



**EXPLORATION OF THE BARRIERS AND ENABLERS OF MAINSTREAM
CLASSROOM TEACHERS ACCESSING PROFESSIONAL DEVELOPMENT ON
TRAUMA INFORMED CLASSROOM PEDAGOGY: THE NATIVITY OF THE
EMBRACE FRAMEWORK**

A Thesis submitted by

Simone Collier

For the award of

Doctor of Professional Studies

2022

ABSTRACT

Over the past decade, considerable focus has been on the classroom and disciplinary responses that disproportionately affect students enduring adversity and disadvantage. A considerable body of research exists that supports the relational approach of trauma informed practice to mitigate the effects of risk factors in the lives of children with developmental trauma. It is an area that emphasises the interpersonal skills of adults rather than focusing on the knowledge and behavioural skills of the child. As part of an Exploratory Sequential Mixed Methods research project, this project explores the barriers and enablers for mainstream classroom teachers engaging in professional development

This exegesis discusses the methodology, rationale, and results for this research project through examining the qualitative research process undertaken with a group of sixteen mainstream primary school teachers through semi-structured interviews. This is followed by a quantitative study consisting of a forty-item online survey with 300 teachers to determine if the results from the qualitative study can be attributed to a wider population. This research project is a thesis by publication with two of three articles published and the third paper submitted and under review by the journal at the time of submission of this exegesis.

These results are consistent with the literature and highlight the problem being greater than single classroom teacher practice and possibly are amendable with policymakers and leadership staff making changes to practice, policies, and frameworks at a sector and school level. These results have significant implications for future framework implementation in school settings and the researcher has contributed to practice and knowledge in the sector through the development of a framework titled, "*The Embrace Framework*" that is informed by the findings from this research project.

CERTIFICATION OF THESIS

I, Simone Collier, declare that the PhD Thesis entitled, “Exploration of the barriers and enablers of mainstream classroom teachers accessing professional development on trauma informed classroom pedagogy: The nativity of the embrace framework” is not more than 100,000 words in length including quotes and exclusive of tables, figures, appendices, bibliography, references, and footnotes.

This Thesis is the work of Simone Collier except where otherwise acknowledged, with the majority of the contribution to the papers presented as a Thesis by Publication undertaken by the student. The work is original and has not previously been submitted for any other award, except where acknowledged.

Signed:



Date: 19/5/22

Endorsed by:

Karen Trimmer

Principal Supervisor

India Bryce

Associate Supervisor

Govind Krishnamoorthy

Associate Supervisor

Student and supervisors' signatures of endorsement are held at the University.

STATEMENT OF CONTRIBUTION

An acknowledgment of the collective contribution of all authors in the three papers (2 published and the third paper is under review) is outlined below.

Paper 1:

Collier, S. Bryce, I. Trimmer, K. and Krishnamoorthy, G. (2022). Evaluating frameworks for practice in mainstream primary school classrooms catering for children with developmental trauma: an analysis of the literature. *Children Australia*
<https://doi.org/10.1017/cha.2020.53>

Student (Collier, S.) contributed 70% to this paper. Collectively Bryce, I., Trimmer, K., and Krishnamoorthy, G. contributed the remainder 30%.

Paper 2:

Collier, S. Bryce, I. Trimmer, K. and Krishnamoorthy, G. (2022). Roadblocks and Enablers for Teacher Engagement in Professional Development Opportunities Aimed at Supporting Trauma-informed Classroom Pedagogical Practice. *Journal of Graduate Education Research*. 3 (10). <https://scholarworks.harding.edu/jger/vol3/iss1/10>

Student (Collier, S.) contributed 70% to this paper. Collectively Bryce, I., Trimmer, K., and Krishnamoorthy, G. contributed the remainder 30%.

Paper 3:

Collier, S. Bryce, I. Trimmer, K. and Krishnamoorthy, G. (2022). Validation of the barriers and enablers for teachers accessing professional development of trauma informed pedagogy. Under review with *Social Science and Humanities Open*

Student (Collier, S.) contributed 70% to this paper. Collectively Bryce, I., Trimmer, K., and Krishnamoorthy, G. contributed the remainder 30%.

ACKNOWLEDGEMENTS

This exegesis document is dedicated to my greatest supporter, my wonderful husband, Rod Collier who has listened to, brainstormed with, and lamented over many points and worries along my research journey. His unwavering belief in me and my end dreams to make a difference in a world for those children who deserve to also have dreams, I will be forever indebted to him.

My unwavering gratitude is extended to my Associate Supervisor and colleague, India Bryce who has without exception responded to my every query, question, worry, or lesson learnt over the past four years. Her expertise, interest, and tireless commitment to my research project and to my journey as a researcher, I will be forever grateful for.

A big thank you and acknowledgement is extended to Professor Patrick Danaher for taking his own personal time to review and provide comprehensive feedback on my exegesis. His kindness and expertise are gratefully received.

My grateful acknowledgement is extended to my Principal Supervisor, Professor Karen Trimmer, who has mentored me with research skills and expertise that have supported me throughout my research project.

Sincere gratitude to my parents, my late father, who sadly passed away twelve months ago and couldn't see this research journey completed, and my mother who remains a strong advocate for my tenacity and will to always be my best. My parents were proud supporters of me and insisted on my siblings and I valuing education and working hard at whatever endeavour we undertook. Their resilience, determination, and fearless ambition has propelled me through many challenges including this research journey.

This research has been supported by an Australian Government Research Training Program Scholarship.

TABLE OF CONTENTS

Abstract.....	i
Certification.....	ii
Statement of Contributions.....	iii
Acknowledgements.....	iv
Table of Contents.....	v
List of Figures and Tables.....	viii
Situating Concepts	1
Chapter 1: Introduction and Overview.....	1
Trauma-informed Care & Schools	9
The Research Problem.....	11
Summary and Aims	12
Chapter 2: Literature Review	13
Background and Context	13
How Significant is the Problem?	15
Developmental Trauma	16
Effects of Trauma	18
Impact on Language Development.....	20
Impact on Stress Response and Emotional Regulation	21
Impact on Cognitive and Academic Functioning	23
Impact on Sensory Processing.....	25
Trauma and Educational Settings	27
Theories and Frameworks	30
Attachment Theory	35
Trauma Theory	36
Behaviourist Theory	37
Family Systems Theory	38
Trauma-Informed Care	38
Trauma-Informed Care in Schools	39
Impact on Teachers When Working with Developmental Trauma.....	41
Areas of Controversy.....	43
Adapted Framework to Support Trauma-Informed Care in Schools	53
Training, Coaching, Mentoring and Supporting Trauma-informed Practice Within a School.....	54
Trauma Aware Education.....	56
Practical Context.....	58
Chapter 3: Research Design and Methodology	58
Introduction	58
Philosophical Assumptions.....	58
Ontology, Epistemology, and the Researcher	60

Axiology and the Researcher.....	61
Methodology – Exploratory Sequential Mixed Methods (ESMM).....	64
Method.....	66
Study 1: Qualitative Data Collection and Analysis – Interviews	67
Study 2: Develop Survey Instrument and Pilot Study	70
Study 3: Quantitative Study.....	74
Ethical Considerations	76
Chapter 4: Results.....	77
Study 1	77
Results Study 2	85
Conclusions & Creations.....	90
Discussion.....	90
Enablers and Barriers to Professional Development for Trauma-informed Pedagogy	90
Theoretical Implications of this Research Project	91
Practical Implications	93
Limitations.....	94
Future Research	95
Conclusion.....	96
References.....	98
Appendix A.....	128
Appendix B: Thematic Analysis	138
Appendix C: Thematic Map	140
Appendix D: Initial Survey	141
Appendix E: Final Survey tool.....	145
Appendix F: Framework of Practice.....	163

