-informed professional learning (e.g. Anderson, Blitz & Saastamoinen, 2015; McIntyre, Baker & Overstreet, 2019). A number of these studies have utilised the SAMHSA framework as a basis for program development (e.g. Chafouleas et al., 2018; McIntyre et al., 2019). Furthermore, many studies have demonstrated encouraging results in regard to the effect of trauma-informed practices on students, schools and teachers. However, replication of studies across broader settings is yet to occur. Despite the use of the interventions and assessment of the effectiveness, there has been limited research explicitly describing teacher understanding or their classroom practices.

In the Australian context, Costa (2017) identified the need and potential direction for the implementation of trauma-informed practices but did not provide any research evidence concerning actual teacher understanding and practices. Furthermore, although Quadara and Hunter (2016) presented a discussion paper on trauma-informed practices in the context of child sexual abuse to the recent Australian Royal Commission into Institutional Responses to Child Sexual Abuse, the authors describe the Australian climate of trauma-informed practices across all sectors as “opaque” and “piecemeal” (p. 8). This description indicates the early development of research and practices within the Australian context.

Whilst research on trauma-informed practices has recently emerged within Australia (Berger et al., 2018; Brunzell, Stokes & Waters, 2019, 2018, 2016a, 2016b; Howard, 2018) there is only a small amount of empirical research focused on teacher knowledge and understanding of trauma-informed practices with children in the primary school years. Howard (2018) in her survey of Queensland school leaders ($N = 182$) and teachers ($N = 169$), notes that training and implementation of trauma-informed practices are occurring in Australian schools in an inconsistent manner. Almost 30% of the surveyed teachers reported that the topic of trauma-informed practices was new to them. In the state of Victoria, Brunzell et al. (2019) have been investigating teacher learning and implementation of Trauma-informed Positive Education (TIPE) as a new practice pedagogy model. In one further study identified in this review, Berger et al. (2018) examined the role of trauma-informed practices in supporting students following a disastrous event in the state of

Victoria. The high school teachers interviewed ($N = 8$) reported that previous knowledge of trauma-informed practice and their understanding of their students through this lens, assisted in supporting the students following the disaster. As seen by these studies which will be thoroughly examined in the following review of literature, although trauma-informed research in Australia is growing, there is limited empirical research particularly regarding primary school teachers' knowledge and practice in the state of NSW.

Due to the limitations in prior research addressing trauma-informed knowledge and practices of Australian teachers, the following review also considers the broader research about teacher mental health knowledge. There are known limitations in teachers' knowledge and skills in the promotion of mental health, both in Australia and internationally (Askell-Williams & Cefai, 2014; Graham, Phelps, Maddison & Fitzgerald, 2011; Maelan, Tjomsland, Baklien, Samdal & Thurston, 2018; Reinke, Stormont, Herman, Puri & Goel, 2011). In Australia, Askell-Williams and Lawson (2013) explored the changes in mental health knowledge, pedagogy and self-efficacy of primary school teachers ($N = 1,397$) following training in a mental health initiative known as KidsMatter. (See Appendix A for glossary of Australian organisations). The authors noted significant growth post-training. Graham et al. (2011) conducted a study of primary school teachers ($N = 508$), which highlighted that knowledge and self-efficacy were concerns of teachers in supporting students with mental health difficulties. These researchers have similarly identified that there has been very little empirical research documenting teacher understanding and support of students with mental health issues. Furthermore, these studies highlight the potential associations of both self-efficacy and knowledge in supporting teacher mental health understanding. In summary, although there is wider understanding of teacher mental health literacy, researchers have noted the limited body of research about teacher understanding of mental health and trauma and their related classroom practices in the Australian context.

This thesis explores New South Wales primary school classroom teacher mental health and trauma literacy and considers how this knowledge is related to teacher self-efficacy, self-reported classroom practices and professional learning opportunities. Teacher reports of their classroom practices are assessed to gain an understanding of their application of the principles of trauma-informed classroom practices. This study aims to provide a sound starting point for understanding the trauma-informed knowledge, professional learning and practices of primary school teachers in the context of New South Wales and Australian schooling systems, by drawing on the voices of teachers.

1.1 The Context of this Study

The Australian state of New South Wales (NSW) contains the largest public education system in Australia ($N = 2,149$ schools), known as the NSW Department of Education. This public education system sits alongside a number of independent schools ($N = 354$) and Catholic schools ($N = 598$) (Australian Bureau of Statistics (ABS), 2019). Across all of these schooling systems, students in the state of NSW are typically required to attend school from the year that they turn six years old through to the age of 17 years. This includes 13 scholastic years, beginning with Kindergarten and concluding with Year 12 (Grade 12). The primary (elementary) school years refer to the first seven years of schooling, where students are typically assigned to a class in which a single classroom teacher delivers the majority of all curriculum (subjects) to the students for a calendar year. Students transition to high school at the beginning of Year 7. The population of this study includes primary school teachers from all schooling sectors in NSW.

Across the state of NSW, socio-educational advantage varies significantly and is measured by the Australian Curriculum, Assessment and Reporting Authority (ACARA) with a measure referred to as the Index of Community Socio-Educational Advantage (ICSEA). This measure includes an assessment of the education and qualifications of students and parents, and of school-level factors such as the number of indigenous students and the geographical location of the school. The resulting ICSEA value allocated to each school considers the magnitude of these factors when summarising educational advantage or disadvantage at the school level (ACARA, 2015). These ICSEA values range from approximately 500, representing extremely educationally disadvantaged student backgrounds through to approximately 1300 representing a school with students of very educationally advantaged backgrounds. The current project recorded ICSEA values as part of the demographic information collected.

All schools in NSW are in the process of undergoing significant educational reforms to align curriculum and practices with a national curriculum that has recently been introduced. This national curriculum includes a focus on students' Personal and Social Capability (ACARA, n.d) which broadly considers student mental health in a social and emotional learning framework. Part of this framework includes a focus on students recognising and regulating emotions, building positive relationships and handling challenging situations effectively. Furthermore, Australia's youth and child health strategy includes statements about children being supported in their mental health needs (Council of

Australian Governments (COAG) Health Council, 2015). Recently, and subsequent to the commencement of this study, the Australian government released the Be You national mental health promotion strategy that contains online learning modules for teachers on topics including mental health and trauma (Australian Government Department of Health, 2018). This new program consolidated previous programs including KidsMatter, MindMatters, Response Ability and organisational initiatives from non-government mental health support and advocacy groups such as Beyond Blue and HeadSpace. Several of these past initiatives are referred to by participants of this study. (See Appendix A for a glossary of Australian Organisations).

The focus on NSW primary schools was due to the current barriers to trauma-informed practice and mental health literacy identified for primary school teachers in that state (Costa, 2017). These current barriers identified by Costa (2017), included unhelpful practices, limited understanding, traditional beliefs and inadequate resources. Primary school contexts were also of specific interest due to the increased prevalence of mental health issues within this age group, as identified in recent national assessments of child mental health (Lawrence et al., 2015). Furthermore, NSW has a very high and concerning school exclusion rate for children with mental health conditions in comparison to peers without such conditions (Van Bergen, Graham, Sweller, & Dodd, 2015).

1.2 Statement of the Problem

Currently, there is limited research investigating teacher knowledge and understanding of childhood trauma and the implementation of trauma-informed practices in schools. This is despite the well-developed understanding of the implications of trauma on a child's development. It has been recommended that understanding the teacher's perspective will be useful for increasing the evidenced-based implementation of school interventions (Reinke et al., 2011). Furthermore, despite a growing number of interventions and training in trauma-informed practices, an empirical basis for these interventions is lacking (Dorado et al., 2016). In particular, there appears to be no Australian research that documents the specific knowledge base of teachers in this field and only recently have studies by Berger et al. (2018) and Brunzell et al. (2019; 2016a) reported on the trauma-informed practices of Australian teachers. Specifically, no research could be identified that reported the current state of knowledge and understanding of NSW primary school teachers, nor an understanding of the current pedagogies or practices they are employing with students experiencing mental health or trauma-related conditions.

1.3 Project Aims

This study aims to investigate NSW primary school teacher understanding of childhood trauma by assessing the trauma-related mental health literacy, trauma-informed practices and professional development of primary school classroom teachers.

The aims of this project are to:

1. Assess teachers' levels of knowledge, awareness and comfort with trauma and mental health literacy concepts.
2. Identify the incidence and experience of teaching students with trauma or mental health diagnoses.
3. Identify teacher approaches and practices in teaching students affected by trauma.
4. Identify the extent and sources of teacher professional development in the areas of mental health and trauma understanding.

2. Literature Review

This review of the literature first explores the specific educational implications of childhood trauma. Following this, teacher knowledge and understanding of trauma and mental health are discussed. Thirdly, teacher self-efficacy is explored, particularly acknowledging the significant role that teacher self-efficacy plays in shaping mental health knowledge and teaching practices. Finally, trauma-informed practices are discussed, including the role of teacher professional learning.

2.1 The Educational Implications of Childhood Trauma

The experience of traumatic stressors in childhood is far reaching, with ramifications in all areas of development and the child's education. These consequences include lower educational attainment than peers without mental health difficulties (Trout, Nordness, Pierce & Epstein, 2003) and, in Australian studies, lower attainment in national literacy and numeracy assessments for children involved in child protection services (AIHW, 2015). It is estimated that up to 50% of Australian students who drop out of secondary school do so because of the adverse consequences of mental illness (Bowman, McKinstry & McGorry, 2017). The following review of recent research findings highlights the adverse implications

of traumatic childhood experiences for several critical developmental domains including neurocognitive, educational, behavioural and social development.

Perfect, Turley, Carlson, Yohanna and Saint Gilles (2016) summarised the developmental effects of trauma in a review of 100 school-related research projects of children who had a history of traumatic experiences. The review found a positive association between adverse child experiences and reduced IQ, specifically noting a propensity for visual/verbal and working memory impairments, lower verbal language abilities, and compromised attention (e.g. Mathews, Dempsey & Overstreet, 2009). Outcomes varied depending on the type of abuse experienced, ongoing traumatic stress symptoms or whether the child had received a clinical PTSD diagnosis. For example, internalising symptoms (e.g. low self-esteem and anxious feelings) were higher amongst students who were sexually abused or maltreated. The prevalence of traumatic event exposure and traumatic stress symptoms were also higher in children with ADHD and learning disabilities (e.g. Daignault & Hebert, 2009). These findings highlight the significant and varied implications of exposure to childhood trauma.

Neurocognitive impairments, including impaired executive functioning, are one of the most commonly reported impairments following childhood trauma. In a review conducted by Kavanaugh et al. (2017), they identified 23 prior studies (from the years 1995-2015) which focused on the neurocognitive implications following childhood maltreatment. The evidence from these studies support the implication that traumatic events could directly influence a child's developing nervous system in multiple ways.

Particular learning and educational implications have been noted in several studies and analysis of large national data samples. In an analysis of the American National Survey of Children's Health data (2011/12), Porche et al. (2016) found that 50.2% of children with four or more adverse childhood experiences had both learning and behavioural difficulties. Increases in the number of traumatic experiences and mental health diagnoses indicated the need for an Individual Education Plan (IEP), and the likelihood of repeating a school grade, while the number of mental health diagnoses indicated reduced school engagement.

A specific study by Daignault and Hebert (2009) of 100 French-Canadian girls (aged 7-12) who had experienced sexual abuse, found that below-average cognitive functioning was the most common difficulty experienced (39%), followed by withdrawn or externalised behaviours (34%) and social difficulties (28%). It was also found that social, behavioural and academic function was affected proportionally by the number of abuse factors to which

the child had been exposed. Similar results were found by Cefai and Camilleri (2015) in a study of nine-year-old students ($N = 486$) and adverse life experiences. They found that the risk of mental health difficulty was 50% for students with three risk factors, increasing to 75% for those with five risk factors. It is relevant to note that these significant risks were still identified despite excluding the more sensitive risk factors of familial violence and child abuse due to the potential identification and participation issues in the small population area where the research was conducted. Importantly, even without these risk factors, the notable cumulative effect of the studied adverse experiences supports earlier research by Anda et al. (2006) and Felitti et al. (1998) which also noted this cumulative stressor effect.

Behavioural and social implications of traumatic exposure are also likely to hold special significance in the school environment. In a study of 30 children and adolescents (14 trauma-exposed, 16 matched controls), Marusak, Martin, Etkin and Thomason (2014) utilised a functional MRI and emotional conflict task to measure brain activity. Firstly, they found that trauma-affected youth had greater amygdala reactivity to the emotional conflict task, and secondly, they were unable to regulate their emotional conflict. Furthermore, the participants had an absence of effective inhibitory control. The researchers' commented that the combination of these factors mean that affected individuals may be unable to master age-appropriate social and academic skills at school, including emotion regulation and conflict resolution.

From the perspective of students, Dods' (2013) interview study of student and teacher relationships, found that the students ($N = 4$) described their externalising behaviours as an attempt to be recognised and noticed by their teachers. The students' desired to develop connections with their teachers, without expectation of their teacher knowing specific details of what they may have experienced. This small-scale study highlighted a few of the implications of trauma on attachment and relationships.

In summary, these recent reviews and empirical studies highlight the complex ways in which trauma and other mental health diagnoses influence all areas of child development and intersect with schooling and other social environments. These findings indicate a significant area of learning need for teachers and professionals who may need support to understand and translate these findings to appropriate interventions and pedagogical strategies.

2.2 Teacher Mental Health and Trauma Knowledge, and Self-Efficacy

The professional accreditation standards for Australian teachers state that all teachers must “Know students and how they learn” (Australian Institute for Teaching and School Leadership (AITSL), 2014, para.1) and this entails knowledge of all aspects of child development and the means to nurture this development and support the child’s wellbeing. This is crucial due to the well-established association between wellbeing and learning (Waters & Loton, 2019). Furthermore, teachers are required to use this knowledge and understanding to develop personalised learning to address student diversity (ACARA, n.d). Therefore, knowledge of students and their learning needs is an important concept for all Australian teachers and their inclusive teaching practice.

It has been found that the development of teacher personal practical knowledge occurs not just through their understanding of content matter, the students in their care, and the school environment, but also by their experiences in life (Clandinin & Connelly, 1998). In particular, it has been noted that teacher ability to support and promote the mental health of their students requires knowledge of a new subject matter (mental health), new pedagogical content knowledge, and new ways of understanding the personal characteristics of their learners and the learners themselves (Shulman, 1986; Askell-Williams & Cefai, 2014). The research examining teacher knowledge and understanding of mental health and trauma is multi-faceted and will be explored from several perspectives in this review, including research emerging from the study of teacher self-efficacy and inclusive educational practices.

2.2.1 Teacher mental health literacy.

The concept of mental health understanding and knowledge has been referred to as an individual’s *mental health literacy* (Jorm et al., 1997). Mental health literacy refers to the recognition, management and prevention of mental health problems through having the appropriate knowledge and beliefs to intervene or act appropriately (Jorm et al., 1997; O’Connor, Casey, and Clough, 2014). Mental health literacy has been the target of specific interventions and professional development activities for teachers. For example, a program known as Mental Health First Aid is one such Australian program that has been utilised to increase teacher mental health literacy. With this program, Jorm, Kitchener, Sawyer, Scales, & Cvetkovski (2010) analysed the pre and post-training knowledge of Australian high school teachers ($N = 327$) finding that training increased teachers’ mental health knowledge,

reduced some stigma, and increased confidence in supporting students. Most of these changes were also sustained at six months post-training, indicating that professional learning regarding mental health increased participant mental health literacy.

2.2.1.1 Teacher knowledge and understanding of mental health.

Internationally, the study of teacher knowledge and understanding of mental health is an area of ongoing research. This research has highlighted teachers increased sense of responsibility and understanding of the need to support students with mental health concerns. In an early study, Rothi, Leavey and Best (2008) documented the changing role and understanding of teachers in the face of growing mental health concerns for children and young people. In interviews with 30 primary and high school teachers ($N = 30$), they found teachers were facing a growing expectation to take on duties as entry-level mental health professionals. At this time, these teachers felt they were inadequately prepared to support student's mental health needs and were keenly aware of the need to supplement their pedagogical skills with new mental health skills relevant to their teaching population. Furthermore, teachers noted that mental health knowledge received through training put them at an advantage to other teachers who had not received any training. Teachers desired further mental health knowledge relating to recognition, referral processes, and classroom strategies. This early study highlighted a need for evidence-based practice and training models, as well as a need for further exploration of teacher perceptions of their role in supporting mental health and related pedagogy.

Similar teacher sentiments were noted by Reinke et al. (2011) in a study of US early childhood and elementary school teachers ($N = 292$). Despite 75% of the teachers currently working or having recently referred students with mental health concerns, only 28% of respondents felt they had adequate knowledge and only 34% felt they had the skills to meet the mental health needs of their students. Teachers perceived the need for more knowledge of mental health recognition and strategies for working with students with externalising behavioural needs. Teacher reported barriers for supporting students included insufficient school-based mental health professionals, lack of professional learning and funding deficiencies. This study further highlighted teacher knowledge concerns alongside teacher uncertainty regarding their changing role in supporting students with mental health conditions.

A further study by Graham et al. (2011) examined Australian primary and secondary teachers ($N = 508$) views on supporting children's mental health in schools. Teachers

identified student and family life as the main situations that impacted on student mental health, including divorce or family violence. Almost 90% of teachers indicated that they viewed mental health education as very or extremely important. Only 22% felt very confident in dealing with significant mental health issues in their classroom, with less than half confident in dealing with issues relating to abuse or domestic violence. Teachers were concerned by the high mental health needs of students and desired further training to recognise the signs and symptoms of mental illness. These teachers were also aware that future professional learning opportunities were limited by time, school priorities and funding. Similar, to international counterparts, these Australian teachers desired further knowledge, training and resourcing to support the needs of their students.

More recently, Askill-Williams and Lawson (2013) assessed Australian teacher knowledge and confidence in mental health promotion as part of the KidsMatter mental health awareness initiative (see earlier reference to this program on p. 13 & 15). The researchers noted how little is known about teacher mental health knowledge and also their sense of teacher self-efficacy for the promotion of mental health. Primary school teachers ($N = 1,397$) from 100 schools completed a knowledge, pedagogy and self-efficacy for mental health promotion questionnaire before and after an intervention of this program. Prior to implementation, up to 50% of teachers expressed that their knowledge and confidence in mental health promotion was not of high quality. Following the intervention, statistically significant increases were noted in teacher mental health knowledge (13%), self-rated pedagogy (16%) and self-efficacy for mental health promotion (10%). Qualitative responses indicated that teachers were heavily reliant upon curriculum resources for their pedagogical knowledge of mental health. Furthermore, the researchers noted the ongoing tension that existed between teachers needing to know their students as learners, the associated mental health derived learning needs and the information available to be able to develop this knowledge. This study supports the systematic provision of teacher mental health professional learning so that teachers can adequately meet the learning needs of their students.

Specific studies have demonstrated that teacher knowledge and beliefs can improve with targeted teacher professional development in this area. One of the most recent studies identified in this review demonstrates the importance of school context and whole school approaches. Norwegian secondary teachers ($N = 6$) and head teachers ($N = 10$) were interviewed by Maelan et al. (2018) to determine how they supported their students' mental health. This encompassed understanding the everyday practices employed by teachers to

support students. The researchers found that teachers acknowledged this as one of their key responsibilities as educators and prioritised the development of close relationships with students and reducing academic pressure. Further, within the whole school context, developing an inclusive and safe school, and providing opportunities for experiencing mastery was important. Teachers also saw support from other professionals as an important way to increase their sense of competence and knowledge in supporting students' mental health within the educational environment.

In summary, both international and Australian researchers discuss mental health knowledge and understanding as critical for all teachers in order to address the needs of students in their classrooms. However, teachers have self-reported their own deficiencies in mental health knowledge and understanding, with teachers expressing a need for greater knowledge and more understanding of ways to support students. Recent research offers a positive suggestion that interventions and school-wide approaches provide a mechanism to develop teacher knowledge and increase teacher's self-efficacy and perception of support.

2.1.1.2 The measurement and assessment of teacher knowledge and understanding.

There have been several different approaches to assessing mental health literacy and knowledge across sectors. However, there have been limited tools developed with strong reliability and validity. This section provides a closer critical review of several studies that have examined the assessment of teacher mental health knowledge and understanding. However, it must be noted that only a limited number of specific mental health literacy studies could be identified in this emerging field of research.

O'Conner et al., (2014) identified around 13 scale-based measures of mental health literacy across different sectors. From this review, the researchers' concluded that a robust tool was lacking. The identified limitations associated with these measures included the definitions of mental health literacy and inadequate information provided for determining the validity and reliability of these tools. The reviewers recommended future research to develop a scorable scale of mental health literacy for individuals.

The majority of scales and tools reviewed, including for studies previously discussed in this review, were developed specifically by researchers for each study (e.g. Askill-Williams & Lawson, 2013; Graham et al., 2011). This means the items in the measures may be very specific to assessing particular program outcomes and may not be generalisable or useful to other studies or research contexts. For example, one of these reviewed studies,

relevant for the Australian context, was the seminal work by Jorm et al. (1997; 2010). These researchers developed mental health literacy measures to examine participant literacy following completion of Mental Health First Aid Training. These assessments focused on knowledge about mental health conditions, with a specific focus on depression (recognition of symptoms in a vignette, indicators of stigma, beliefs and confidence), alongside questions about general help provided to students or colleagues, school policies and practices.

Since the O'Connor et al. (2014) review, one further mental health literacy scale has been identified in the current review. The Educator Mental Health Literacy Scale (EMHLS) (Fortier, Lalonde, Venesoen, Legwegoh & Short, 2017) is a five-point Likert scale which was developed to assess the implementation of school mental health initiatives in an Ontario school district, Canada. The authors of the scale aimed to identify the needs of educators and areas of mental health support to be prioritised, as well as analyse any change in mental health literacy during the implementation period. The scale was administered to teachers in 2010 ($N = 3,913$) and 2015 ($N = 3,965$). The scale contained five items related to awareness of mental health issues, four items addressing knowledge of mental health issues and four items asking about the respondents' comfort with mental health issues. The strength of this scale lies in the diverse and generalisable nature of the items in the subscales that are not solely designed to assess elements of the intervention strategy. Small to moderate statistically significant positive differences ($p < .01$) were noted across all three domains and all individual items in the pre to post assessments. This signified teacher growth of mental health literacy across the time period.

In summary, across these studies the assessment of mental health knowledge of educators has been limited and inconsistent. Many studies have not assessed actual teacher knowledge at all and have not assessed their pedagogical practices in any detail. However, the more recent development of the Educator Mental Health Literacy Scale does provide a more diverse assessment of teacher mental health literacy with a consideration of both knowledge and attitudinal factors such as comfort with discussing mental health issues. Because this scale was designed to assess understanding across a whole school region *before* and after the mental health initiatives, it was not designed solely to measure the learning outcomes of a specific intervention initiative and thus offers applicability in other research contexts. Although mental health and trauma can be overlapping diagnostic terms, the following section of the review will now consider teacher trauma related knowledge and the assessment of trauma literacy specifically.

2.2.2 Teacher trauma-informed knowledge and understanding.

Knowledge of childhood trauma and the implications for development and learning are a particular yet highly relevant subdomain of broader mental health literacy. Researchers Alisic (2012) and O'Neill et al. (2010) consider an understanding of childhood trauma as essential information required to develop appropriate remedial and behavioural interventions for children who have experienced trauma. However, the researchers assert that teachers do not have the requisite training in the causes and symptoms of trauma. Similarly, Tobin (2016) and Walsh and Farrell (2008) claim that, although teachers and schools may have many of the skills and resources to practically help children affected by trauma, it is the *understanding* of trauma that will allow teachers to utilise these skills to best address the needs of their students. However, as Martin, Cromer and Freyd (2010) assert, teacher knowledge of childhood trauma and the implications for a child in the classroom is mostly unknown.

Having knowledge and understanding of trauma is commonly referred to as being *trauma-informed*. Carello and Butler (2014) state that to be *trauma-informed* is to understand how traumatic events or stressors may have featured in the life of individuals. This understanding may then be applied to the provision of services that are accommodating of the individual's needs. Trauma-informed environments aim to be safe and supportive for all through the provision of services that reflect current research. This research field is growing in the identification of the need for teachers to know and understand the biological, emotional and physical implications of childhood trauma. This trauma knowledge is not just for knowledge sake, but for educators to be able to develop and instigate the appropriate intervention and support.

2.2.2.1 Teacher knowledge and understanding of trauma.

Following on from the review of research examining teaching knowledge and understanding of mental health, this section of the review considers the more recent development of research concerning teachers' knowledge and understanding of trauma. First, it must be noted that only a limited number of studies could be identified in this new and emerging field of research. As noted in the Introduction, Thomas et al. (2019) stated that teachers are under-examined in this field, while Morton and Berardi (2018) claim that the examination of teacher knowledge of trauma has primarily been examined through the evaluation of trauma-informed training programs. As such many of the studies reviewed here

show self-reported teacher knowledge changes pre and post-professional development or program implementation. The recency of these studies is also particularly notable.

Research by Dorado et al. (2016) examined the training of teachers (K-8) and administrative staff ($N = 175$) as a part of the Healthy Environments and Response to Trauma in Schools (HEARTS) program in the USA. The respondents' reported a 57% increase in their knowledge regarding trauma and its effects on children and a 68% increase in their knowledge about trauma-informed practices. However, the program developers noted the dearth of empirical research on the effectiveness of trauma-informed systemic approaches for which they could base the development of the HEARTS program. This highlights a major limitation in any emerging field of research but also indicates a need for more empirical research to describe and identify the nature of teacher knowledge, beliefs or practices for training program development.

Similarly, Perry and Daniels (2016) implemented a professional development program utilising the SAMHSA trauma-informed framework for school staff ($N = 32$) in a K-8, USA public school. The training focused on trauma-sensitive practices, identifying students requiring trauma-informed support, implementing trauma-informed supports, and teaching skills for coping with trauma related symptoms. From this, 91% of staff indicated an increase in knowledge. Evaluation of this program is ongoing but an example of knowledge growth through teacher professional learning is evident.

It is essential to note that teacher knowledge can be interpreted through each teacher's contextualisation of potential practice into specific environments (schools) and systems. This was observed by McIntyre et al. (2019), who recently investigated teacher pre and post-training change in knowledge. The researchers utilised a scale they had developed to assess knowledge change. They found a significant percentage growth from 20% pre-training to 70% post-training of those who scored at least 80% on the knowledge measure. However, they did find that knowledge was interpreted through teacher understanding of the larger school and system structures and governance. For example, increased knowledge may have highlighted to teachers the barriers in their systems and lowered the perceived acceptability of implementation in their school. This highlights the notion that trauma-informed understanding is developed (and interpreted) both individually and contextually, with teachers' perspectives an important construct.

Looking more directly at teacher perspectives assists in the process of understanding teacher trauma-informed knowledge. Individual teacher's perspectives was the focus of the

qualitative study by Alisic (2012), who interviewed primary school teachers ($N = 21$) in the Netherlands. The study explored questions such as, “*What is your experience with regard to children and trauma?*” as well as examining past professional development. Teachers expressed concerns and doubts about their knowledge and capacity to meet the needs of their students within their teaching role. They desired further professional knowledge and described a high level of emotional burden accompanying their role in meeting student need. The authors concluded that knowledge was not the only concern of the teachers, but indirectly their self-efficacy and attitudes toward working with children affected by trauma.

Internationally, it has been asserted that teacher trauma mental health literacy has the potential to increase through trauma focused professional learning opportunities (McIntyre et al., 2019). However, the specifics of the knowledge that is required remains largely unknown (Thomas et al., 2019). Furthermore, studies have noted individual and contextual variables that could be influencing knowledge development, as well as the concerns teachers have for their knowledge and skill capacity. This has encompassed teacher concerns for being able to fulfil their role and their self-efficacy for their positions.

As discussed in the Introduction, there is limited empirical research directly addressing the trauma-informed knowledge of teachers. To this end, broader trauma-informed studies in the Australian education context are addressed. This review of literature identified three studies specifically examining teacher knowledge or understanding in Australian contexts. Each of these studies was published subsequent to the commencement of this thesis project, demonstrating the very recent emergence of such research in the Australian context.

In the first example, Brunzell, Stokes and Waters (2019) report an evaluation of the Trauma-informed Positive Education (TIPE) model. This model evaluated teacher understanding of key concepts including building self-regulatory capabilities, relational capabilities and developing positive wellbeing. Teachers ($N = 18$) were actively involved in the learning process through inquiry participatory research. The primary themes that emerged with this cohort of educators included the priority of building classroom relationships and increasing psychological resources for wellbeing. The results further suggested, that as active collaborators in their knowledge and practice development, teachers felt empowered that they could better meet the specific developmental needs of trauma-affected students in their classrooms.

A unique Australian qualitative study by Berger et al. (2018) tracked developments in the life of a school following a disaster in the local area. Specifically, the disaster known locally as the Hazelwood Mine Disaster in the state of Victoria, caused a local specialist school for disadvantaged youth to relocate to another area. This relocation was yet another potentially disruptive event in the lives of the students. The study demonstrated, according to Berger et al. (2018) the benefit of school staff being trauma-informed *before* the disaster and relocation event. Specifically, these specialist teachers were already insightful and informed about their students' backgrounds and thus understood student needs and responses upon facing the disaster. These authors suggested that the former training and trauma-informed understanding may have provided staff with essential resources at the time of the disaster for supporting the students with the maintenance of stable routines, school engagement, increasing self-regulatory skills and monitoring student behaviour. These benefits of being trauma-informed in the face of unexpected disaster highlight the multi-faceted potential that this knowledge may provide to students and staff.