List of Figures

Figure 1: Visual representation of the frameworks of practice, systems & contexts within the ecological-transactional Model.....	34
.....	34
Figure 2: School-wide positive behaviour support model used in Queensland Schools	50
Figure 3: Adaptation of the ecological systems model to demonstrate a multilevel and transactional framework applied to school-wide positive behaviour support (SWPBS) and community systems to explain the ecological impacts on a child who has experienced developmental trauma.	52
Figure 4: Chafouleas et al's. (2016) multitiered framework for school-based service delivery	53
Figure 5: Methodological research approach outlining the research process in this exploratory sequential mixed-methods research project	63
Figure 6: The strategy for Study 2 and Study 3 of this research project.	75

List of Tables

Table 1: Aspects of a survey considered during the pilot study	73
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SITUATING CONCEPTS

CHAPTER 1: INTRODUCTION

Overview

As the age-old adage goes, ‘a system is always perfectly aligned to the results’ (Batalden, 1980). This phrase has contributed significantly to the evolution of this research project. Indeed, it invokes reflection and insight into the accountability of systems and subsystems responsible for and evaluated according to outcomes and results.

The field of practice-led research is seen as an emergent and unique research paradigm centring on creative practice as an outcome of this research process (Hamilton & Jaaniste, 2009). Such is the case in this instance, where a practice problem has been identified, research has been conducted, and a creative framework of practice has evolved as an outcome. The structure and content of this paper begin with Section 1 and an explanation of the *situating concepts* reflected in the introduction (Chapter 1). This is followed by the literature review (Chapter 2 & Article 1), which frames this research through the lens of contemporary practice informed by current theory and key concepts. This section includes key definitions, terms, concepts, and current issues that connect this research project to the fields of education and child protection. This section establishes a context for the reader to appreciate and understand the practice within these interdisciplinary fields.

The second section of this paper provides a *practical context* and focuses on the research process. This section includes the research design, methodology, philosophical assumptions, method, data collection, analysis, and results. This practical context section is reflected in Chapter 3, Chapter 4 and Article 2. A discussion of how the research unfolded and progressed, including the methods of development and iteration, are included in this section. The results are then presented in preparation for creating options to inform future practice to be discussed in Section 3 of this paper.

Section 3 discusses the *conclusions and creations* that will inform future considerations for education and child protection practice as contributions to knowledge become apparent. The conclusions drawn are reflected in Chapter 5 and Article 3, along with the discussion as key issues arising from the research highlighting what was discovered, achieved, and narrated.

Research Aims & Objectives

The primary objectives of this research project are to: a) examine the barriers and enablers for teachers to access professional development that will enhance their skill set and knowledge base when teaching children with developmental trauma; b) discover future trajectories, concepts and practices that may come to the fore due to the research and provide potential directions and suggestions for future research; c) Develop a practice framework that encompasses the emerging data and analysis as a possible solution to the initial research problem. Chapter 6 unveils a framework of practice, titled the Embrace Model, which was created following the research project. The Embrace framework encompasses the broader disciplines of education and child protection. The researcher has worked extensively within both these sectors and has an integral understanding of the issue raised through this research question. The Embrace framework offers a solution to this research problem and will provide schools and governments with an alternative framework to consider. This solution has significant implications for the children who are inevitably part of both systems. The framework solution that has evolved from this research project illustrates a solution to advancing these fields.

Research Question

The overall research goal for this exploratory sequential mixed methods (ESMM) research project is to answer the question, “*What are the barriers and the enablers for*

mainstream classroom teachers accessing professional development on trauma informed classroom pedagogy?”

Structure of this Research Project

This research question was addressed through a mixed methods approach and included three individual studies; Study 1: A qualitative study involving data collection through teacher interviews and data analysis, Study 2: Development of a survey and a pilot study to assess the survey instrument, and Study 3: A quantitative study using a survey tool to test the validity and reliability of results obtained from Study 1. This research project was research by publication project and includes the publication of two papers and a third paper submitted for review with a journal. Paper 1 is a conceptual paper titled: *“Evaluating frameworks for practice in mainstream primary school classrooms catering for children with developmental trauma: an analysis of the literature”* published by Children Australia (2020). Paper 2 highlights the results from the qualitative study and is titled: *“Roadblocks and enablers for teacher engagement in professional development aimed at supporting trauma informed classroom pedagogical practice”*, published by Journal of Graduate Education Research (JGER) in 2022. Paper 3 draws together the results from the quantitative study and the qualitative study and discusses the implications for schools and the larger teaching cohort and is under review with Social Science and Humanities Open Journal at the time of submission.

This exegesis outlines what is required for teachers to engage in professional development that addresses the impacts of trauma for children in the classroom. This research project culminates in the evolution of a practice framework that draws together key elements from the findings in Study 1 and Study 3. This framework is titled *“The Embrace Framework; A trauma focused framework of practice for mainstream school settings.”*

(Appendix F)

The Biographically Situated Researcher

Beginning my career as a Special Education teacher who taught in behaviour support and special education and mainstream settings for a number of years, the paradox of working with children both in mainstream and in special education settings who demonstrated behaviours that appeared so extreme, yet unprovoked and couldn't necessarily be explained by a diagnosis. Having worked as a Deputy Principal in student welfare and as a Guidance Officer there appeared to be no answers within the education sector to support these children who were consistently suspended and disengaged from education. Moving into the social work sector, initially in homelessness and domestic and family violence and then into child protection, a varied career of working with children and young people in Residential facilities and in complex care settings as well as out-of-home care with foster and kinship carers provided few answers. I am currently working in leadership and manager roles in child protection and currently in a State Project Manager role with Act for Kids setting up a program for developing bespoke individual support packages for highly vulnerable children and families across a family's ecologies. My involvement in a pilot research project in partnership with the University of Southern Queensland trialling an evaluative tool to measure cumulative harm in children and young people is a deep passion and being able to transfer this knowledge to teachers is a priority. I am deeply passionate about supporting children with complex trauma, my doctorate research investigating the barriers and enablers for mainstream classroom teachers to engage in professional development of trauma informed classroom pedagogy has prompted the development of a practice framework for schools. Recently, I published my first children's book, titled *Jeremy's Changing Family* which is focused on hearing the voice of a little boy who is the biological child of foster carers. The book explores the challenges and celebrations of a foster family and in particular the children of foster carers. The second book is currently under review

Teachers today are responsible for a diverse range of outcomes, including the safety and security of all students, academic achievement, welfare, and social, emotional, and physical wellbeing of children. This multifaceted accountability has constrained schools and staff to prioritise some results to the detriment of others (Stevenson et al., 2020). Teachers are expected to focus on curricula, assessments, governance, and pedagogical standards. A common theme throughout the literature includes education systems being aligned to produce some predictable outcomes, including high rates of student disengagement, low levels of reading proficiency, high incidences of behaviour problems and high rates of teacher attrition (Stevenson et al., 2020).

Teacher skills in engaging students in classroom instruction while managing challenging behaviours are a prerequisite for reducing teacher attrition rates and lessening the likelihood of student disengagement from education. The skills are required for productive and safe learning environments to be fostered. Despite this, teachers continue to lack specific training in classroom and behaviour management and report high levels of stress and vicarious trauma. Consequently, they are more likely to leave the profession (Ingersoll et al., 2018; Zabel & Zabel, 2002).