The extent to which teachers perceive their own knowledge and trauma-informed practices was recently examined by Howard (2018). This recent Australian study examined the trauma-informed knowledge of school leaders ($N = 182$) and teachers ($N = 169$) in the state of Queensland. This study identified large gaps in teacher experiences, training and understanding of trauma-informed knowledge and practices. Most respondents (73.29%) desired more knowledge in the area of trauma-informed practices, while almost half of the teachers (44.64%) had not received any training. Those who had received training reported that it was an insufficient arrangement of short presentations for a small number of staff from the school. This study confirms the earlier reported sentiments of Quadara and Hunter (2016) who labelled the state of knowledge of trauma-informed practices in Australia, as 'piecemeal' and 'opaque', and further demonstrates the poorly developed and unprioritized status of trauma-informed knowledge development at the systemic level of state education in Australian schools.

2.2.2.2 The assessment of trauma-informed knowledge.

Trauma-informed knowledge has been a problematic construct to assess. Specifically, Overstreet & Chafouleas (2016) in their commentary on this topic, claim there are a lack of specific measures at an educational system (or teacher) level. Similar to the assessment of mental health literacy, the majority of studies that have investigated trauma-informed knowledge or practices have developed their own scales and measures to assess the

specific constructs (such as self-reported knowledge growth) of the individual studies (e.g. Dorado et al., 2016; McIntyre et al., 2019).

This measurement concern was highlighted by Baker et al. (2016) who found there was no objective way to measure the extent to which an individual or system could be ‘trauma-informed’. As such, they proposed the Attitudes Related to Trauma-Informed Care (ARTIC) scale as a measure of attitudes. This scale assesses attitudes to the implementation of trauma-informed care, including subscales focusing on underlying causes of behaviour, self-efficacy for their work and personal support of trauma-informed care. This scale was designed to begin to address the gap of assessing the trauma-informed care of an individual or system. However, this scale does not assess knowledge and was not suitable to address the research aims of this project.

As highlighted, clear measurement of trauma knowledge and understanding has not been developed. An extensive review of the literature did not identify any further sources of measurement of either trauma knowledge or understanding.

In summary, the trauma-informed knowledge of teachers is largely unknown in both Australian and international contexts. However, there is emerging empirical evidence and interest in teachers developing a trauma-informed knowledge. Alongside teachers developing knowledge, there are ongoing questions pertaining to teacher capacity, self-efficacy and practices to support students who have been affected by trauma. There remain ongoing difficulties in assessing teacher trauma-informed knowledge with a standardised assessment tool. Further research is supported to investigate teacher trauma-informed knowledge and understanding.

2.2.3 Teacher self-efficacy and educational practices.

While teacher knowledge of trauma and mental health concepts are critical components to consider in the assessment of literacy, research also considers teacher self-efficacy as bearing a close relationship to practice via the influence of these cognitive beliefs on practice. According to Tschannen-Moran and Woolfolk Hoy (2001), a teacher’s self-efficacy belief refers to “*a judgement of his or her capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated.*” (p. 783). When a teacher has quality knowledge development for teaching, they are well-placed to be successful and develop sound self-efficacy for teaching (Askill-Williams & Cefai, 2014; Bandura, 1997). As such, research has found that a

teacher's level of self-efficacy has strong links to many teaching attributes, skills and pedagogies including an intention to teach inclusively (Sharma, Forlin & Loreman, 2008), teaching commitment (Chesnut & Burley, 2015), teacher resilience, organisation and persistence (Tschannen-Moran & Woolfolk Hoy, 2001).

Although teachers may recognise the need to support mental health in their classrooms and schools, their responses are affected by their perceived self-efficacy in addressing these concerns (Graham et al., 2011; Mazzer & Rickwood, 2015). These findings have potential significance in this discussion of teacher knowledge and practice in the area of mental health and trauma. The following review considers existing research about teacher self-efficacy in the context of teaching students with mental health conditions.

Several Australian studies have begun to explore the relationship of self-efficacy to mental health and trauma teaching contexts. As noted above, Askell-Williams and Lawson (2013) remarked that the quality of teacher knowledge is closely related to the state of their self-efficacy. Almost 50% of respondents rated themselves with low self-efficacy to implement school mental health initiatives. Additionally, self-efficacy was raised by the Australian teachers surveyed by Graham et al. (2011), discussed previously. These teachers made numerous comments about feeling “inadequate in terms of knowledge” (p. 490) with their skills and lack of training leaving them feeling powerless. Alongside the reduced levels of self-efficacy with their capacity to support children with mental health concerns, teachers were struggling with the complexity of their roles and the expectations placed upon them. These teachers reported a tension between self-efficacy and mental health practices, which highlights the importance of further investigation into these concepts.

Teacher capabilities for mental health promotion were explored by Askell-Williams and Cefai (2014) in their examination of teachers across Malta ($N = 217$) and Australia ($N = 812$). They found that generally positive attitudes towards mental health promotion were expressed by participants. This was complicated, however, with up to 50% of respondents not strongly agreeing that they had appropriate knowledge, self-efficacy or resources for promoting student mental health. Findings also indicated that primary school respondents had more positive attitudes and actions than high school respondents. There were few significant differences in perceptions between Maltese and Australian teachers. However, Maltese teachers did present lower scores on factors related to knowledge, resources and parenting support. The authors recommend that the existing capacities of teachers should be further developed for the successful promotion of students' mental health. From this study, it is concerning to note the high number of educators who did not perceive that they had the

self-efficacy and knowledge for mental health promotion, despite holding generally positive attitudes.

An Australian qualitative study of mental health and self-efficacy of high school teachers ($N = 21$) was conducted in the Australian Capital Territory by Mazzer and Rickwood (2015). The researchers investigated the perceived role of teachers and their self-efficacy in supporting the mental health of students. Teachers reported they did not have sufficient skills to meet the mental health needs of the students in their care, despite identifying it as part of their role. They perceived a deficit in their skills, knowledge and mental health training. The researchers also found that teachers had low self-efficacy in their responses to arising student mental health issues with a fear of saying or doing 'the wrong thing'. From this it is recommended that due to the high number of teachers identifying skill and knowledge deficit that further professional learning remains a priority for schools and systems. These perceptions of their own efficacy can affect both their classroom practices and the way they approach their role.

As a further construct of exploring teacher role, Brunzell et al. (2018) explored the concept of teachers identifying meaningful work within the trauma-affected classroom. Through journal entries and semi-structured group interviews, primary and high school teachers ($N = 18$) reflected on working with trauma-affected students in two Australian schools. This study found that the strength of teacher pedagogy, knowledge and self-efficacy held direct links to the perceived sense of meaning, purpose and impact that teachers felt when working with trauma-affected students. This highlights the broader implications of self-efficacy and knowledge within the trauma-affected classroom.

The potential associations between teacher knowledge, self-efficacy and actual teacher *practice* are more difficult to examine. Sharma and Sokell (2016) sought to examine this with a small-scale observational study ($N = 5$) of classroom practices. This study found a positive relationship between the reported self-efficacy towards the implementation of inclusive practices and classroom observation of inclusive practices. Teachers who held more favourable views toward students with disabilities tended to use more effective practices. Based on these findings, they suggest that higher quality education is likely to take place in the classrooms of teachers with lower inclusion concerns. However, as noted in this very small study of just 5 teachers the analysis of actual teaching practices is time intensive and difficult to assess, thus self-efficacy and practices tend to be measured in self-report assessments.

As such, the measurement of teacher self-efficacy is also relevant to the study of trauma-informed practices of teachers. As previously discussed, research has noted that teacher self-efficacy has strong links to teacher knowledge and pedagogy. Most measures of teacher self-efficacy focus on the assessment of efficacy in very specific domains of practice, with the most common measures of general teacher self-efficacy considering several domains of practice.

One such tool, and a commonly used teacher self-efficacy measure (Wilson, Woolfson & Durkin, 2018), is the Teachers Sense of Efficacy Scale (TSES). Tschannen-Moran and Woolfolk Hoy (2001) developed this scale to examine this concept of teacher self-efficacy by focusing on the specific subdomains of instructional strategies, classroom management and student engagement. This measure included items such as “*How much can you do to calm a student who is disruptive or noisy?*” (Tschannen-Moran & Woolfolk Hoy, 2001). The Teacher’s Sense of Efficacy Scale has shown to be a valid and reliable ($\alpha = 0.94$) measure of overall teacher self-efficacy.

This scale was utilised by Wilson et al. (2018) in their examination of school and primary teacher predictors of teachers ($N = 148$) self-efficacy beliefs towards inclusion. The TSES was useful in identifying the self-efficacy strategies (instructional strategies) that predicted behaviour. The reliability and the validity of this scale made it appropriate for regression analysis for predicting inclusive classroom behaviours. Furthermore, this study supported the importance of mastery experiences in the self-efficacy of teachers. As well as supporting the aforementioned links between self-efficacy and inclusive classroom practices (Sharma, Loreman & Forlin, 2012).

As has been discussed, the association between teacher knowledge and self-efficacy is well documented. Furthermore, several additional positive constructs are associated with sound teacher self-efficacy, including the meaning teachers find in their work and their intention for inclusion. However, there are concerns expressed by teachers (both internationally and in Australia) that they do not have the capacity, skills and self-efficacy for best-supporting students experiencing mental health concerns. Teacher self-efficacy can be reliably assessed through scale measures, such as the TSES (Tschannen-Moran & Woolfolk Hoy, 2001). However, there are limited findings regarding teacher self-efficacy for teaching students with mental health or trauma-related concerns.

2.3 Trauma-Informed Practices

The increasing awareness of the need for trauma-informed practice (Overstreet & Chafouleas, 2016) is demonstrated by a growing number of organisations creating sensitive environments for both children and adults affected by traumatic experiences (Donisch, Bray, Gewirtz, Hanson & Lang, 2016). Specific components of trauma-informed practices include a focus on early intervention and increasing the capacity of staff to respond appropriately, recognising that “problem” behaviours may be symptoms of a trauma related condition, and by creating a safe, supportive and understanding environment (Dube & McGiboney, 2018). As Hanson and Lang (2016), in their review of trauma-informed practices assert, all staff need to be educated so they can be aware of the signs of traumatic stress and thus make appropriate referrals for support. The framework for trauma-informed practice suggested by SAMHSA (see p. 11) provides an explicitly non-clinical approach with the recommendation that practitioners make onward referrals to trauma-specific clinical interventions (Berliner & Kolko, 2016). Such early identification and referral to treatment can reduce long term challenges and improve the resiliency of children (Walkley & Cox, 2013).

Although a broadly understood and utilised framework for trauma-informed practices exists in the form of the SAMHSA framework, the application of the concept may vary across and within organisations and services (Hanson & Lang, 2016; Thomas et al., 2019). Berliner and Kolko (2016) assert that an ongoing challenge exists in having a clear operationalisation of trauma-informed practices to be able to maximise understanding and implementation. One example of the problematic variability in the applied definition of trauma-informed practice was found in a study by Donisch et al. (2016). This study examined a selection of mental health services, child welfare services, juvenile justice, and education programs that aimed to improve outcomes for children who had experienced trauma. Individuals from the organisations ($N = 126$) participated in focus group sessions, and their understanding of trauma-informed practices was assessed in questions based on the SAMHSA framework. Their answers highlighted the discrepancy in the definition and operationalisation of the concept of trauma-informed practice. Inconsistency was found not only across the different settings but also within the practitioners’ field. Regardless of having a common goal, all approached this trauma-informed lens through varying levels of knowledge and understanding, which resulted in varying implementation skills, assessment capabilities and strategies for treating trauma.

2.3.1 Teacher knowledge of trauma-informed practices.

Schools are increasingly being identified as potential sites for universal mental health promotion (Askell-Williams & Cefai, 2014; Atkins & Rodger, 2016; Graham et al., 2011; Toros & Tiirik, 2016). Universal (or Tier 1) mental health promotion is a model of providing support for all students regardless of their behavioural or emotional concerns (Berger, 2019). As part of this universal focus, strength-based approaches including positive psychology are commonly being proactively implemented in schools to increase resilience, promote healthy development and support social-emotional learning (Brunzell et al., 2016b; Cefai & Camilleri, 2015; Waters, 2011). For a school to be a mental health-promoting school, a commitment to a holistic approach is required by all staff. This involves all staff utilising their knowledge, self-efficacy, attitudes, practices, policies and procedures for mental health promotion and support (Dix & Murray-Harvey, 2011). This learning environment is where the implementation of trauma-informed practices and a teacher's mental health awareness form a part of inclusive practices in schools (Morton & Berardi, 2018). This universal and holistic approach can be applied to examining schools that are supportive of students who have experienced childhood trauma.

Schools are now widely considered to be ideally placed to support students, as the promotion of protective factors within school settings, such as positive teacher-student relationships, has been found to significantly mediate potential mental health difficulties (Cefai & Camilleri, 2015). Furthermore, the trauma-informed practice environment is not only supportive of students who have been exposed to traumatic stressors, but it may also benefit those who are undiagnosed, and the peers of trauma-affected children (Gubi et al., 2019, Cole et al., 2013). A trauma-informed understanding prevents the misinterpretation of behaviours resulting from trauma as other childhood behavioural problems and disorders, including ADHD and conduct disorders (Gubi et al., 2019; Cole et al., 2013). However, looking more specifically at educational settings, the empirical research into trauma-informed practices is limited (Quadara & Hunter, 2016) but growing.

2.3.1.1 The nature of trauma-informed practices in schools and classrooms.

An extensive review of such programs has been undertaken by Thomas et al. (2019). This review highlighted the inconsistencies with trauma-informed interventions in schools between 1998 and 2018. The researchers highlighted the “*siloed nature of empirical work around trauma-informed practices and the subsequent need for interdisciplinary inquiry and dissemination to change teaching practices.*” (p.423). This review aimed to identify the

forms of inquiry for trauma-informed school practice and the associated implications for teacher practice change. The review search included a focus on trauma-informed care/practice, changing teaching practice, school-age children, and intervention. A total of 33 studies met the final criteria across four different disciplines (education, social work, psychology/psychotherapy and multi-disciplinary). Within these 33 studies, the researchers identified 30 different interventions cited (such as the HEARTS program (Dorado et al., 2016)). It was noted that 32 of these 33 studies identified their study to be ‘effective’ to some degree, yet, with no standard measures of what determined a program to be effective.

Additionally, the review by Thomas et al. (2019) included an examination of the trauma related resources available for educators in the USA (including *‘Helping Traumatized Children Learn’* (Cole et al., 2013)) in determining the most frequently promoted practices. The resources ($N = 9$) identified were primarily found to be based on the SAMHSA framework and identified three specific content themes for trauma-informed practice development. The first content theme included the understanding of brain science, neurobiology, and mental health, and the subsequent potential fight, flight and freeze response experienced by a child. The second theme included shifting educator perspectives to employ empathetic responses, instead of a deficit lens when approaching student behaviour that is considered disruptive or problematic. Educator self-care and wellbeing were a focus of the third content theme. This review by Thomas et al. (2019) highlight the vast discrepancies experienced in developing an understanding of trauma-informed practices.

In the Australian context, Brunzell, Stokes and Waters (2016b) have been investigating Trauma-informed Positive Education (TIPE) as a framework for implementing trauma-informed practices in the classroom. This model was based on the research literature surrounding the need to focus on repairing the trauma-affected student’s dysregulated stress response, which includes addressing the changes in brain development that have affected regulation, emotions and learning. Secondly, this model focuses on repairing disrupted attachment style, through principles such as unconditional positive regard. Furthermore, they have addressed the need for positive psychology approaches to assist the students in strengths building and leading to an upward well-being spiral. The focus of TIPE aims to maintain the healing of developmental deficits, alongside providing the opportunity for psychological growth.

TIPE was explored further by Brunzell et al. (2016a) in exploring and utilising the experience base of teachers. This action research project involved nine Australian high school teachers working with trauma-affected students. These teachers identified four

themes of regulatory capacities within promising trauma-informed classroom practice, including the role of rhythm, self-regulation, mindfulness and de-escalation. This study revealed how teachers were able to integrate their learning about increasing regulatory capacities. Furthermore, the importance of the teacher's voice in developing trauma-informed knowledge and understanding and framing these processes in the individual educational contexts was highlighted.

The development of trauma-informed practices is continuing as more evidence-based studies enter the field. Hanson and Lang (2016), in their review of trauma-informed programs, found no research delineating professionals' perceptions about trauma-informed practices or its implementation on a larger scale. This difficulty in examining evidence-based practices is compounded by the different sectors (e.g. social work or psychology) approaching trauma-informed practices in varying ways (e.g. Donisch et al., 2016).

According to Weegar and Romano (2019) teachers have a deficiency in the knowledge of trauma-informed practices. This study explored teacher knowledge from the perspective of other professionals outside the classroom. The researchers interviewed school social workers and mental health practitioners, as well as surveying foster carers ($N = 49$) about teacher knowledge of trauma-informed practices. These professionals and carers responded that teachers had limited knowledge and skills related to trauma-informed practices. In particular, this perceived knowledge deficiency included understanding how maltreatment impacts brain development, the support available in their schools, and their role in supporting these children. However, it was also acknowledged that teachers face barriers in developing their understanding, including being overburdened and under-resourced, lacking time, and understanding their role.

Teacher knowledge of trauma-informed practices was explored by Anderson et al. (2015) with elementary teachers ($N = 25$) in the USA. This study began with a pre-assessment of teacher identified needs, which highlighted developing strategies for addressing challenging student behaviours as the primary area of knowledge. The training program then included a focus on neurohormonal/toxic stress impacts of trauma, positive behavioural strategies, stress reduction techniques and cognitive behavioural based classroom management techniques. In the post-workshop survey, teachers reflected primarily on learning the most about relaxation techniques (63%). Examples of knowledge identified at the post-training were that 94% of participants agreed that the disruptive behaviour of students might be linked to stress-related physiological changes. However, this

knowledge survey was not completed as a pre-intervention assessment, so knowledge growth is not discernible.

Another trauma-informed practice building strategy was investigated through the implementation of a trauma screening program in New York City (NYC) (Pataky et al., 2019). All students in two NYC middle schools completed an assessment that investigated their adverse childhood experiences. Following this, the staff came together to discuss the results related to the students in their schools. The researchers' comment that providing staff with real-time access to the data surrounding their students encouraged teacher engagement with the issues and effects of trauma. This process supports other recent findings which suggest that it is important to examine the extent of the pervasiveness and behavioural implications of trauma within school settings, as many staff may be unaware of the extent (Blodgett & Lanigan, 2018; Gubi et al., 2019).

As noted by Thomas et al. (2019), much of the work investigating teacher trauma-informed practices remains 'siloed' in individual intervention or professional development studies. While these studies demonstrate the potential for development of trauma-informed practices it remains that teacher understanding and knowledge is largely unknown.

2.4 Conclusion

In summary, there is evidence that a substantial number of Australian children are exposed to sources of traumatic stress. This review has considered developmental and school-related consequences of trauma-related conditions highlighting that educational implications for children are severe but may also vary. It appears that multiple or cumulative exposures pose a higher risk, while some subgroups of children and some subtypes of traumatic events pose a more significant risk for the developing child. As such, these findings indicate the complexity of understanding childhood trauma and the ensuing challenge for teacher education and professional development. Classroom teachers within Australia and beyond are highlighting the blurred line emerging between their role as a classroom teacher and other mental health responsibilities. However, they desire more knowledge about mental health and trauma as they are facing the complexities within their everyday classrooms. Furthermore, knowledge is essential to the development of a robust sense of teacher self-efficacy and the capacity of a teacher to build an inclusive classroom. This review highlights the need for closer examination of teacher knowledge and understanding, the training teachers have received, as well as the specific role of a teacher in supporting a child's mental health. As such, this study aims to provide an assessment of the

foundational knowledge and practice base of NSW primary school teachers as they work to support trauma-affected students in their schools.

2.5 Research Questions

The specific research questions and sub-questions that will be addressed are:

1. What are teacher levels of mental health and trauma literacy?
 - a. How do teachers describe the effects of trauma on a student?
2. What are the influences of teacher self-efficacy, demographic factors (teacher age, experience, mental health diagnoses) and school factors (school type, ICSEA value and student diagnostics) on teachers' trauma and mental health literacy?
 - a. Is there a significant difference between teacher mental health or trauma literacy scores according to factors of gender, school type or professional learning?
 - b. Do teacher self-efficacy, teacher demographics (age, teaching experience, professional learning) and school factors (school type, ICSEA value and student diagnoses) predict teacher mental health and trauma literacy?
3. Are teachers employing trauma-informed practices in their self-reported classroom pedagogies and practices?
4. What are the sources of teacher professional learning, and what do teachers perceive to be the trauma-informed professional learning needs and challenges of the future?

3. Method

3.1 Study Design

This exploratory study employed an online survey to assess teacher knowledge, self-efficacy and trauma-informed practices. The survey-based methodology supported a systematic and structured approach to data collection and analysis (de Vaus, 2014, p. 3). An online administered survey was selected due to the advantages outlined by Roberts and Allen (2015) which include flexibility, low budget, rapid dispersion, as well as access to a diverse and geographically spread sample. These study design features supported the exploratory nature of the project which sought to access a broad representation of teachers in the vast demographical and geographical area of NSW, Australia.

This survey employed previously published and validated scales, as well as open-ended questions to assess broader teacher understanding and practices. The two specific scales were a modified version of the Educator Mental Health Literacy Scale (EMHLS) (Fortier et al., 2017) which included an additional set of trauma-related items developed for this study and the Teachers' Sense of Efficacy Scale (TSES) (Tschannen-Moran & Woolfolk Hoy, 2001). A full description of each survey is available in the Measures section below. Teacher responses to open-ended questions focused on teacher understanding of trauma and the implementation of trauma-informed practices. Additional short answer responses assessed professional experience, professional training and perceived training barriers. A range of demographic indicators were also assessed including teacher reported incidence of students with mental health or trauma related conditions in their classroom, school location, and school ICSEA value (socio-educational advantage indicator).

3.2 Pilot Survey

A pilot survey of ten primary school teachers (all known to the researcher) was conducted to assess the reliability and validity of this survey. The teachers were nine females and one male with a mean age of 41.7 years ($SD = 17.61$) and mean teaching experience of 12.8 years ($SD = 12.5$). The pilot survey was conducted in the fortnight before the release of the final survey. Cronbach's alpha was used to assess the internal consistency of the EMHLS. The total scale responses indicated high reliability ($\alpha = 0.95$) and the newly developed trauma items also demonstrated high internal reliability ($\alpha = 0.87$). Teacher responses to the open-ended survey items indicated all respondents understood the question

items and provided valid responses. No items required wording changes or further clarification.

Cronbach's alpha was also used to assess responses to the TSES. The pilot survey responses to the TSES pilot had a mean of 7.12 ($SD = 0.5$) which was similar to the TSES mean of 7.1 ($SD = 0.94$) reported by Tschannen-Moran and Woolfolk Hoy (2001). The Cronbach's alpha of 0.82 was lower than that reported by Tschannen-Moran and Woolfolk Hoy ($\alpha = 0.94$) although still acceptable reliability. As this is a commonly used scale, no items were deleted.

3.3 Participants

The survey received a total of 151 responses which were screened, and non-valid responses eliminated. The final sample included NSW primary school teachers comprising 132 female respondents and 7 male respondents. The a priori power analysis indicated 109 participants were required for 90% power for detecting a medium-sized effect with .05 criterion of statistical significance for correlations. Furthermore, a priori power analysis indicated that 120 participants were required for 90% power for detecting a medium-sized effect with a .05 criterion of statistical significance for the intended One-Way Independent ANOVA's.

The study employed specific inclusion and exclusion criteria to manage the focus on NSW teachers and eliminate invalid survey responses. Teachers were included in the study if they were currently teaching in NSW primary schools and identified as classroom teachers (as opposed to non-classroom staff such as administrative assistants). Four survey respondents were excluded from the final sample as they resided out of NSW, or did not identify as current classroom teachers, for example, were self-employed or retired from the profession.

The sample was reasonably representative of the general NSW teaching population. The respondents were 95% female, which was higher but reflected the typically higher proportion of female teachers in NSW (75%) in 2018 (Australian Bureau of Statistics, 2019). The sample had a mean age of 40.13 years ($SD = 11.01$) and a mean of 14.33 years ($SD = 10.5$) of teaching experience. Around one third (35.3%) of participants had a qualification higher than a Bachelor's degree which is significantly higher than that reported for the population of NSW government school teachers alone (19% hold a higher qualification) (Centre for Educational Statistics and Evaluation (CESE), 2015) (See Table 1).

As shown in Table 1, the different teaching sectors (NSW Department of Education schools, Catholic schools and independent schools) were well represented, with a slightly higher representation of respondents from NSW Department of Education schools (79.1%) than is currently reported in NSW (64% are government school teachers) (ABS, 2019). In contrast, there was a slightly lower number of respondents from Catholic schools (7.9%) compared to the proportion of Catholic school teachers (20%) in NSW (ABS, 2019). Independent schools were represented by 12.9% of respondents which was close to the proportion of independent school teachers (16%) in the state of NSW (ABS, 2019).

The number of respondents was also reasonably representative of the diverse location of NSW schools which range from metropolitan locations such as cities or large urban localities to outer regional localities which include rural and more isolated localities. For example, 77.7% of participating teachers were from metropolitan schools, and 75% of NSW government school teachers work in metropolitan schools (CESE, 2015). (See Table 1). The mean Index of Community Socio-Educational Advantage (ICSEA) ($M = 1035.5$) was slightly higher than the Australian mean of 1000 points (ACARA, 2015).

Table 1 Participant demographics

	n	%
Gender		
Male	7	5.0
Female	132	95.0
Ethnicity		
Australian	126	90.6
Indigenous Australian or Torres Strait Islander	3	2.2
China	2	1.4
Other ¹	8	5.6
School Sector		
Government	110	79.1
Independent	18	12.9
Catholic	11	7.9
Position		
Classroom Teacher	94	67.6
Assistant Principal/Stage Co-ordinator	18	12.9
Deputy Principal	3	2.2
Principal/Teaching Principal	5	3.6
Learning and Support	11	7.9
Specialist Subject	8	5.8
Highest Education		
Postgraduate Qualification	49	35.3
Bachelor's Degree	89	64.0
Diploma	1	0.7
School Remoteness		
Metropolitan Cities Australia	108	77.7
Inner Regional Australia	22	15.8
Outer Regional Australia	8	5.8
Remote Australia	0	0
Very Remote Australia	1	0.7

¹ Other ethnicities include Canadian, German, Indian, Italian, New Zealand, Palestinian, Scottish and Sri Lanken.

3.4 Measures

An online survey (see Appendix C) developed using Qualtrics survey software included demographic questions, two specific questionnaires, and open-ended questions. This survey was completed on average in 27 minutes by the participants in their own time. Each of these measures are outlined below:

Demographic questions:

Participant demographics were assessed in the areas of teacher qualifications, years of experience, age and gender. A range of school-related demographic information was also collected, including school postcode (as an indicator of urban or rural location), and school ranking on the Index of Community Socio-Educational Advantage (ICSEA). Student socio-educational advantage background was viewed as an important factor to examine as children from disadvantaged backgrounds are at a greater risk of experiencing traumatic events throughout childhood (Salazar, Keller, Gowen & Courtney, 2013). In particular, if communities have been touched by social vulnerability it is perceivable that the majority of students in those schools will have experienced significant stress (Blaustein, 2013). As such, the incidence of mental health and trauma-related diagnoses in the current classroom were also reported by the teacher. This incidence of diagnoses was important to collect because it is known that experience in teaching not only builds knowledge, but confidence, sense of mastery and self-efficacy (Wilson et al., 2018). Hence, this study was interested in not only the demographic information of incidence of mental health conditions in the classroom, but also whether or not this experience might predict teacher mental health and trauma literacy.

Mental health literacy:

Mental health literacy was assessed with the Educator Mental Health Literacy Scale (Fortier et al., 2017). The EMHLS consists of 13 questions assessed in three subscales including five questions assessing mental health awareness (e.g. “The risk factors and causes of student mental health issues.”), four questions assessing mental health knowledge (e.g. “The signs and symptoms of student mental health issues.”) and four questions assessing comfort with the concept of mental health (e.g. “Talking with students about mental health.”). Each subscale was rated on a 5-point Likert scale ranging from ‘1= not at all aware/not at all knowledgeable/not at all comfortable’ to ‘5= very aware/very knowledgeable/very comfortable’. A total score out of 65 was calculated for Educator Mental Health Literacy, as well as subscale scores of 25 for awareness, and 20 each for

knowledge and comfort. The initial scale was administrated in the Fortier et al., 2017 study (See Section 2.2.1.3). This scale was selected due to the scale being designed to examine the foundational mental health literacy base of educators in the district.

Trauma-related mental health literacy:

To assess trauma-related mental health literacy, two further items were developed to reflect each of the three subscales of the original EMHLS, specifically addressing teacher awareness of trauma (e.g. “The causes of trauma in a child’s life”), teacher knowledge of trauma (e.g. “The signs and symptoms of childhood trauma”) and teacher comfort with the concept of childhood trauma (e.g. “Providing support for a student who has experienced trauma”). All items were rated on a 5-point scale ranging from ‘1= not at all aware/not at all knowledgeable/not at all comfortable’ to ‘5= very aware/very knowledgeable/very comfortable’. A score of 30 was calculated for the total scale with subscale scores of 10. (See Table 3) (See Appendix C for all items).

Reliability analysis was carried out on the original items of the Educator Mental Health Literacy Scale and also for the newly developed trauma scale items. The resulting Cronbach’s alpha for the 13 items of the Educator Mental Health Literacy Scale was 0.95 and the six items of the Trauma Mental Health Literacy Scale produced an alpha of 0.91.