Classroom and behaviour management are often confused as synonyms. However, for the purposes of this paper, distinguishing between the two in practice is required. Classroom management emphasises instructing groups of students instead of focusing on individual students. Classroom management also refers to whole-class instruction but emphasises prevention and response to common behaviour problems that may be disruptive to student learning. Such behaviours may include relatively minor off-task behaviours such as leaving one's seat, talking to peers during instruction time, talking out of turn, distracting others, and yelling out. In contrast, behaviour management typically focuses on the specific behaviours of individual students, where the behaviours impact the student's learning and

social/emotional interactions, impacting other students around them and the teacher's capacity to teach the class on an ongoing basis. These behaviours may include violent and aggressive behaviours toward themselves and/or others, absconding, property damage and minimal engagement in academic material. These students will require a functional behavioural assessment (FBA) and the development of a behaviour intervention plan (BIP) to shape or replace the problematic behaviours with more socially appropriate behaviour to enable engagement in learning and social interactions. It is acknowledged that there is considerable overlap between classroom management and behaviour management.

Struggles with managing challenging classroom behaviours contribute to a range of adverse effects, including increased teacher stress and a decrease in job satisfaction (Wang et al., 2015; Klassen & Chiu, 2010; Landers et al., 2008, Smith & Ingersoll, 2004), along with negative impacts on student learning (Flower et al., 2017). The attrition rate of teachers in the first five years following graduation is as high as 40% in Australia and as high as 50% in the United Kingdom (Ewing & Manuel, 2005; Milburn, 2011). In Australia and overseas, the attrition rate is as high as 50% in lower socio-economic areas affected by poverty (Hong, 2010; Ingersoll, 2001). For special education teachers, the rate jumps to 40% of teachers leaving the profession within the first three years (Hill & Flores, 2014), a trend exacerbated by the COVID-19 pandemic (Kini, 2020). Within general and special education, irrespective of the content area, research consistently demonstrates that the classroom and behaviour management of students is a major contributor to teacher attrition (Freeman et al., 2014; Oliver & Reschly, 2007, 2010; Stough et al., 2015). Researchers have attested that classroom instruction and behaviour management competencies are highly influential to the success of new and experienced teachers (Dinkes et al., 2009). Teachers' inability to effectively respond to and redirect disruptive behaviours is a major reason for teachers leaving the profession (Ingersoll et al., 2018). Griffiths (2020) discussed that teacher motivations for initially

accessing the teacher profession played a significant role in the attrition rate of teachers, with two different motivations identified. The first is content imparters, emphasising compliance, assessment, and curriculum and focusing on imparting knowledge as the core motivation to become a teacher. The second group of teachers is focused on social and emotional knowledge (Griffiths, 2020). Interestingly, the study demonstrated that the content imparters were extremely challenged by student behaviours, whereas the social/emotional focused teachers were still challenged but less significantly (Griffiths, 2020).

Many children displaying disruptive behaviours in the classroom and the wider school and community contexts have been exposed to early childhood trauma that has included abuse and neglect. Chaos and unpredictability at home can include punitive or unresponsive parenting, leading to social and emotional struggles for a child, often evidenced by challenging behaviours at school (Bronfenbrenner & Evans, 2000). School life for many of these students is characterised by negative and aggressive patterns of behaviour resulting in suspensions, detentions, expulsions and disengagement from school and limited access to ongoing learning or the protective elements of school concerning safety. Students who demonstrate serious and disruptive behaviours are seen as relentless in attempting to sabotage learning experiences in a classroom. Teachers often report struggling to manage these behaviours and carry an element of fear due to threats the student's behaviour poses to themselves and the other students. Externalising unpredictable behaviours are often common, significantly reducing the teacher's capacity to ensure adequate classroom management and safety, harm minimisation, and the security of all other students. Jenson et al., (2004) concluded that students demonstrating problematic externalising behaviours 'are the most difficult to manage in an educational setting' (p. 67).

Research from the United States, the United Kingdom, Canada, and Chile substantiates international concerns that students' disruptive and challenging behaviours

remain an ongoing challenge for teachers. Similar concerns exist within Australia, exemplified by the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA), which established the Student Behaviour Management Project in 2003. This project identifies core principles of best practice concerning student behaviour (de Jong, 2005b) in response to the serious behavioural problems occurring across Australia.

Students' serious and disruptive challenging behaviours are compounded by exposure to adverse childhood experiences (ACEs), including limited family support, poverty, exposure to family violence, parental mental health issues, substance misuse, parenting choices, death of family members, abuse, and neglect (Overstreet & Chafouleas, 2016). Multiple studies examining the effects of childhood maltreatment on educational outcomes report impaired academic achievement, with lower grades overall, greater special education requirements, and higher rates of dropping out and not completing high school (Lemkin et al., 2018). Walsh et al., (2019) found that children who have experienced complex trauma face more challenges academically and are more challenging than other students for teachers to 'teach and reach' (p. 19). This could be due to the increased number of absences, also resulting in grade retention whereby children are not deemed accomplished in the grade curriculum they are in and therefore require repeating a grade level, involvement with remedial classes, and school dropouts and leading to lower academic achievement (Porche et al., 2016; Romano et al., 2015; Walsh et al., 2019). Blackorby and Cameto (2004) and Perry et al., (2008) also support the notion that one of the strongest predictors of lower achievement scores on standardised tests is poor mental health in children. Recent research published by the Australian Institute of Health & Welfare (2020; AIHW) revealed in 2013–2014, an estimated 314,000 children aged 4–11 years (almost 14%) experienced a mental disorder. Globally, the estimated numbers of youth with mental disorders in 2019 was one in seven or an estimated 166 million adolescents (UNICEF, 2019 <https://data.unicef.org/topic/child->

health/mental-health). In Australia, boys were more commonly affected than girls (17% compared with 11%). Attention deficit hyperactivity disorder (ADHD) was the most common disorder for children (8.2%). It was also the most common disorder among boys (11%). Anxiety disorders were the second-most common disorders among all children (6.9%) and the most common among girls (6.1%). Boys with challenging behaviours far outweigh girls across the globe. In the United Kingdom, 10 to 12 times more boys than girls are diagnosed with emotional/behavioural disorders. In Denmark, there is a five-to-one ratio of boys to girls in segregated facilities; and an 80% occupancy rate of boys in specialist facilities (McCulloch et al., 2000). An Australian study by Arbuckle and Little (2004) reported similar outcomes, with boys being identified by teachers as more problematic than girls, noting that 18% of boys compared to 7% of girls were described as having serious behaviour, warranting additional specialist support. Developmental delays in language and cognition in the preschool years are a common result of maltreatment and children experiencing trauma. This seriously compromises these children's participation, engagement, and learning in schools (Maguire et al., 2015; Walsh et al., 2019). Additionally, school-aged children who experience mental health diagnoses have been found to be suspended or expelled from school at a rate of three times more than their same-aged peers and Bomber, (2020) highlights that excluded children and young people are ten times more likely to suffer recognisable mental health problems (Blackorby & Cameto, 2004; Perry et al., 2008, Bomber, 2020).