Teacher self-efficacy:

Teacher self-efficacy was assessed with the Teacher’s Sense of Efficacy Scale-TSES. The measure includes three subscales assessing instructional strategies, classroom management and student engagement, with items such as “*How much can you do to calm a student who is disruptive or noisy?*” (Tschannen-Moran & Woolfolk Hoy, 2001). This measure was considered appropriate to use due to its high reliability and the subscales which address important concepts related to classroom inclusion including classroom management and curricular differentiation that are pertinent to the concept of trauma-informed practice in this study. The TSES consists of 24 questions assessed in the three subscales with eight questions assessing self-efficacy for instructional strategies (e.g. “How well can you implement alternative strategies in your classroom?”), eight questions assessing self-efficacy for classroom management (e.g. “How well can you respond to defiant students?”) and eight questions assessing self-efficacy for student engagement (e.g. “How much can you do to help your students value learning?”). All items were rated on a 9-point scale ranging from ‘1= none at all’ to ‘9= a great deal’. A total score as calculated for teacher sense of self-efficacy, as well as a score for each subscale. Cronbach’s alpha was used to assess the

reliability of participant responses in the current study yielding an acceptable alpha of 0.96 for the total TSES. This was compared to 0.94 on the original Teachers Sense of Efficacy Scale (Tsachannen-Moran & Woolfolk Hoy, 2001).

Trauma understanding and practice:

Trauma knowledge, understanding and practice were assessed with two qualitative open-ended response questions. The first question, *“Please describe how you think childhood trauma might affect a child in the classroom and school environment”* was designed to assess teacher understanding and knowledge of the potential effects of trauma on a child’s life, in particular in the school environment. This question was developed from the SAMHSA framework, in particular, focusing on Part A *“a realization of the widespread prevalence and impact of trauma”*, and Part B *“a recognition of the signs of traumatic exposure”* (SAMHSA, 2014, p. 9). This question was qualitatively analysed with NVivo, utilising a priori themes developed from the literature. (See Section 2.1 for the educational implications of trauma). Further details of the analysis discussed below in Section 3.6 Analysis Plan.

The second open-ended question focused on teacher knowledge of potential trauma and mental health informed teaching practices, *“Please describe a typical example of teaching a child who has experienced trauma or mental health diagnoses”*. This question was developed from the SAMHSA framework, in particular, focusing on Part C *“a response grounded in evidence-based practices”* and Part D *“that resists re-traumatization of individuals.”* (SAMHSA, 2014, p. 9). This question was qualitatively analysed with NVivo, utilising a priori themes developed from the literature. (See Section 2.3 for Trauma-informed Practices). Further details of the analysis discussed below in Section 3.6 Analysis Plan.

Professional learning:

Professional learning was assessed with qualitative and quantitative questions designed to capture learning experiences emerging from formal and informal learning contexts such as professional development that might be offered by the school and informal learning that the teacher may engage in outside of these formal professional learning opportunities. The number of hours of formal professional development for both mental health and trauma training was recorded in a teacher estimate of the number of hours undertaken. This is a reasonable question in the state of NSW because all teachers are required to record and monitor their professional development activities for mandatory

teacher accreditation. Informal learning was assessed through a short-answer description of the type of independent learning. Three open-ended questions asked participants to comment on past professional learning providers, their perceived future learning needs, and perceived barriers to obtaining appropriate professional learning or knowledge.

3.5 Procedure

The participants were recruited through a purposive method instigated through social media channels identified by the researcher. The initial survey link was posted on four New South Wales teacher-specific Facebook Pages. These groups included “On Butterfly Wings-English & More”- a support group for the teaching of English and literacy, “On Butterfly Wings- Learning and Support”- a support group for teachers interested in specific learning strategies and methods to support students with additional learning needs, “TeachMeet-NSW” - a support group for NSW teachers to encourage the sharing of ideas through regular professional learning network meetings, and the “Australian College of Educators - NSW” which is a part of this national professional organisation for educators. These groups were selected due to their large reach of over 35,000 combined members, and very active presence in the teaching community as well as a strong NSW focus. The administrators for each group shared the survey link and also posted a ‘reminder’ link two weeks later.

After this initial distribution of the survey, a snowball sampling approach was used whereby participants were encouraged to send the survey link to other teachers. This was designed to ensure as wide a reach of the survey as possible including beyond these Facebook support group members. The survey remained open for four weeks, from November to December 2018. All responses remained anonymous, with care taken to ensure no teacher demographic questions could inadvertently provide any opportunity to match identities with responses.

3.6 Analysis Plan

Each research question was addressed through specific analysis, as shown in Table 2.

Research Question 1

First, the data was screened, and the descriptive properties of each measure reported to address research question 1 (*What are teacher levels of mental health and trauma literacy?*).

Question 1a (*How do teachers describe the effects of trauma on a student?*) was assessed with qualitative data emerging from the short answer response question(s). This was analysed with a coding scheme developed from current and past research studies, manuals and policy documents as reviewed in the Literature Review. Specifically, themes relating to understanding of trauma and the effect on a child were collated from studies by Anda et al. (2006), Breidenstein et al. (2011), Brunzell et al. (2016a, 2016b), Costa (2017), Daignault and Hebert (2009), Felitti et al. (1998), Kavanaugh et al. (2017), Marusak et al. (2014) and Tobin (2016). Similarly, policy and advocacy documents were screened to identify any further themes, including SAMHSA (2014). No further themes were identified in these additional documents.

Analysis commenced in NVivo 12 with the key areas of development reported in the literature, and new or more specific sub-themes were added as teacher responses were analysed. For example, in the area of neurological effects and cognitive development, several specific sub-themes emerged including memory function, attentional processes; in the key theme of socio-emotional effects specific subthemes emerged including emotion regulation, stress responses and peer relationships. The number of cases were recorded in each theme and the percentage of respondents who identified these themes. The number of identified trauma-informed codes were calculated for each respondent.

Research Question 2

Statistical analyses were carried out to address research question 2 (*What are the influences of teacher self-efficacy, demographic factors (teacher age, experience, mental health diagnoses) and school factors (school type, ICSEA value and student diagnoses) on teachers' trauma and mental health literacy?*). Pearson's correlation procedures were used to assess associations between the continuous variables of general mental health and trauma literacy, teacher age, years of teaching experience, professional learning hours, diagnoses in the class and school ICSEA value were analysed.

Question 2a (*Is there a significant difference between teacher mental health or trauma literacy scores according to factors of gender, school type or professional learning?*) utilised One-Way Independent ANOVA's to assess the group differences between gender, professional learning and school type, for mental health and trauma literacy.

Finally, to address question 2b (*Do teacher self-efficacy, teacher demographics (age, teaching experience, professional learning) and school factors (school type, ICSEA value and student diagnoses) predict teacher mental health and trauma literacy?*) a multiple linear

regression was utilised to assess any predictors of trauma and mental health literacy. Variables included demographic predictors, including age, gender, self-efficacy, teaching experience, and school type, experiences of teaching children with certain diagnoses, and professional development.

Research Question 3

The short-answer responses for question 3 (*Are teachers employing trauma-informed practices in their self-reported classroom pedagogies and practices?*) were analysed in NVivo 12 with an a priori approach. Themes were collated from studies outlined in the Literature Review, including Brunzell et al. (2016a, 2016b), Costa (2017), Kavanaugh et al. (2017), Marusak et al. (2014), Porche et al. (2016), and Thomas et al. (2019). Similarly, policy and advocacy documents were screened to identify any further themes, including SAMHSA (2014). No further themes were identified in these additional documents.

Analysis commenced in NVivo 12 with the key areas of development reported in the literature, and new or more specific sub-themes were added as teacher responses were analysed. For example, with practices relating to the importance of structure, several specific sub-themes emerged including expectations and routine; in the key theme of safety practices specific sub-themes emerged including plans and avoiding triggers. The number of cases were reported in each theme, and the percentage of respondents who identified these themes. The number of identified trauma-informed codes were calculated for each respondent.

A sample of the qualitative data was re-coded by a colleague for accuracy purposes.

Research Question 4

Finally, the short answer responses to question 4 (*What are the sources of teacher professional learning, and what do teachers perceive to be the trauma-informed professional learning needs and challenges of the future?*) were analysed in NVivo 12. Sources of professional learning were coded utilising emergent themes. Future learning needs were coded utilising the SAMHSA (2014) Framework (See p. 11). Short answer responses to future challenges were analysed utilising emerging codes. The percentage rates for each code were calculated.

Table 2: Measures and data analysis plan overview

Research Questions	Measures	Analysis Strategy
1. What are teacher levels of mental health and trauma literacy?	Educator Mental Health Literacy Scale (EMHLS) Trauma Mental Health Literacy Scale (TMHLS)	Descriptive analysis
1a. How do teachers describe the effects of trauma on a student?	Short answer responses	a priori thematic coding
2. What are the influences of teacher self-efficacy, demographic factors (teacher age, experience, mental health diagnoses) and school factors (school type, ICSEA value and student diagnostics) on teachers' trauma and mental health literacy?	Demographic information Educator Mental Health Literacy Scale (EMHLS) Trauma Mental Health Literacy Scale (TMHLS) Teachers' Sense of Efficacy Scale (TSES)	Descriptive analysis Pearson's Correlation
2a. Is there a significant difference between teacher mental health or trauma literacy scores according to factors of gender, school type or professional learning?	Educator Mental Health Literacy Scale (EMHLS) Trauma Mental Health Literacy Scale (TMHLS) School demographic information Teacher professional learning self-reports	One-Way Independent ANOVAs for each factor
2b. Do teacher self-efficacy, teacher demographics (age, teaching experience, professional learning) and school factors (school type, ICSEA value and student diagnoses) predict teacher mental health and trauma literacy?	Educator Mental Health Literacy Scale (EMHLS) Trauma Mental Health Literacy Scale (TMHLS) Teachers' Sense of Efficacy Scale (TSES) Demographic information	Multiple Linear Regression
3. Are teachers employing trauma-informed practices in their self-reported classroom pedagogies and practices?	Short answer responses	a priori thematic coding
4. What are the sources of teacher professional learning, and what do teachers perceive to be the trauma-informed professional learning needs and challenges of the future?	Short answer responses	a priori thematic coding

4. Results

4.1 Teacher Mental Health and Trauma Literacy.

The first research question addressed the level of teachers' mental health and trauma literacy. The mean and standard deviations are presented in Table 3.

Table 3: Mean scores of teacher mental health and trauma literacy

Scales	Mean	SD
Mental health literacy		
Awareness	3.43	0.85
Knowledge	3.33	0.93
Comfort	3.51	0.93
Total	3.44	0.83
Trauma literacy		
Awareness	3.41	0.95
Knowledge	3.00	0.99
Comfort	3.27	1.10
Total	3.23	0.91

As shown in Table 3, teacher's mental health literacy scores were in the moderate range, slightly above the midpoint of the scale. Similarly, trauma items also revealed scores slightly above the midpoint of the scale indicating that teachers felt moderately certain of their knowledge, awareness and comfort with these concepts. For both the mental health and trauma literacy scales, knowledge items had marginally lower means.

4.1.1 Teacher self-reported trauma knowledge and understanding.

Teacher understanding of trauma was further assessed in an open-ended question which asked teachers to report on their understanding of the effects of trauma on a student in the classroom. These short answer questions were coded by identifying the key behavioural or developmental indicators of trauma listed by the teachers and these were grouped in terms of the main effects reported in the literature and reviewed in Section 2.1. (See a priori coding scheme in Section 3.6 Analysis Plan). Of the teachers who responded to this question

($N = 139$), 78% of them identified five or more of the effects of trauma identified by the a priori coding scheme. There were 8% of respondents who identified two or less.

Overall, it was acknowledged by 21 (15%) of teachers that trauma affects all aspects of the child's life. This was seen through multiple references to the broad spectrum of developmental domains. For example, one teacher stated, "[Trauma] affects all aspects of the school and classroom environment...Socially, mentally, physically and academically." However, 10 (14%) teachers did acknowledge that the implications of trauma will vary.

Externalising behaviours were the most common effect noted by teachers using relatively simple descriptors such as "bad behaviour". A smaller number of reports were more specific or knowledgeable about behaviours that indicated greater awareness of the mechanisms or underlying cause of poor behaviour including the use of terms related to self-regulation and coping skills or references to 'flight or fight' responses. Internalising responses were also frequently mentioned with this category showing greater understanding of the effects of trauma on the child using more specific terms about the psychological state such as 'dissociative' or 'hyper vigilant'. A further 22 responses did not fit the a priori coding scheme. These instead focused on descriptions of teacher actions, the broad support required for students and teachers, as well as the classroom environment. The perceived effects of trauma are outlined below in Table 4.

Table 4: Perceived effects of trauma on a child in the classroom and school environments

a priori themes emergent sub-themes	Frequency of cases	% of respondents (N = 139)	Example
Externalising behaviours	159	77	
- Anger and physical aggression	59	35	“...lash out and have difficulty controlling anger...”
- Non-compliance or poor behaviour (generalised)	42	29	“presenting as ‘badly behaved’” “Stubborn attitudes also play a part of their lives.”
- Capacity for self-regulation	26	11	“...not able to cope with unfavourable situations.”
- Reactive externalising behaviours	21	14	“...fight or flight response when corrected or redirected.”
- Avoidance strategies	11	8	“...skipping school, not trying to complete work- avoidance.”

a priori themes emergent sub-themes	Frequency of cases	% of respondents (<i>N</i> = 139)	Example
Internalising Behaviours	125	58	
- Anxiety	26	17	“...may be anxious about certain activities or sounds.”
- Dissociation	45	29	“...avoidance, shutting down, selective mutism.” “...have dissociative characteristics.”
- Emotional	27	19	“...extremes in high and low emotional states, fear, sadness.”
- Hypervigilance	16	12	“Constant state of stress waiting for the unknown,” “Need adjustments to school behaviour policy because when viewed through the lens of trauma, all behaviours are a self-protection strategy.”
- Self-esteem	11	8	“...low self-esteem and low confidence levels as they can be afraid to ask for help.”

a priori themes emergent sub-themes	Frequency of cases	% of respondents (<i>N</i> = 139)	Example
Learning and Cognitive Development	106	75	
- Concentration and focus	50	36	“...can’t concentrate on what they are supposed to be doing.” “...disengaged learner.”
- Learning difficulties	22	16	“Needs constant 1:1 support to access the curriculum.” “...lack of motivation for learning.”
- Neurological changes /effects	6	4	“Impact on learning due to structural changes in the brain.”
- Academic achievement	28	20	“...underachieving academically.”
Attachment and Personal Relationships	54	66	“Struggles to make positive relationships with adult staff and students.”
Health	21	12	“...poor hygiene.”

4.1.2 Teacher reported incidence of mental health or trauma diagnoses in the classroom.

A total of 118 teachers provided a response to the first two questions on classroom incidence. From these responses, teachers reported an average of two students per class ($M = 2.44$, $SD = 2.58$) with mental health conditions and a similar number of students with a history of a traumatic experience ($M = 2.29$, $SD = 3.01$).

Secondly, a total of 97 teachers responded to the third question which addressed trauma diagnosis. Teachers reported fewer students with a known trauma diagnosis ($M = 0.62$, $SD = 1.13$) with less than one student on average reported in these classes.

A number of teachers did not respond to the question or indicated they were unsure if any students met the criteria for any of the conditions or had not perceived to have taught a student with these conditions. For example, one respondent commented, “I have not taught a child like this.”

4.1.3 Professional development and learning

Professional development was assessed with questions relating to the number of hours of formal professional development activities teachers had engaged in since beginning classroom teaching. Half ($n = 70$) of all respondents had some form of mental health training with a mean of 5.6 hours ($SD = 13.64$) with a range of 0 to 100 hours of training reported. There were over 30 different sources of formal mental health professional learning reported, included training delivered by the teacher’s employer (e.g. NSW Department of Education) and training offered in other mental health promotion strategies or specific programs (e.g. Kids Matter and Mental Health First Aid.) (See Appendix A for Glossary of Organisations).

Less than half ($n = 62$) (45%) of all respondents had attended trauma training with a mean of 1.66 hours ($SD = 3.47$) and a range of 0 to 20 hours. Over 20 different sources of formal trauma professional development were reported, including the teacher’s employer (e.g. NSW Department of Education) and the Berry Street Educational Model training offered by the non-government organisation in the state of Victoria known as Berry Street (see Appendix A for Glossary of Organisations).

A further descriptive question also asked if teachers had engaged in any informal learning and the source or type of informal learning. Less than half of all teachers ($n = 58$) reported engaging in any form of informal or self-directed learning (41.7%) with the most

common source of learning being reading from professional or online sources. For example, “Various professional articles on trauma especially as they relate to refugee students.”

4.1.4 Associations with and predictors of mental health and trauma literacy.

In question 2, we were interested in the characteristics of teachers, schools and classrooms that might be associated with mental health and trauma literacy, and may also predict mental health and trauma literacy scores in this sample of teachers. These variables included teacher age, years of teaching experience, qualifications, teacher self-efficacy, teacher reported rates of diagnoses in the classroom and school ICSEA values. (See Table 5, for the descriptive properties of these variables).

First, a Pearson’s correlation procedure was used to assess associations between the continuous variables of general mental health and trauma literacy, teacher age, years of teaching experience, teacher self-efficacy, diagnoses in the class and school ICSEA value.

Table 5: Pearson’s correlations among teacher and school demographic variables

	Mental health literacy	Trauma literacy
	r	r
Age (years)	.18*	.17*
Classroom Teaching Experience (years)	.11	.09
Mental Health Professional Learning	.21*	.24**
Trauma Professional Learning	.35**	.40**
Teacher Self-efficacy	.54**	.50**
Student Diagnoses		
Mental Health Diagnosis	.22*	.22*
Traumatic Experiences	.06	.14
Trauma Diagnosis	.24*	.28**
ICSEA	-.14	-.19*

* Correlation is significant at the .05 level (2-tailed)

** Correlation is significant at the .01 level (2-tailed)

As shown in Table 5, there was a small and significant positive correlation between teacher age and mental health and trauma literacy scores. However, there were no significant correlations between the mental health and trauma literacy scales and years of classroom teaching experience.

Furthermore, the hours of mental health professional learning had a small but significant positive correlation with both mental health and trauma literacy. The hours of trauma professional learning had a moderate and significant positive correlation with both mental health and trauma literacy.

As also shown in Table 5, a small but significant positive correlation was found between the number of students with a mental health or trauma diagnosis in the classroom and teacher mental health and trauma literacy scores. The school ICSEA value was also weakly and negatively significantly correlated with trauma literacy, suggesting that lower school ICSEA values were indicative of higher trauma literacy scores. It is also interesting to note that the overall correlation table demonstrated a significant negative correlation ($r = -0.37, p < .001$) between the number of children with a trauma diagnosis and school ICSEA value. This indicates that schools with a lower ICSEA value had higher teacher reports of children with a traumatic background.

In question 2a, we were similarly interested in whether there were differences in the categorical variables of teacher level of education, type of school or formal professional development. These variables were assessed in relation to mental health and trauma literacy in a series of One-Way ANOVAs.

A One -Way Independent ANOVA was conducted to assess potential differences in mental health and trauma literacy scores between teachers with different levels of education (grouped as postgraduate and undergraduate level of education). There was no significant difference in mental health literacy scores between those with postgraduate ($M = 44.25, SD=10.50$) or undergraduate ($M = 44.89, SD =10.97$) levels of education, $F(1, 137) = 0.11, p = 0.74$. There was also no significant difference in trauma literacy scores between those with postgraduate ($M = 18.63, SD = 5.23$) or undergraduate ($M = 19.77, SD = 5.58$) levels of education, $F(1, 137) = 1.37, p = 0.24$.

One-Way Independent ANOVA's were conducted to assess potential differences in the mental health and trauma literacy scores of teachers from different school types (government or non-government school types). There was no significant difference in the mental health literacy scores of teachers from government ($M = 44.95, SD = 11.12$) and non-government ($M = 43.55, SD =9.48$) schools, $F(1, 137) = 0.39, p = 0.54$. However, there was

a significant difference in the trauma literacy scores of teachers from government ($M = 19.84$, $SD = 5.47$) and non-government ($M = 17.59$, $SD = 5.15$) schools, $F(1, 137) = 3.97$, $p = 0.048$.

To assess the potential difference between the mental health literacy scores of those who had received formal mental health training and those who had not, a One-Way ANOVA was conducted. Those who had received mental health training ($M = 48.65$, $SD = 8.90$) had significantly higher mental health literacy than those who had not ($M = 39.71$, $SD = 10.92$), $F(1, 135) = 27.82$, $p < .001$. Similarly, there were significant differences in trauma literacy scores between those with mental health training ($M = 21.48$, $SD = 4.62$) and those with no training ($M = 16.78$, $SD = 5.28$), $F(1, 130) = 43.73$, $p < .001$.

To assess the potential difference between the mental health literacy scores of those who had received formal trauma mental health training and those who had not, a One-Way ANOVA was conducted. Those who had received trauma mental health training ($M = 49.11$, $SD = 9.69$) had significantly higher mental health literacy than those who had not ($M = 40.50$, $SD = 10.33$), $F(1, 130) = 24.23$, $p < .001$. Similarly, there were significant differences in trauma literacy scores between those with trauma mental health training ($M = 22.26$, $SD = 4.30$) and those who had not ($M = 16.77$, $SD = 5.13$), $F(1, 130) = 43.73$, $p < .001$.

To assess the potential difference between the mental health literacy scores of those who had received informal self-directed study and those who had not, a One-Way ANOVA was conducted. There was a significance found between the group who had informal self-directed study ($M = 49.82$, $SD = 10.01$) and those who had not ($M = 39.94$, $SD = 9.53$), $F(1, 125) = 32.18$, $p < .001$. Similarly, there were significant differences in trauma literacy scores between those who had completed self-study ($M = 22.21$, $SD = 4.79$) and those who had not ($M = 16.74$, $SD = 4.97$), $F(1, 125) = 39.80$, $p < .001$.

Predictors of Trauma Mental Health literacy

Multiple linear regression analysis was used to assess if participant demographics (age, years teaching), self-efficacy, teacher reported incidences of mental health/trauma diagnoses or professional learning predicted participants' trauma mental health literacy. Trauma mental health literacy was the focus of this regression model due to the aims of the study. Due to the small reported incidences of trauma-related condition groups, teacher reported trauma diagnoses and trauma experiences were combined in one 'trauma-related diagnoses' variable to attain a single variable with sufficient sample size. The results of the regression indicated the predictors explained 51.5% of the variance ($R^2 = .47$, $F(8,92) = 12.22$, $p < 0.01$). The predictors of trauma mental health literacy are listed in Table 6. As shown in Table 6, self-efficacy is the strongest predictor followed by mental health diagnoses and trauma professional learning.

Table 6: Predictors of trauma mental health literacy

Variable	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>p</i>
Constant	-3.06	5.51		-.56	.58
Age (Years)	.09	.07	.19	1.37	.17
Classroom Teaching Experience (years)	-.05	.07	-.10	-.74	.46
Mental Health Professional Learning	.01	.03	.01	.14	.89
Trauma Professional Learning	.40	.15	.21	2.7	<.01**
TSES	.13	.02	.57	7.7	<.01**
Student Diagnoses					
Mental Health Diagnoses	.46	.16	.22	2.84	<.01**
Trauma-related Diagnoses	.11	.14	.07	.75	.45
School ICSEA Value	-.01	.01	-.09	-1.1	.29

**Significant at the .01 level (2-tailed).

4.2 Self-Reported Trauma-Informed Classroom Practices

Question 3 asked if teachers employed trauma-informed practices in the classroom. These practices were examined with the question, “*Please describe a typical example of teaching a child who has experienced trauma or mental health diagnoses*”. This provided insight into the practices of NSW classroom teachers.

The written short answer responses were initially coded in NVivo using a priori themes developed from current trauma-informed literature and resources (e.g. Brunzell et al., 2016b; and Marusak et al., 2014), as outlined in the Literature Review. Additionally, the SAMHSA and TIPE frameworks were utilised. The a priori themes were then refined based on a secondary inductive analysis of the responses. The primary themes that emerged included a focus on the individual child, collaboration, relationship building, behavioural and emotional regulation, safety, structure and predictability, and finally social-emotional learning before academic learning (see Table 7.)

Of the teachers ($n = 92$) who responded to this question, 48 teachers (52%) identified five or more of the a priori trauma-informed practices in their responses. There were 19% of respondents who identified two or less trauma-informed practices.

The most common responses referred to structure and predictability (50% of all respondents), employing student centred practices (50%) and making academic adjustments (46%).

A small number of responses (5 cases from 5% of respondents) fell outside the a priori coding framework. These thematically highlighted the extent of the issue in their school, “This just touches the surface. It can be such a complicated matter.”

Table 7: Teacher descriptions of teaching practices

a priori themes emergent sub-themes	Frequency of cases	% of respondents (<i>n</i> = 92)	Example
Student-Centred	68	50	
- Information gathering	6	7	“I would consider the individual child and talk to parents/the child/other professionals (where relevant)/past teachers to find out more about them.”
- Understanding signs and symptoms	9	10	“I get to know my students and observe them so I can begin to see triggers and signs of issues. Some children show an almost shadow across their face - that’s all you see and it's so quick.”
- Communication	32	35	...make sure communication is open between relevant peoples including parents and other agencies.”
- Individualised plan	15	16	“Identify the needs of the specific child and their triggers if they have any.”
Academic Learning	42	46	
- Workload adjustments	35	38	“I reduce academic load for certain students if I can see they are not coping, so they can feel a sense of achievement and have a successful day at school.”
- Personal needs	7	8	“Need to address Maslow’s needs before any learning can occur.”

a priori themes emergent sub-themes	Frequency of cases	% of respondents (<i>n</i> = 92)	Example
Safety	51	56	
- Avoid triggers	7	8	“I would avoid trigger activities that I know would escalate the trauma symptoms.”
- Environment	11	12	“Providing a safe environment above all else.”
- Plans	11	12	“I am formulating ‘present, centred, grounded’ safety plans with each child to decide on a course of action if they feel unsafe/anxious/angry to help them calm down.”
- Calm-down (“time-out”) space	22	24	“...allowing child time to calm down away from other triggers, very difficult without teacher aide support in a class of 29 students when this student has very little resilience.”
Structure	46	50	
- Expectations	17	19	“Set clear expectations with firm reasonable consequences and rewards.”
- Routine	29	31	“Ensure the student knows and understands the rules and daily routines. Pre-warn the students of any anticipated changes to routine.”
Relationship Building	44	39	“Build a relationship that is safe and encouraging.”

a priori themes emergent sub-themes	Frequency of cases	% of respondents (<i>n</i> = 92)	Example
Social-Emotional Learning	43	37	
- Growth mindset	12	13	“Try to build a positive mindset in the child.”
- Individual instruction	11	12	“Reteach expected behaviours 1:1”
- Explicit teaching	20	22	“Explicitly teaching Social Emotional Learning [to the whole class] and revisiting this often” “...school-based activities and programs (mind up, bounce back)”
- Collaboration	50	31	
- Internal	30	19	“Inform all staff about particular children and strategies that work,” “...sending to counsellor”
- External	20	12	“...check in regularly with others involved, eg. parents, outside professionals.”
Regulation	21	23	“Scheduled brain breaks both indoors and outside inclusive of big body movements and mindfulness activities.”

4.3 Future Mental Health and Trauma Literacy Priorities

The desire for professional learning was evident in individual responses from teachers ($n = 67$). The responses of teachers were analysed against the SAMHSA trauma guidelines and are outlined in Table 8. One teacher commented: “I think the need for teachers to have more specialised training in mental health is so important. Kids are coming to school with so many extra stresses and more complex problems that influence their ability to concentrate and learn.”

Further training in understanding mental health literacy and childhood trauma was a priority for 80.6% of the 67 respondents who answered this question, with 12.2% unsure if they wished to receive further training. Future professional development desires included a very strong desire for strategies and practicalities of supporting students who may have experienced trauma or have a mental health condition. This was indicated by 78% of the participants who answered this question. (See Table 8).

Teachers also reported on the perceived barriers to further professional learning. It was noted that time was the most significant barrier as mentioned by 43% of the 70 participants who answered this question. This was followed by accessibility, school priority and budget. (See Table 9).

Table 8: Future professional learning

SAMHSA Framework	% of respondents (n = 68)	Examples
Strategies to support students	78	<p>“...how to support students AND families. Strategies to implementing classroom to support these students”</p> <p>“I would LOVE to explore how much I am and am not allowed to do in the classroom with my students. I would love to know I am doing ALL I possibly can to empower my students to overcome the negative effects of trauma.”</p>
General responses	16	<p>“Should be rolled out as mandatory training in all schools.”</p>
The signs of traumatic exposure	15	<p>“...more specific training around identifying students who may have experienced trauma.”</p>
Prevalence and impact of trauma	13	<p>“...understanding the impact if trauma on learning and development.”</p>
Resist their re-traumatisation	10	<p>“How to comfort students with trauma and how to avoid making it worse/retriggering students.”</p>
Information about evidence-based practices	3	<p>“...what difference a teacher can make using evidence-based strategies, who can support teachers to do this.”</p>

Table 9: Barriers to future professional development

Themes	% of respondents (n = 71)	Examples
Time	43	“Teachers have a lot going on.”
Accessibility	24	“Regional location.” “Knowing where to look.”
School Priority	16	“Needs to be included in School Plan to make PD available in this area. If not part of School Plan then not permitted for staff.” “...and feeling like there aren’t high numbers of children who have experienced trauma in my current classes so other priorities take over.”
No Barriers	16	“None. When relevant I would do this.”
Budget	14	“...money for a good casual to take my class while I am learning.”
Support	11	“Lack of in-class support to enable CRT (classroom teacher) to focus on implementing the practices correctly and consistently, and to inform the student’s network of support persons....”
Staffing	6	“My concern for the child in my class too take time off to go to these PD. A change - casual teacher, can send the child off and cause more problems for themselves and their classmates.”

4.4 Additional Teacher Responses

A number of additional comments ($n = 28$) were made by teachers throughout the survey and at the final “*Any other comments?*” short answer question. These responses do not specifically address the above research questions. However, were viewed by the researcher as important considerations and teacher experiences to include. These responses were analysed by emergent thematic coding.

The first theme ($n = 14$) to emerge from these additional responses was indicative of the need for support. Specifically teacher responses indicated a sense of perceived inadequacy in their position as a teacher, “It is very complex and requires multiple levels of support and understandings to make positive differences in the lives of the young people we work with and their families and sadly, the systems in place to support this are nowhere near sufficient particularly in rural areas.” This theme also reflected knowledge of support mechanisms, typified by responses indicating knowledge or lack of knowledge of how to receive support, as typified in these responses: “teachers don’t often know where to go to help them get support.” and “there is very little support or places to turn to for advice as each individual reacts to trauma very differently.” Another teacher acknowledged, “Schools may also be the only safe place where a child feels they can let this out if still in a traumatic situation at home.”