Trauma-informed Care & Schools

With increasing recognition of the pervasiveness of child abuse and neglect and the impact of traumatic stress on children and families, awareness is growing of the importance of 'trauma-informed' approaches to interventions. Trauma-informed care refers to understanding, anticipating and responding to issues, expectations, and special needs that a victimised person may have in a particular setting (Hanson & Lang, 2016). At a minimum,

trauma-informed practitioners must endeavour to do no harm, that is, to avoid re-traumatising or blaming clients for their efforts to manage their traumatic reactions (Fallot & Harris, 2008). Trauma-informed care requires a commitment from practitioners and services to understand traumatic stress and develop strategies for responding to the complex needs of survivors. Trauma-informed care (TIC) is becoming a prominent approach of many organisations globally to meet the needs of people who have experienced trauma and those of the caring professionals in the organisations (Christian-Brandt et al., 2020). Implementing a TIC approach encompasses an overarching framework that emphasises the impact of trauma and guides an entire system's general organisation and behaviour (Hopper et al., 2009). Researchers have now turned their attention to the implementation of these practices in educational contexts.

Professional development is an important foundational component of Trauma-informed schools that are renowned for incorporating staff training and professional development as a critical component to developing staff competence in trauma-informed approaches and as a method of building unity amongst the staffing group within the school (Metz, Naom, Halle, & Bartley, 2015). Findings from the field of implementation science indicate that there must be consensus amongst the staff within a school for new and innovative pedagogical and instructional practices to be adopted (Metz et al., 2015). Thus, an underpinning component of trauma-informed schools is staff professional development and training, ensuring that all school personnel realise the impact of trauma, recognise the need for trauma-informed care, and develop the skills to create an environment responsive to the needs of trauma-exposed students. The foundational training must be augmented and deepened through more intensive training that focus on specific trauma-informed classroom strategies and through the coaching of teachers to increase their capacity to use trauma-informed skills and strategies (Blodgett & Dorado, 2016; Fixsen et al., 2009; Metz et al.,

2015). Specific competencies considered central to most models of trauma-informed care include establishing safe environments that foster connected relationships where the teacher knows how to prevent and respond to student triggers that can lead to behavioural escalation and re-victimisation (e.g., Cole et al., 2013; Multiplying Connections Initiative, 2008; Wolpow et al., 2011). Professional development and coaching related to trauma-informed care have been demonstrated to build knowledge, change attitudes, and develop practices favourable to trauma-informed approaches when delivered to service providers in clinical settings (Baker et al., 2015)

The Research Problem

In a study conducted by Alisic (2012), teachers' perspectives in primary school settings were explored regarding supporting and teaching students who had experienced trauma. The prominent themes that were found included teachers searching for a clear role definition since they felt supporting these students often involved the work of a social worker rather than a teacher. Teachers were concerned about responding to the conflicting needs of the traumatised child and the other students in the room, gaining better knowledge and skills related to trauma-informed pedagogy, and managing the emotional burden of supporting children with trauma backgrounds. With significant shifts in public awareness of the impacts of childhood abuse and neglect, the recognition of the detrimental effects of child abuse and neglect on children's capacity to learn (Creeden, 2007; Wolfe 1999), and the parallels between childhood trauma and externalising behaviour (Geddes, 2003), the importance of appropriate educational responses to childhood trauma is being considered (Burnett & Greenwald O'Brien, 2007, Cole et al., 2005). This research project offers an opportunity to explore enablers and barriers for teachers accessing professional development to build skills, gain deeper knowledge and enhance their pedagogical base for classroom instruction and behaviour management as an aspect of the mainstream classroom teacher's working context.

Summary and Aims

Many teachers are confronted by and unsure how to respond to a child with a trauma background, although teachers do recognise that they are well placed and in the most optimal position to play a role in a child's recovery (Rolfness & Idsoe, 2011; Brunzell et al., 2019). Teachers' engagement in training and professional development opportunities focused on knowledge acquisition about the impacts of trauma on all domains of a child's development and how to employ strategies to reduce the trauma effects on the child in the classroom is the focus area for this research project.

Conceptual framework

Misinterpretation of trauma-related behaviours as being oppositional and defiant and teachers inadvertently using behaviour management strategies that can trigger emotionally traumatised children and miss valuable opportunities to support social, emotional, and cognitive growth is of concern.

This study has evolved as a response to this notion of teachers struggling to manage children in their classroom when challenging externalising pain-based behaviours are exhibited. Teachers cite this as a significant contributing factor for high attrition rates in the profession (Flower et al., 2017). However, the buy-in or take-up of professional development opportunities to learn about trauma-informed behaviour management and classroom instructional practice is limited. The focus of this research project is the exploration of the barriers and enablers for teachers to engage in professional development opportunities when recognition of the benefits of trauma-informed approaches is apparent (Chafouleas et al., 2016). There has been significant growth in the development of resources available to train education and school mental health staff in trauma-informed care, including kits, workbooks, training curricula, and service delivery models, coupled with more traditional trauma-specific treatment options. The present research explores why teachers participate in development

opportunities to stretch their learning and embrace a growth mindset surrounding this topic. The literature substantiating the need for such an investigation will be reviewed in Chapter 2.

CHAPTER 2: LITERATURE REVIEW

Background and Context

“Both research and wisdom show us that regardless of the adversity they face, if a child can develop and maintain a positive attachment to school, and gain an enthusiasm for learning, they will do so much better throughout their lives. The role of teachers in the lives of traumatised children cannot be underestimated” (Downey, 2007, p. 35)

Chapter two aims to present a holistic overview of the foundation of knowledge pertaining to childhood trauma and the impacts of the trauma experiences on the developing mind and body. Identifying elements of prior scholarship and determining the research purpose to understand gaps in research and knowledge that will assist in bridging research to practice gaps for teachers and ultimately assist vulnerable children accessing our classrooms.

Child abuse is a social construct that means different things in different cultures at different times (Fogarty, 2008). Child abuse and neglect are defined by the World Health Organisation as, ‘All forms of physical and/or emotional ill-treatment, sexual abuse, neglect or negligent treatment or commercial or other exploitation, resulting in actual or potential harm to the child’s health, survival, development or dignity in the context of a relationship of responsibility, trust or power’ (Cited in AIHW, 2019; WHO, 2006, p. 9). Throughout history, the practice of ‘flogging children for misdemeanours’ has been an acceptable act since children were perceived as the property of the parent who had the right to treat a child in any manner that they saw fit (Liddell, 1993). The concept of providing protection for children from their parents or caregivers did not exist in the early years of the nineteenth century (Liddell, 1993). However, the child rescue or child saving movement became apparent in the second half of the nineteenth century. This child rescue movement led to legislation to protect

children from cruelty, aiming at severe physical abuse and giving rise to statutory intervention into families lives by government agencies (Scott & Swain, 2000). This was known as the first wave of the child protection movement (Scott, 2006). The media was vocal in the second wave of the child protection movement in the 1960s with the identification of battered baby syndrome (Kempe et al., 1962). In the Medical Journal of Australia, Birrell and Birrell (1968) published their study of undiagnosed fractures and non-accidental injuries among children admitted to Royal Children's Hospital in Melbourne. In 1966, Dr Dora Bialestock published the results of her study examining over 200 babies consecutively admitted into the state's care and revealed significant developmental delays associated with child neglect (Bialestock, 1966). This second wave of the child protection movement saw laws and policies enacted specifically aimed at statutory bodies being notified of serious physical abuse. This prompted the introduction of mandatory reporting guidelines for some organisations within the community (Scott, 2006). The 1970s and 1980s saw significant growth and change occur in the child protection sector, characterised by significant social changes in the family structure, where single-parent families and divorced and remarried parents resulted in blended family units (Lonne et al., 2009). This created diversity in the families involved in the child protection sector and the risks associated with child abuse and neglect were identified (Liddell, 1993). The 1980s and 1990s saw the discovery of child sexual abuse, leading to strengthening these laws and policies (Scott, 2006). The third wave of child protection has embraced the concept of 'at risk' and been fuelled by two drivers of child protection work, including the notion of a child as a holder of human rights and the notion of a child as a psychological being (Scott, 2006). An increasing range of parental behaviours is now viewed as physiologically harmful to children. Emotional abuse has become the single-largest category of substantiated cases in several Australian states by statutory bodies and written into child protection acts across Australia (Scott, 2006).