Secondly, the theme of focusing on the individual student was highlighted by teachers ($n = 6$). For example, “Approaches vary according to the needs of the child. Teachers have to be flexible and not rigid in their approach to teaching of children who have experienced trauma.”

Finally, a number of teachers ($n = 4$) left final comments at the conclusion of the survey indicating changes in their experiences and the rise in incidence of childhood trauma and mental health concerns, as well as the repercussions for schools from these perceived changes. For example, “Over the course of my teaching career, I have witnessed a significant rise in students who have experienced trauma and have additional mental health needs. I feel that teachers need to be better equipped to support these students with training and professional development opportunities.”

5. Discussion

Schools and classroom teachers are required to know their students and how they learn (AITSL, 2014), and are required to provide the best evidence-based practices to support student mental health and wellbeing (ACARA, n.d.). The majority of teachers in this study acknowledged that mental health and childhood trauma concerns were important considerations when supporting the students in their classrooms. The New South Wales primary school teachers in this study reported teaching an average of two students with a (teacher-reported) mental health diagnoses and two students with a (teacher-reported) history of traumatic experiences or trauma diagnoses in their current classes. Moreover, these teachers report only moderate levels of knowledge, awareness and comfort with mental health and trauma concepts. The closer study of the predictors of teacher trauma literacy revealed that this critical understanding is influenced by the modifiable factor of trauma professional development and the changeable factor of teacher self-efficacy.

This discussion will address the teacher knowledge and trauma-informed practice limitations that have emerged from this research. Following this, the role of mental health and trauma professional learning will be highlighted. Further, the implications of teacher self-efficacy and mental health will be discussed. Finally, the reported future professional learning needs will be considered before the project limitations and emerging future research concludes this section.

5.1 Teacher Knowledge- Limitations in Scope and Applications

It is evident from the responses of teachers describing the effect of trauma on a child's life that childhood trauma causes a widespread complexity in the education sector. As described by their reports of teaching such a student in the classroom, teachers were able to identify multiple affected domains of a child's life. However, limitations in both knowledge and practice were observed through the analysis of responses concerning both the current literature and the SAMHSA framework (SAMHSA, 2014). The discrepancy between knowledge and practice was demonstrated by the gap between the percentage of respondents who identified five or more effects of trauma (78%) and those who could then identify a further five or more trauma-informed practices (52%) in their responses. It is also significant that less than 20% of respondents identified less than two trauma-informed practices. This highlights not only potential teacher shortcoming in their knowledge of trauma-informed

practices, but also considerable potential ramifications in the learning and wellbeing of trauma-affected students.

Understanding that trauma may present as internalising or externalising behaviour is considered essential trauma knowledge for teachers to possess (Dods, 2013). Thus, it is a positive indicator of teacher knowledge that 77% of respondents in the sample noted externalising difficulties as a key feature of the effects of trauma on a child in the classroom. However, as also indicated in the reporting by teachers, these externalising behaviours were also what Gubi et al. (2019) referred to as potential misinterpretations of symptoms of trauma as merely ‘bad behaviour’. For example, there were 42 references about poor or non-compliant behaviour of students, often labelled as ‘bad behaviour’. This negative image of students highlights the possibility for students with mental health or trauma related conditions to be responded to in harsh or punitive ways (Cole et al., 2013). Such simplistic explanations of ‘bad behaviours’ may partly explain the very high rates of school exclusion (i.e. suspension and expulsion) experienced by students with mental health or trauma related conditions in NSW (Van Bergen et al., 2015). Recently, the state of NSW has indeed recognised that very high rates of school exclusion including for those with mental health conditions are of concern and a government review is currently in progress (Baker, 2019).

In comparison to externalising symptoms, fewer teachers (58%) in this study acknowledged internalising symptoms, such as low self-esteem. However, despite this being only a low proportion of the sample, it is indicative of some understanding that internalising symptoms are higher in trauma-affected children (Daignault & Hebert; 2009; Perfect, 2016). There was variability in teacher knowledge of internalising conditions, with some teachers able to use quite specific descriptors of the psychological effects of trauma, noting behaviours such as anxiety, hypervigilance or disassociation while other teachers referred to ‘avoidance’ or ‘not completing work’ or ‘stress’. These responses highlighted a focus on student-specific behaviour but not the trauma-related condition leading to this behaviour. While a detailed analysis of language was not the aim of this study, the descriptive language used by teachers to report the effects of trauma on a child in the classroom revealed the varied depth and scope of NSW teacher knowledge. Furthermore, over 40% of respondents did not identify *any* internalising behaviours (including emotions or anxiety), which may indicate a significant effect of trauma that is overlooked in the classroom. These results indicate a specific area of focus for future professional development programs.

Teacher short-answer responses about trauma-informed practices that were coded as practices that could potentially address both externalising and internalising behaviours were reported by only 50% or fewer participants. For example, almost 50% mentioned providing more structure and 46% mentioned addressing the feeling of safety in the classroom. This is despite the importance of increasing safety and structure for students (Gibbs et al., 2015; Weegar & Romano, 2019). Furthermore, this focus on structure and safety is an essential component of educational contexts, which may provide a calm and collected environment not otherwise experienced in a child's life (Cefai & Camilleri, 2015). However, it is troubling to note that less than 50% of respondents described these evidence-based practices. The high number of respondents that made no mention of safety or structure in their responses is concerning as it highlights potential teacher deficiency in practice knowledge in this domain. Moreover, a minimal number of teachers displayed deeper awareness of the effects of trauma on the child regarding the need to avoid re-traumatising the child (6%) or retriggering the child (5%). Highlighting a potential weakness in teacher trauma-informed practices.

Further limitations in trauma-informed practices were evident in that very few teachers referred to practices to address self-regulatory responses or the regulation of student emotional responses (23%). Increasing student self-regulatory capacities (e.g. Brunzell et al., 2016a) is a specific component of trauma-informed practice that has been demonstrated to assist students in regulating trauma responses. It is concerning that the large number of respondents who did not discuss social-emotional learning may not acknowledge the teacher's role in proactively (not just reactively) supporting student mental health (Maelan et al., 2018).

Significant deficits or disjuncture between teacher understanding and practice was also reflected in the content of their reports of the effects of trauma on children in the classroom and their subsequent reports of practices they employ in their classrooms. For example, despite the fact teachers acknowledged attachment or relationship problems as an effect of trauma, very small numbers of teachers (less than 30%) mentioned applying any form of pedagogical practices associated with improving relationships or social and emotional learning. Similarly, although learning and cognitive development were acknowledged effects of trauma by 75% of teachers, less than half the respondents commented on addressing trauma with any specific learning strategies or academic practices. Learning practices were primarily described as 'reducing the academic load' for students. This is despite the unequivocal evidence of the significant academic consequences of trauma (Anda et al., 2006; Daignault & Hebert, 2009; Kavanaugh et al., 2017). Both the absence of

social-emotional learning and the absence of mentioning any specific academic support strategies is concerning with the known association between learning and wellbeing (Waters & Loton, 2019). Significantly, the neurological consequences of trauma were generally not reported by teachers in this sample, with only 4% of respondents indicating any reference to specific neurological symptoms or effects. This is regardless of the high number of brain-related educational and behavioural implications of trauma, as well as toxic and cumulative stress effects discussed in the literature. (See Section 2.1).

The extent of teacher understanding and potentially negative attitude could also be seen in comments such as, “[The student] can’t concentrate on what they are supposed to be doing.” and “Stubborn attitudes also play a part of their lives.” These comments possibly reflect an issue of misinterpretation of trauma behaviour, as examined by Gubi et al. (2019). This could also lead to teachers adopting behaviour management consequences (including exclusion) rather than a trauma-informed response intended to de-escalate behaviours (Morton & Berardi, 2018). However, it was beyond the scope of this project to follow up and engage in deeper analysis of these teacher responses and thus it would be beneficial to conduct a much closer investigation of teacher attitudes as this may benefit programs aiming to implement trauma informed practices (McIntyre et al., 2019).

The limited scope of references to the effects of trauma, along with limited scope of practice-related descriptions to address these effects, could be explained by only moderate levels of trauma literacy reported by teachers in this study. This may be compounded by the narrow and higher focus of teachers in this study on the externalising conditions presented by students. This may mean that more teacher understanding and focus is directed to behaviour management than classroom pedagogical practices, which was the focus of the practice-related question in this study. As also noted by Howard (2018), until educators have developed knowledge about the (diverse) effects of trauma, they are less likely to engage in trauma-informed practices and training.

This leads to the next important finding of this paper which warrants further discussion here because of the significant implications for teacher practise in NSW. It was concerning that only 50% of teachers reported any professional development in mental health and 45% in trauma. This is despite the high prevalence of mental health conditions in Australian children (Lawrence et al., 2015). These results are similar to the over 40% noted by Howard (2018) of surveyed Queensland teachers who had not attended any trauma-

informed professional learning. This low rate of professional learning across Australia is concerning.

It is acknowledged that professional learning may take many forms, and much of this training is organised at the school level and reflects the priorities of the school, as also acknowledged by some respondents in this study (Howard, 2018). With a busy professional workload, teachers may not be able to organise their own training and may be unable to attend training in person. For this reason, informal self-study by teachers was investigated. For the 41.7 % of respondents to this question who had completed self-study, the majority of their reading material was acquired via the internet. This leads to further questions about the evidence-based nature of the resources being utilised and whether teachers understand the quality or sources of the evidence and prioritise this when selecting resources (Reinke et al., 2011). As mentioned by Reinke et al. (2011), school personnel do not typically select and implement school-based mental health resources in a systematic and fidelity focused manner.

The results of this study also highlight the lack of a consistent, potentially evidence-based professional learning source for teachers in NSW. This was evident in the large number of different providers from which individual teachers had received professional learning, totalling more than 40 mental health and trauma providers across the state. Even though the content of each of these training ‘modules’ is unknown to the researcher, it is known from the extant research reviewed in Chapter 2, that there is a paucity of research about trauma informed practices around the world and very few studies in Australia demonstrating the evaluation of any professional learning resources. This provides further evidence of an ad hoc and decentralised distribution of training in the state of NSW as has been previously noted in other Australian contexts (e.g. Howard, 2018; Mazzer & Rickwood, 2015). Without systematic provision of these learning opportunities for NSW and Australian teachers, teachers will continue to be underprepared for supporting students with mental health and trauma difficulties (Askell-Williams & Lawson, 2013; Howard, 2018).

Additionally, it is important to note that one of the only predictors of teacher mental health and trauma literacy was actual trauma professional development. This is a very surprising result to have attained significance considering so few teachers in this study reported specific trauma related professional development. Due to the lack of previous research in this field this regression analysis was exploratory. However, the results from this study support past research, including Jorm et al. (2010) and Askell-Williams and Lawson (2013), suggesting that mental health literacy can increase with a teacher’s professional

development. Thus, this regression finding is a strong indication of the potential of trauma professional development to make a significant difference in teacher knowledge, awareness and comfort with trauma in classroom.

However, the question remains as to how much more effective teachers may be in implementing trauma-informed practices with an increase in trauma literacy alone. The results of the study suggest that closer understanding of the teacher-knowledge and practice nexus is required in order to develop intervention programs that not only develop a detailed knowledge of the effects of trauma but assist teachers in matching this understanding with classroom practices and pedagogies to address the needs of children with these symptoms. To this end, the development of more recent programs guided by specific theory such as the TIPE program (Brunzell et al., 2019) show great promise in not only explaining to teachers the theoretical underpinnings of childhood trauma but also demonstrating specific practices, such as addressing self-regulation and increasing positive resources.

Alongside professional learning, teacher self-efficacy was also a strong predictor of mental health and trauma literacy for NSW teachers. It has been established in the literature that self-efficacy plays a substantial role in the intention for inclusion and mental health practices (Askell-Williams & Lawson, 2013; Sharma & Sokell, 2016). It was, therefore, encouraging to see the high positive correlation between teacher self-efficacy and mental health and trauma literacy. This positive relationship has been well-documented (Sundborg, 2019) and this study further demonstrates the role of self-efficacy in teacher knowledge, potentially reflecting a reciprocal relationship between self-efficacy and knowledge. Overall, there appears to be a strong desire reported by the NSW teachers in this study to increase their knowledge and sense of efficacy, as indicated by their self-reported future learning needs for specific support strategies to address the different abilities and needs that are present in their classrooms.

5.2 Moving Forward

Data from this project indicates that future training in trauma and mental health practices is a priority for the majority of teachers (over 80%). The strong desire for this training to focus on strategies to support students (78.1%) highlights the potential deficiencies NSW teachers may be feeling in their trauma-informed practices. The desire for strategies to support students facing emotional, behavioural, social and academic difficulties resonates with ongoing literature on teacher perceptions of supporting student mental health

needs (Askill-Williams & Cefai, 2014; Mazzer & Rickwood, 2015; Reinke et al., 2011). Further individual comments made by teachers highlight this ‘need’ they see for teachers to be better equipped to support the students in their care. These results reflect those found amongst teachers in the state of Queensland, with over 70% of teachers feeling the need to develop more skill and/or knowledge in trauma-informed practices (Howard, 2018). It is therefore essential that the implementation of learning processes to equip teachers to be trauma-informed begins with this foundational knowledge and their learning desires (Pataky et al., 2019). Furthermore, the learning process should be expanded to actively allow teachers to collaborate, design and understand the purposes of trauma-informed practices to meet the needs of vulnerable students (Brunzell et al., 2019).

It is relevant to note here that this focus on skills and strategies is in contrast to the non-teacher respondents in Weegar and Romano (2019), who expressed the high priority for teachers to be trained in understanding the effects on the brain. These professional and foster carer respondents perceived that this knowledge would help teachers understand the source of student behavioural problems as stemming from their trauma-related conditions. This difference between professionals/foster carers (as in the Weegar and Romano study) and teachers may reflect the overarching focus of teachers on their classroom practices, and perhaps reflects a gap in teacher knowledge and understanding that others consider essential. For example, Howard (2018) and Sundborg (2019) have stated that until teachers have a good understanding of the effects of trauma, they will not be able to practice effectively.

5.3 Limitations

This exploratory study of teacher mental health and trauma literacy was primarily limited by the lack of available measures in this emerging field of study (Graham et al., 2011). There were no validated instruments suitable for measuring trauma-informed knowledge (Sundborg, 2019) and thus a brief trauma literacy scale was developed for this survey based on a similar pre-existing scale. Although this scale had acceptable reliability, it was based on participant self-report, which has the potential for personal bias, such as over or underestimating a participant’s knowledge. While the use of short-answer responses provided more insight into participant knowledge, more developed surveys about specific areas of knowledge and practice are still required in this field. This need is demonstrated in the current study by the limitations in specific areas of teacher knowledge and practices that were revealed by the qualitative data of this study.

It is important to note that the teacher reported knowledge and practices in this study could not be linked to specific interventions or the development of actual trauma-informed practices. Furthermore, the use of both correlational and group comparisons means that causality cannot be determined. The use of the multiple linear regression did provide some insight into the predictors of trauma mental health literacy. However, the addition of further variables and factors not measured by this survey may have strengthened the model and results.

Due to the small scale of this study, and despite an adequate number of participants to support the analysis, the findings from this study would benefit from a more extensive study on groups of both NSW and Australian teachers, as policy and procedural decisions are being made at both national and state levels in education. A larger sample size would add scope to these results and investigate further the foundational levels of knowledge across the country. Similarly, we do not know why so few male teachers responded to this survey. It may be that the teacher support groups and web-based platforms used as data collection avenues are more reflective of female membership and therefore the survey did not reach many male respondents. However, this membership information was not available to the researchers, and we cannot speculate or comment any further on how this low number of male participants may have affected the reliability or validity of the data in this study.

Due to the nature of the topic, the survey may have been completed by more teachers who have a specific interest and concern about trauma-informed practices, and were, therefore, more inclined to complete the survey. However, this does not explain why so many respondents failed to answer the questions regarding experiences with students with a mental health or trauma-related diagnoses. It is speculative to guess why this may be; however, due to these questions being towards the end of the survey, participant fatigue may have been an issue. Furthermore, due to the time restrictions and thesis size limitations, the exploration of teacher practices could not include actual observation or data collection in classrooms.

5.4 Future Research

The teacher reports of practices in this study suggest very few specific trauma-informed practices as defined by frameworks such as SAMSHA. Future research with teachers in the classroom could involve more direct observation of actual classroom practices or data collection of teacher materials and school policies regarding managing and responding to students with mental health concerns. Furthermore, investigation of student

responses to these practices would add to the small (but slowly increasing) trauma-informed practice evidence base.

While not the focus of the study, the qualitative responses in the study highlight the serious emotional concerns expressed by some teachers who called for more support and training. Future research could consider the emotional burden and vicarious trauma of teachers working with trauma-affected children. Teacher emotional burden attached to working with students who have experienced trauma is well documented (Alisic, 2012; Brunzell et al., 2018), as is the potential for secondary trauma or vicarious PTSD. The effects of this were not addressed in this study. However, it should be acknowledged that teacher wellbeing has potential implications on teacher self-efficacy and practice. Furthermore, the isolation that teachers experience could be further explored, as comments such as: “the systems in place to support this are nowhere near sufficient, particularly in rural areas” are linked to the potential day to day struggles teachers may experience (Graham et al., 2011).

The findings of this research project support the call for quality evidence-based programs of training to be implemented across the state and country. A systematic approach across school sectors and within schools is recommended.

5.5 Conclusion

The findings from this study provide important insights about the educational implications of childhood trauma as seen through the eyes of teachers reporting their own knowledge and experiences. These implications are not restricted to the effects of trauma on the child but also extend to the practices and limitations to practice reported by these teachers who are responding to mental health and trauma in their classrooms. This study has provided insights into these practices and highlights the limitations of this knowledge and practice. This study also highlights a deficit in professional learning and a lack of a consistent or common training resource for teachers. Alongside the research by Howard (2018) and Brunzell et al., (2019) in exploring the trauma-informed practices of Australian teachers, this study lends support to the call for a more systematic and state-wide implementation of trauma-informed practices in Australian classrooms.

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Appendix A: Glossary of Australian Organisations

Organisation Name	Details
Australian Childhood Foundation	An organisation supporting children affected by trauma and child abuse. Provides therapeutic services for children, raises awareness and equips educators and professionals. https://www.childhood.org.au/
Berry Street	A child and family support service which includes a focus on healing childhood trauma, assisting children to learn, building stronger families and provider of the Berry Street Education Model. https://www.berrystreet.org.au/
Beyond Blue	An online mental health support service to connect people to professionals for support and provide mental health information. Oversees Be You. https://www.beyondblue.org.au/
Be You	An online resource providing educators with knowledge, strategies and resources for helping children with their mental health. https://beyou.edu.au/
Headspace	The national mental health support service for young people. Providing youth counselling and professional support centres, and resources and training for health professionals and educators. https://headspace.org.au/
KidsMatter	A previous national mental health service for children providing resources to schools, families, professionals and children. Consolidated to become BeYou in June 2017.
MindMatters	A previous national mental health service for secondary school youth providing resources to schools, families, professionals and youth. Consolidated to become BeYou in June 2017.
Response Ability	A previous national mental health service for preservice educators providing resources to support the mental health of children and young people. Consolidated to become BeYou in June 2017.

Appendix B: Participant Consent Form

**Faculty of
Human Sciences**



**MACQUARIE
University**

Dear Teacher,

Topic: Student mental health and trauma in the classroom: Learning from teacher experiences.

You are invited to complete a survey for primary school teachers who are currently eligible to teach in New South Wales Primary Schools.

The study aims to investigate primary school teachers' classroom experiences and knowledge of student mental health and trauma. Currently we have little understanding of this issue and further information from classroom teachers may support the design of resources and professional development programs for teachers.

This study is currently being conducted by Kate Eastman as a part of the Master of Research program and is supervised by Dr Anne McMaugh (Department of Educational Studies) Macquarie University. Please direct any questions you may have about this study to Kate at [REDACTED].

Data collected through this online survey is anonymous. No personal details or identifying information will be collected. The survey will take up to 20 minutes to complete. The survey will collect 1) some general demographic details such as your teaching experience, age, gender and school postcode; 2) your knowledge about student mental health and trauma related experience; 3) your current classroom experiences of teaching such students; 3) any professional development course or study you may have completed in this area and 4) your feeling of confidence and support to teach students with these conditions.

Data will be accessed only by the research team conducting this study and findings will be reported in the student's thesis and may also be reported in a published journal or conference presentations. A report of the study findings will also be made available via the organisation that sent you this survey link. Report findings from the study can be made available to you upon request.

If for any reason this survey, which addresses mental health difficulties for students within schools, causes you discomfort or unease, you may discontinue the survey. If you require further support you may contact your Employee Assistance Program for free confidential counselling.

Alternatively, the following support services may be contacted:

Lifeline-13 11 14 - www.lifeline.org.au

Beyond Blue- 1300 224 636 - www.beyondblue.org.au

Sane Australia Helpline- 1800 187 263 - www.sane.org

Participation in this study is entirely voluntary: you are not obliged to participate and if you decide to participate, you are free to withdraw at the conclusion of the surveys before submitting your responses without having to give a reason and without consequence.

The ethical aspects of this study have been approved by the Macquarie University Human Research Ethics Committee. If you have any complaints or reservations about any ethical aspect of your participation in this research, you may contact the Committee through the Director, Research Ethics & Integrity (telephone: (02) 9850 7854; email: ethics@mq.edu.au). Any complaint you make will be treated in confidence and investigated, and you will be informed of the outcome.

I have read and understand the information above and any questions I have asked have been answered to my satisfaction. I agree to participate in this research, knowing that I can withdraw at the conclusion of the surveys before submitting my responses without having to give a reason and without consequence.

When you have read and understood the requirements of this survey and are happy to proceed,
please click on the 'YES' button."

I consent to participate in this survey.

YES

NO

Appendix C: Teacher Survey

Survey Questions	Response	
PART A- Experience and Demographics		
Please complete the following questions relating to general demographics.		
1. What is the highest level of education you have received?	Bachelor's Degree Graduate Certificate Graduate Diploma Master's Degree PhD Other:	
2. How many years classroom teaching experience have you had?	Enter number	
3. Are you an early childhood, primary or secondary school teacher?	Early Childhood Primary Secondary	
4. What is your current teaching position?	Classroom Teacher Specialist Teacher (e.g. PE/Music) Learning Support Assistant Principal/Stage Co-ordinator Deputy Principal Teaching Principal Principal/Head of Primary Retired On leave Casual Other:	
5. Where is your school located? Please enter the postcode.	Postcode	
6. What is your school ICSEA value? Available here https://www.myschool.edu.au/	Number	
7. In what type of school are you working? Tick all that apply	Independent Department of Education Catholic Systemic Single Sex (Male) Single Sex (Female) Co-educational Mainstream school with a special unit Special School Other (please specify):	
8. What is your gender?	Male Female Other	
9. What is your age?	Enter #	
10. What is your ethnicity? (drop down)	Australia	English
	Indigenous Australian or Torres Strait Islander	India
	New Zealand	Other:
	China	

PART B- Mental Health Literacy and Childhood Trauma

The following questions relate to mental health literacy and childhood trauma.

Awareness

1. 'How would you rate your awareness of each of the following?'

A 5-point scale ranging from '1= not at all aware' to '5= very aware'.

1. The range of mental health issues that children and youth experience during the school years.
2. The risk factors and causes of student mental health issues.
3. The types of treatments available to help students with mental health issues (e.g. counselling).
4. The local community services for treating students with mental health issues (e.g. do you know whom to call?).
5. The steps necessary to access local community services for mental health issues.
6. The support services available for children who have experienced trauma.
7. The causes of trauma in a child's life

Knowledge

2. 'How would you rate your knowledge of each of the following?'

A 5-point scale ranging from '1= not at all knowledgeable' to '5= very knowledgeable'.

1. About the signs and symptoms of student mental health issues.
2. About appropriate actions to take to support student mental health at school.
3. About legislation related to mental health issues (confidentiality, consent to treatment, etc.).
4. About school system services and resources for helping students with mental health issues.
5. About appropriate evidence-based strategies to prevent re-traumatisation of students.
6. About the signs and symptoms of childhood trauma

Comfort

3. How would you rate your comfort for each of the following?

A 5-point scale ranging from '1= not at all comfortable' to '5= very comfortable.'

1. Talking with students about mental health.
2. Talking with parents/caregivers about their child's mental health.
3. Providing support to students with mental health issues
4. Accessing school and system services for students with mental health issues.
5. Responding to the support needs of students with a trauma background.
6. Providing evidence-based support for a child who has experienced trauma.

4. Please describe how you think childhood trauma might affect a child in the classroom and school environment: ...

Please do not identify or name any child in your response.

PART C- Teacher Experiences in the Classroom

The following questions are designed to gain a better understanding of the kinds of things that create challenges for teachers.

Directions: Please indicate your opinion about each of the questions below by marking any one of the nine responses in the columns on the right side, ranging from (1) "None at all" to (9) "A Great Deal" as each represents a degree on the continuum.

Please respond to each of the questions by considering the combination of your current ability, resources, and opportunity to do each of the following in your present position.

1. How much can you do to get through to the most difficult students?
2. How much can you do to help your students think critically?
3. How much can you do to control disruptive behaviour in the classroom?
4. How much can you do to motivate students who show low interest in school work?
5. To what extent can you make your expectations clear about student behaviour?
6. How much can you do to get students to believe they can do well in school work?
7. How well can you respond to difficult questions from your students?
8. How well can you establish routines to keep activities running smoothly?
9. How much can you do to help your students value learning?
10. How much can you gauge student comprehension of what you have taught?
11. To what extent can you craft good questions for your students?
12. How much can you do to foster student creativity?
13. How much can you do to get children to follow classroom rules?
14. How much can you do to improve the understanding of a student who is failing?
15. How much can you do to calm a student who is disruptive or noisy?
16. How well can you establish a classroom management system with each group of students?
17. How much can you do to adjust your lessons to the proper level for individual students?
18. How much can you use a variety of assessment strategies?
19. How well can you keep a few problem students from ruining an entire lesson?
20. To what extent can you provide an alternative explanation or example when students are confused?
21. How well can you respond to defiant students?
22. How much can you assist families in helping their children do well in school?
23. How well can you implement alternative strategies in your classroom?
24. How well can you provide appropriate challenges for very capable students?

PART D- Professional Development and Experience

The following questions relate to professional development and experience.

Have you received any specific training or professional development (PD) about student mental health or childhood trauma?

1. Mental health?	<p>Yes/No/Unsure If yes...</p> <p>a. Do you remember how many hours of training or PD</p> <p>b. How beneficial was this training /PD to your understanding of mental health?</p> <p>1= 'Not at all beneficial' to 5= 'Highly beneficial.'</p> <p>c. Do you remember the name of the training program or organisation that trained you or delivered the PD?</p>
2. Traumatic events or trauma related disorders in childhood?	<p>Yes/No/Unsure If yes...</p> <p>a. Do you remember how many hours of training or PD??</p> <p>b. How beneficial was this training/PD to your understanding of trauma? 1= 'Not at all beneficial' to 5= 'Highly beneficial.'</p> <p>c. Do you remember the name of the training program or organisation that trained you or delivered PD?</p> <p>d. How much did this training/PD address any of the following? 1= 'Not at all' to 5= 'Very much so.'</p> <ol style="list-style-type: none"> 1. The prevalence and impact of trauma. 2. The signs of traumatic exposure. 3. Information about evidence-based practices. 4. Strategies to support students and resist their re-traumatisation.
3. Have you completed any self-study or reading on the topic of mental health or childhood trauma?	<p>Yes/No/Unsure</p> <p>Please describe your self-study or reading:</p>
4. Do you know of any forms of support for you to learn more about trauma and implementing evidence-based practices in your classroom??	<p>Briefly describe here:</p>
5. Do you know of any barriers to you learning more about trauma and implementing evidence-based practices in your classroom	<p>Briefly describe here:</p>
6. Would you like to receive more training and professional development in the topics of mental health or childhood trauma?	<p>Yes/No/Unsure</p> <p>Please describe anything specific or particular, you would like to know more about in further training?</p>

Have you taught any students with mental health diagnoses or childhood trauma histories?	
7. Do you know of any children with <i>mental health diagnoses</i> in your class this year?	Yes/No/Unsure. How many children? (Enter number)
8. Do you know of any children with a history of <i>traumatic experiences</i> in your class this year?	Yes/No/Unsure. How many children? (Enter number)
9. Do you know of any children with <i>specific trauma related mental health diagnoses</i> in your class this year?	Yes/No/Unsure How many children? (Enter number)
10. If yes, please describe a typical example of teaching a child who has experienced trauma or mental health diagnoses. <i>Please do not identify or name any child in your response.</i>	Please describe here:
11. Do you have any other comments you would like to share? <i>Please do not identify or name any child in your response.</i>	Short answer

Thank you for participating in this survey. Please share this survey with others in your teaching network.

If anything from this survey has raised concerns for you, please contact your school's Employee Assistance Program for free, confidential support. Alternatively, the following support services may be contacted:

Lifeline-13 11 14 - www.lifeline.org.au

Beyond Blue -1300 224 636- www.beyondblue.org.au

Sane Australia Helpline- 1800 187 263

If you have further questions, please contact Kate at kate.eastman@students.mq.edu.au.

If you would like to learn more about mental health or the impact of traumatic experiences on children, these following resources may be beneficial to you:

KidsMatter <https://www.kidsmatter.edu.au/primary>

Australian Childhood Foundation <https://professionals.childhood.org.au/>

As a thank you for your time, you have the option of entering a draw to win one of four \$50 Coles Myer vouchers.

If you would like to participate, please enter your email address below. Email addresses will not be associated with your survey responses. Email:

Appendix D of this thesis has been removed as it may contain sensitive/confidential content