How Significant is the Problem?

During 2018–2019, the Australian Institute of Health and Welfare (AIHW, 2020) reported that 170,200 Australian children received child protection services consisting of an investigation, care and protection order, or placement into out of home care due to child abuse and neglect. This figure increased from 2017 to 2018, when 159,000 children received a child protection service (AIHW, 2019). This report also highlighted that children of Aboriginal and Torres Strait Islander (ATSI) heritage were eight times more likely to receive child protective services than their non-indigenous counterparts (AIHW, 2020). Notably, such figures may not accurately represent the number of children at risk, given that many concerns go unreported to authorities for a variety of reasons. Thus, estimates of exposure to other adverse childhood experiences (ACEs) in Australian children are likely to be higher (Moore et al., 2015).

Families separated from those involved with a child protection service across each state and territory are deemed vulnerable and disenfranchised and may be referred to a pre-statutory service. This is where a support and assessment service, such as Family and Child Connect (FACC) or Intensive Family Support (IFS), is engaged to assist families in making changes to ensure they keep their children safe from harm since the family does not meet the threshold for a child protection service. In Queensland, 25,809 families were referred to pre-statutory Family and Child Connect (FACC) services in 2017-2018 for support and assistance to reduce the likelihood of the family becoming involved in the child protection system (FACC, 2018). Although these figures are not conclusive, this demonstrates an overwhelming number of children in crisis in Australia. Further, these children are increasingly vulnerable to child abuse and neglect (AIHW, 2019, p. 3). The number of children nationally subject to child protection notifications rose from 37.8 per 1,000 children in 2013/2014 to 44.4 per 1,000 children in 2017/2018 (AIHW, 2019).

As stated above, the Australian Institute of Health and Welfare (AIHW, 2019) reported that 170,200, or 31.7 per 1,000, children aged 0–17 received child protection services in Australia (AIHW, 2019). This figure is acknowledged as underrepresented by the AIHW since there is no data collection system in Australia that records the prevalence of child abuse and neglect, and only cases reported to child protection services are recorded. The AIHW report (2019) identified that children from isolated and remote areas are four times more likely to receive child protection services than their counterparts residing in major cities. A limitation of these data is that these figures only record the reported child abuse and neglect cases per specific state and territory definitions, and there is no data collection system in Australia that records the prevalence of child abuse and neglect.

Developmental Trauma

Over the past three decades, a richer understanding of the impact of early childhood abuse and neglect, leading to traumatic experiences, has filtered into many social systems (Walsh et al., 2019). The adverse effects of developmental trauma on children's educational, physical, emotional, and mental health are well established (Mitchell, 2009). The effects of abuse and neglect rarely occur as one subtype of trauma; rather, the effects are more severe for multi-trauma experiences based on the concept of cumulative harm, where the effects on the child can be seen as chronic, recurrent, and prolonged (Walsh et al., 2019). Scott (2006) discussed Birrell and Birrell's (1962) paper as having received significantly greater attention across the waves of the child protection movement than Bialestock's (1966) paper. He believes that child neglect has largely been ignored, despite being the single largest reason children have been placed into state care, causing at least half of the child maltreatment fatalities (Smith & Fong, 2004). The literature highlights the complexity of trauma, traumatic experiences, adverse childhood experiences (ACEs), and maltreatment in the lives of children (Chevignard & Lind, 2014; Nicholson et al., 2019; Rossen & Cowan, 2013; Stokes &

Turnbull, 2016; Zembylas, 2016). Wicks-Nelson and Israel (2016) state a considerable volume and range of reactive symptoms may be present in a child's behaviour as a result of trauma. Further, these symptoms may occur during traumatic or stressful events and for a considerable time afterwards. A child's development of secure attachment can be interrupted by child abuse, maltreatment and neglect, negatively impacting a child emotionally, behaviourally and psychologically (Kobak et al., 2006).

Developmental trauma is defined in the literature as due to abandonment, abuse, and neglect during the first three years of a child's life that disrupts cognitive, neurological, and psychological development and attachment to adult caregivers (Nova 2000). Developmental trauma includes traumatic experiences occurring in utero, during infancy, or in early childhood. These traumatic experiences undermine normal developmental processes for the child (Kisiel et al., 2013). Such trauma may include abuse and neglect and may affect attachment with caregivers, cognitive functioning, self-concept, social relationships, and emotional regulation capacities (Higgins & McCabe, 1998). Children with developmental trauma face challenges that hinder their academic success, school engagement, relationships, and social and emotional development. Lexmond and Reeves (2009) noted that it is not poverty per se that causes developmental trauma to occur in a child. Rather, family characteristics correlate with income and a parenting style unrelated to warmth/responsiveness, attachment, disciplinary practices, confidence, and self-esteem. Weitzman (2005) observed how trauma inflicted during a child's earliest developmental period could substantially impact cognitive, social, and emotional growth than trauma inflicted in later childhood when brain development and capacities for self-soothing, emotional regulation, self-awareness, and self-concept mature.

Throughout the literature, evidence and discussion support the co-occurrence of harm types. Harm is defined within the Queensland Child Protection Act 1999 as "any detrimental

effect of a significant nature on a child’s physical, psychological or emotional well-being” (p 3). Harm may be caused by physical or emotional abuse, neglect, and/or sexual abuse or exploitation. Ramiraz (2011) discusses the increase in the risk of harm when intimate partner violence and violent communities are a feature of a family’s ecology, often resulting in a higher likelihood of child sexual abuse, neglect, and emotional and physical harm occurring. Further, Finkelhor (1994) discussed the factors of parenting style, domestic violence, punitive punishments, and emotional deprivation as being likely risk factors to harm occurring for children. According to Bryce (2017), the co-morbidity of harm types typically occurs when child maltreatment is experienced, and this has a cumulative impact on the child. Emotional abuse is often referred to in the literature as psychological abuse since cognition and emotions are interconnected (Bryce et al., 2019; Glaser, 2002, p. 698). Emotional abuse is categorised in two different ways: 1) abuse projected towards a child and 2) emotional neglect when an emotional connection is denied or withheld from a child (Bryce et al., 2019). Throughout the literature, it is evident that emotional harm is a feature of the other harm types and may impact a child’s development across all developmental domains (Bryce et al., 2019).

Effects of Trauma

All children have a fundamental right to safety and a life free from abuse, violence, and neglect, being raised in a home with loving, nurturing parents and attending school in a state where they are ready to engage and learn. For many children, this is not their reality. Adverse childhood experiences (ACEs) refer to a wide range of circumstances that pose a serious threat to a child’s physical and psychological well-being (Felitti et al., 1998). Common examples of ACEs include exposure to domestic violence, extreme poverty, living with parents with mental health and substance use concerns, homelessness, and child maltreatment in the form of child abuse and neglect. In their landmark epidemiological study

on adverse childhood experiences (ACEs), Felitti et al., (1998) found up to two-thirds of adults surveyed in the US reported they had experienced at least one type of adverse childhood event. Further, up to 87% of the sample reported experiencing two or more types of adverse childhood events (Anda et al., 2005).

Cumulative harm is an Australian term for the harm experienced on an ongoing and repetitive basis. In other international jurisdictions, this is known as complex trauma and is discussed in the literature as a pattern of adverse events that are cumulative in nature and have a negative outcome for the child. Broomfield et al., (2007) discussed this further and stated that ‘cumulative harm refers to the effects of multiple adverse circumstances and events in a child’s life. The unremitting daily impact of multiple adverse circumstances and events on the child can be profound and exponential’ (p. 3). A common response for many children experiencing cumulative harm from ongoing abuse and neglect is school refusal or poor school attendance. Teachers are identified as key stakeholders in children’s lives and are able to protect and support children to remain safe. However, children must be present in the schooling context for teachers and other administrative staff to make assessments concerning if a child is at risk of harm.

In many cases, teachers and school administrators are invaluable in identifying and responding to suspected child maltreatment before statutory involvement and intrusive tertiary interventions. Schools offer children, especially those most vulnerable, a haven of safety and security, routine, and predictability. Similarly, teachers hold a position of trust with children and their families. Teachers are well placed for maintaining a close and consistent relationship with children and their family members and receive a great deal of personal and privileged information. This information offers insight into an assessment of needs and risks.

Children are impacted by childhood adverse experiences in many ways. Bromfield et al., (2007) describe key dimensions by which children may vary in their experiences of abuse and neglect:

- the types of abuse and neglect the child is exposed to (e.g., sexual abuse, physical abuse, neglect);
- the frequency, severity, and duration of the maltreatment;
- the age and developmental status of the child when the abuse occurred; and
- the relationship between the child and those seen as linked to the maltreatment occurring.

Child maltreatment that has occurred over different developmental stages has a profound and exponential impact on a child's life, with adverse consequences felt throughout the life course (Masten, 2018). Such findings highlight the importance of considering the history of maltreatment and its impact on the individual rather than merely an isolated episode of abuse. Vulnerable children are most often exposed to a number of different forms of maltreatment experiences across their development, this is referred to in the literature as multitype maltreatment (Higgins & McCabe, 2003). This is an important consideration to understand the cumulative harm experienced by children and their ongoing cumulative and chronic risk in the future (Sheehan, 2019).

Impact on Language Development

Allen and Oliver (1982) used a quantitative study to measure the impact on language development and linked maltreatment to delays in language. Erickson et al., (1989) supported these findings, highlighting language development as an area of concern when considering maltreated children. Cognitive and language competencies are strong indicators of a child's school readiness concerning literacy, the capacity to follow instructions, being receptive to performance evaluations and navigating peer interactions (Spratt et al., 2012). As early

childhood is a sensitive period for language development, maltreated children are at particular risk for language delays. In a meta-analytic review examining maltreatment and language, Sylvestre et al., (2016) found that the language skills of children who had experienced abuse or neglect were delayed compared to children without such experiences, with young children being particularly vulnerable to the language effects of maltreatment. Child maltreatment is associated with diminished receptive and expressive language capacity. Further, delays in maltreated children's abilities to express themselves tends to be greater than delays in comprehension (Casanueva et al., 2012). Children who have experienced maltreatment tend to use fewer words and less complex sentence structures than their age-equivalent counterparts who have not experienced maltreatment. They also tend to have significant trouble coherently connecting ideas when communicating and display less syntactic competence, and their spoken language can be feeble and disorganised (Eigsti & Cicchetti, 2004).

Impact on Stress Response and Emotional Regulation

Allen and Oliver (1982) highlighted psychological, social, and behavioural implications for these children and identified the attachment theory as integral (Erickson et al., 1989). The significance of a positive relationship between children and parents was first discussed in the literature in the 1940s and became more prevalent in the 1960s and 1970s with the development of the attachment theory (Ainsworth, 1963; Bowlby, 1969, 1973). The attachment theory focuses on the relationship between infants and caregivers and how positive interactions assist in developing adaptive behaviours and have positive implications on the child's emotional regulation, self-confidence and self-worth (Wicks-Nelson & Israel, 2016). Child abuse, maltreatment and neglect can interrupt the child's development of secure attachment with caregivers and negatively impact a child's emotional, behavioural and

psychological development. This has implications for other key relationships in the child's life (Kobak et al., 2006).

Research on the physiological effects of maltreatment has focused on changes to the human stress response, a complex phenomenon involving multiple human organs designed to help respond to threats and danger in the environment (LeDoux & Pine, 2016). This stress response is said to have evolved as a survival mechanism, enabling people and other mammals to fight the threat or flee to safety. Unfortunately, chronic exposure to stressful experiences can mean that human bodies can overreact to stressors that are not life-threatening, such as traffic jams, work pressure, and family difficulties (LeDoux & Pine, 2016). Similarly, experiences like abuse and neglect have been found to lead to difficulties in 'putting the brakes on the stress response', with people's bodies having difficulties in dampening the physiological response associated with threats (Delima & Vimpani, 2011). Findings have consistently shown that prolonged and chronic exposure to stress, sometimes referred to as 'toxic stress', alters the function and pattern of the physiological stress systems in children. This causes the child to either react with excessive feelings of stress to potentially benign situations and/or to not identify or act protectively in situations of potential danger and threat (Cicchetti et al., (2011).

Maltreatment influences emotional expression and understanding. Findings from studies conducted by Pollak et al., (e.g., Romens & Pollak, 2012) suggest that maltreated children may exhibit emotional understanding capabilities different from their non-maltreated counterparts. For example, abused children may be more attuned to the expression of negative emotions, such as anger. Further, neglected children were observed to be less able to discern distinctions between emotions (Harden et al., (2014). Maltreatment has also been found to impact children's emotion regulation, defined as a biologically based and environmentally mediated process through which children adapt and cope with their

emotional responses to stimuli in the environment (Coles et al., 2004). Many studies have suggested that emotional regulation is the mechanism by which maltreatment leads to mental health concerns (Jennissen et al., 2016).

Social and emotional development involves the capacity to understand the self and others, form relationships, and experience, regulate, and express emotions. Such skills depend on the quality of relationships and the childhood caregiving environment. A meta-analysis of the association between child maltreatment and attachment styles revealed that maltreated children are more likely to display disorganised attachment and less likely to present secure attachment compared to non-maltreated high-risk children (Cyr et al., 2010). Insecure attachment patterns and sustained child maltreatment disrupt self-regulatory abilities and may lead to compromised expressed emotions, consciousness, behaviour, cognition, and sense of self (Cook et al., 2017). In particular, disorganised attachment in children has been linked to behaviour problems (Dozier & Bernard, 2015).

Impact on Cognitive and Academic Functioning

The relationship between child maltreatment and cognitive development was particularly evident in Chugani et al.,'s (2001) research involving institutionalised Romanian children exposed to severe physical and emotional neglect. Studies on this group of children found significant deficits in these children's intellectual functioning. Research has repeatedly found that exposure to adverse experiences early in childhood is consistently associated with critical lags in cognitive development and numerous academic difficulties (Chugani et al., 2001; Gould et al., 2012) associated with attention and language skills and working memory. Spratt et al.,'s (2012) study highlighted the neurocognitive deficits associated with adverse early life experiences and the impaired functioning and increased vulnerability for social and behavioural difficulties. The study included a cross-sectional study of 420 children with a history of maltreatment. These children performed more poorly in school than their non-

maltreated age-equivalent counterparts. The children in the study had significantly lower grades, higher numbers of suspensions, expulsions and detentions, disciplinary referrals, and grade repetitions throughout lower and middle primary school and across all grades in high school.

Multiple studies examining the effects of childhood maltreatment on educational outcomes report impaired academic achievement, with lower grades overall, greater special education requirements and higher rates of dropping out and not completing high school (Lemkin et al., 2018). Developmental delays in language and cognition in the preschool years are a common result of maltreatment and children experiencing trauma and seriously compromise these children's participation, engagement, and learning in schools (Maguire et al., 2015; Walsh et al., 2019).

Identifying children who have experienced trauma is complex and multifaceted (Gresham, 2017). Barr (2018) highlighted possible reasons for students who are unable to control their behaviour or demonstrate anti-social behaviour at school, citing trauma as a possible reason since it can hinder early childhood brain development, making it difficult for the child to develop executive functioning skills required for school. The importance of self-regulation as fundamental for all other academic learning is supported by Blair and Raver (2015), stating that abuse, neglect, and trauma can impact a child's executive functioning, academic capacity, and ability to adequately adapt to school. The literature indicates the educative, cognitive, and learning consequences of child abuse and neglect. Learning problems are evident because children often exist in a hyper-vigilant state since they are unable to cognitively settle and develop curiosity or take risks with their learning (Tillbury et al., 2017). Many children who have experienced trauma consisting of abuse and neglect feel threatened, leading to transient, aggressive, dissociative, and emotional behaviours that impede learning (Tillbury et al., 2007). Spratt et al., (2012) discussed that 70% of children

with language impairments exhibit co-morbid behavioural problems. When children cannot communicate effectively, they may not have the skills to negotiate or resolve conflict and may have difficulties understanding relating to others. Psychiatric disorders, such as attention-deficit/hyperactivity disorder, anxiety, depression, conduct disorder and oppositional defiance disorder, have a high association with language difficulties. These challenges can lead to poor social functioning and challenging behaviours in the schooling context (Bolter & Cohen, 2007).

Impact on Sensory Processing

McInerney and McKlindon (2014) discussed that many children who have experienced trauma additionally develop sensory processing difficulties, which may contribute to problems with their ability to read, write, and perform academically. Other areas of concern that are a consequence of developmental trauma include auditory and visual perceptions, impeding children's capacity to comprehend complex patterns and different levels of abstraction and/or visual-spatial patterns, leading to problems with reading and writing (Hawtin & Wyse, 1998). Sensory input difficulties can be encountered, meaning that incoming information is often misunderstood, and speech acquisition is often delayed. Sensory processing is a regulatory process vital to daily function since it allows the child to perceive, interpret, and appropriately react to their environment (Ford & Blaustein, 2013; Purvis et al., 2013). Sensory sensitivity to loud or sudden noises, which could be associated with historical trauma, may elicit an over-reactive response that disrupts learning and triggers the stress response in the child, leading to challenging behaviours (Atchison, 2007). In Dowdy et al.'s (2020) study, significant correlations between the child's ACE score and sensory processing patterns of low registration and sensory avoiding were attributed to children who had experienced trauma in early childhood and endured unpredictable and chaotic environments as young children. These findings are consistent with the results from

studies conducted by Engel-Yager et al., (2013) and Serafini et al., (2016), suggesting that the low registration of sensory input and sensory avoiding may be the sensory processing patterns associated with experiences of trauma, as measured by the ACE questionnaire. Sensory processing issues are generally considered clinically significant in children who have suffered abuse and trauma, and much has been written about the possible neurological correlates of such sensitivities (De Bellis & Thomas, 2003; van der Kolk, 2014). Sensory processing disorders include difficulties registering and modulating sensory information and organising sensory input to successfully adapt responses to situational demands (Humphry, 2002; Miller et al., 2007). Individual neurological thresholds and behavioural responses are affected by traumatic experiences (Dunn, 1997). Consequently, minimal stimuli in children with lower neurological thresholds may activate the central nervous system.

Based on Dunn's model (2007), four sensory processing patterns are found. The first two patterns consist of low registration reported in children with higher neurological thresholds and passive self-regulation strategies. These children present lacking motivation or interest in their environments and are indifferent to others and their own emotions. They often struggle to infer others' emotions according to facial expressions. Children with higher neurological thresholds and active self-regulatory skills actively search and experience pleasure from more exciting sensory environments and risk-taking behaviours (Brown et al., 2001). The two other patterns include children with hypersensitivity, whereby sensation avoiding occurs, and children will limit their exposure to stimuli and may experience exclusion/social withdrawal in everyday life (Miller et al., 2007). It could also include sensory sensitivity in children who experience distractibility/discomfort with sensation but do not actively avoid the stimuli. These children may experience intense, overwhelming, and invasive experiences from the stimuli and commonly present as tense and anxious and struggle to initiate relationships. Sensory processing patterns tend to be traits associated with

the psychopathology of children and young people, which is considered the result of developmental trauma in many of these young people (Dunn, 2007; Engel-Yegar, Gonda et al., 2016).

In primary school settings, acknowledgement of and responding to these difficulties is integral to educating and nurturing these students.

Trauma and Educational Settings

Complex trauma is prolonged, repeated, or reoccurring exposure to some form of abuse, maltreatment, or neglect over extended periods as opposed to singular events, such as a car accident, sudden death, or a natural disaster (Courtois & Ford, 2015). Child maltreatment is defined as an act by an adult that harms a child, even if this harm is unintentional, and includes physical abuse, sexual abuse, emotional abuse, neglect, or exposure to family violence (Gilbert et al., 2009). In the literature, the term ‘adverse childhood experience’ (ACE) is commonly referred to as traumatic events that occur before adulthood, including abuse, maltreatment and neglect but also encompassing parental mental illness, domestic violence, divorce, substance use and abuse, homelessness and incarceration (Felitti, et al., 1998; Stokes & Turnbull, 2016).

Schools are fundamental to a timely response to suspected harm to children (Hawtin & Wyse, 1998). As Milner and Blyth (1988) stated, ‘the pupil–teacher relationship is unique in the sense that no other adult in authority enjoys such an intense, continuous and private relationship with a child’ (p. 46). Diamond et al., (2010) maintain that schools must address students' social, emotional, and physical developmental needs to achieve academic success. Addressing children's emotional, social, and behavioural needs impacted by abuse, neglect, or maltreatment can be complex and confronting for educators (Craig, 2008). Building resilience in vulnerable children is a key element of teaching these children. Craig (2008) highlighted that this could be achieved through adapting instructions and strategies to address

their learning characteristics, using positive behaviour supports, building meaningful teacher-student relationships, providing predictability and routines, and integrating trauma-sensitive perspectives across the whole school. This is supported by Nicholson et al., (2019) and Panlilio et al., (2019).

It is identified throughout the literature that the impact of child abuse and neglect on a child's capacity to engage in education is significant. Further, the current schooling structure within Australian schools cannot cater to the special needs of this population (Morgan et al., 2015). Conventional schooling often results in suspensions and exclusions of children from educational institutions, leading to manifestations of more complex vulnerabilities and often more contact with child protection services (Morgan et al., 2015). The literature discusses the requirement of teaching staff to rethink and redefine what it means to be an educator when working with children experiencing failure in the conventional school setting. Trauma-informed and relational pedagogy requires a shift in an educator's sense of identity and practice. Morgan et al., (2015) discussed the likelihood of children with developmental trauma experiences caused by abuse and neglect being suspended and excluded and experiencing ongoing disenfranchisement, where schools often identify the child as the source of the problem rather than being willing to address the needs of marginalised children.

Gresham (2017) discussed how social and emotional learning programs benefit all students' well-being when delivered within whole-class settings. A few key skills are targeted based on an overarching behavioural or social-emotional school focus. Alternatively, for students who have experienced trauma, neglect or maltreatment, one-on-one and small group interventions are beneficial since they foster positive relationships with educators and encourage positive feedback, encouragement, and self-monitoring opportunities in a safe and nurturing environment (Gresham, 2017).

The discussion throughout the literature embraces a common theme that classroom teachers in schools are well placed to identify changes in a child that may be a result of experiencing harm (Bryce, 2018). Meanwhile, the literature clearly states that teachers are best placed to respond therapeutically to children exhibiting behaviours indicative of developmental trauma. There is disparity and confusion regarding how this can occur within the school context. Scholars strongly acknowledge that schools play a significant role in protecting children and that when this protective factor is no longer active in a child's life, the child becomes increasingly vulnerable (Powell & Davis, 2019). Likewise, Wessels (2015) stated that 'participation in education frequently protects children from exposure to other harms such as child exploitation or drug abuse' (p. 62). Morgan et al., (2015) also observed that 'Suspension, expulsion or early school leaving, and the subsequent disenfranchisement of young people may indicate a lack of a system to accommodate the diversity of students' life circumstances and learning needs' (p. 5). Morgan et al., (2015) further stated that teachers need to alter their professional identity and become critically reflective regarding their teaching practice for successful outcomes to occur for children who have experienced developmental trauma. Morgan et al., (2015) proposed that teachers prioritise relationships and accept that children who have experienced trauma require a different mode of interaction with adults than what may have occurred historically in conventional public-school settings.

Children spend most of their days in the care of education professionals. Further, with education departments identified as the second-most common notifier of child abuse and neglect in Australia, an education institution's role in child protection seems clear (AIHW, 2015). A range of factors have been identified in research to highlight the key role educators hold in child protection:

- The period of time teachers spend with children is more significant than any other professional or non-familial adult and compares to that of the child's own family (Briggs & Hawkins, 1997).
- Teachers possess specific knowledge and skills, including a targeted observation and comprehensive understanding of human development; teachers are well placed to identify delays, changes, and anomalies in behaviour, appearance, and progress. They also can detect indicators of abuse and neglect (Walsh et al., 2005).
- Rapport and accessibility are factors that often result in teachers receiving disclosures of maltreatment directly from children, family and other concerned community members.
- Seidman et al., (1994) identified educators as a group of ‘unrelated adults who can serve as “listeners” and “valuers” for young people’ (p. 519).
- Schools and educational staff within these institutions have become such an acknowledged source of monitoring and support for children that child protection departments recognise schools as a 'protective factor' in risk assessment practices (CDC, 2016; Queensland Government, 2015).

Theories and Frameworks

Trauma-informed practice frameworks generally have been shown to make a significant difference for children experiencing the impact of trauma, abuse, and neglect (Perry, 2009). Given the pervasive and chronic impact of complex traumatisation in childhood, schools are an important part of a multi-systemic, wraparound treatment approach. When drawing on ecological system theories, wraparound support refers to a community-based approach to providing comprehensive, integrated services through multiple professionals and agencies and in collaboration with families (Stroul & Friedman, 1986). Throughout the 1990s, during the third wave of the child protection movement (Scott, 2006),

the ‘multidisciplinary integration’ era occurred, embracing the ecological-transactional model of child maltreatment that guides much of maltreatment practice and research today.

Bronfenbrenner (1979) first proposed an ecological perspective on human development, and Belsky (1980) applied the model to child maltreatment. What separates the ecological model from other theoretical models is its deviation from singular-focused processes to a transactional and multilevel explanation (Garbarino, 1977). Belsky (1980) coupled the theoretical models of attachment (Bowlby, 1969) and developed the ecological model. It is explained in five levels: 1) ontogenic, (2) microsystem, 3) exosystem, 4) macrosystem, and 5) chronosystem (see Figure 1). Ontogenic factors relate to the childhood histories of abusive parents and caregivers (Belsky, 1980). The microsystem refers to the immediate context in which child maltreatment takes place and includes the family system, the maltreatment itself, and both parent and child characteristics. The exosystem encompasses the individual and family within larger social structures, including formal and informal structures. Belsky (1980) primarily focuses on the influences that two primary structures exert on the family: work and neighbourhood. However, other social structures include school, formal and informal support networks, socioeconomic status, and social services (Cicchetti & Lynch, 1993). The macrosystem examines the embeddedness of the individual, community, and family within the larger cultural fabric. The chronosystem is made up of the environmental events and systems and includes transitions that occur throughout the lifespan, including socio-historic events. Each level is ecologically nested within the next, and maltreatment is determined by the interaction of and between levels. For example, parental and child behaviour must be understood within the cultural context, where behaviour is learned and displayed (Peterson et al., 2003). Culture influences the attachment relationship, expectations of children and parents, family’s immediate social environment,

larger social connectedness of the family within their smaller communities, and larger social fabric of the environment in which they live (Peterson et al., 2003).

Cicchetti and Lynch (1993) drew upon Belsky's (1980) ecological model and Cicchetti and Rizley's (1981) transactional framework to develop the ecological/ transactional model of child maltreatment (see Figure 1). While the ecological model focuses on the aetiology of child maltreatment, the transactional model focuses more closely on child maltreatment outcomes, with special attention on developmental outcomes for children (Cicchetti & Lynch, 1993). The model offers risk and compensatory factors at each of the five levels of the ecological model and prescriptions for the sequelae of maltreatment. It is important to understand that the presence of violence at one level does not sentence children to poor developmental outcomes. The existence of community violence at the exosystem can be overcome by compensatory factors in the microsystem, protecting the child against any adverse developmental outcomes.

In this regard, schools and teachers are important partners in the prevention, early detection, and early intervention of child maltreatment. The provision of such wraparound support for children experiencing chronic traumatic stress has seen the emergence of 'trauma-informed care' approaches across various service settings, including schools. Evaluation of the frameworks of practice that support children with trauma experiences is discussed in the attached published article, titled, "Evaluating frameworks for practice in mainstream school classrooms catering for children with developmental trauma: an analysis of the literature."



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Article

Cite this article: Collier S, Bryce I, Trimmer K, and Krishnamoorthy G. Evaluating frameworks for practice in mainstream primary school classrooms catering for children with developmental trauma: an analysis of the literature. *Children Australia* <https://doi.org/10.1017/cha.2020.53>

Received: 7 July 2020
Revised: 15 September 2020
Accepted: 18 September 2020

Keywords: developmental; trauma; education; frameworks; practice; abuse; neglect; maltreatment

Author for correspondence: Simone Collier,
Email: simone.collier@usq.edu.au

Evaluating frameworks for practice in mainstream primary school classrooms catering for children with developmental trauma: an analysis of the literature

Simone Collier¹, India Bryce¹, Karen Trimmer¹ and Govind Krishnamoorthy²

¹Department of Child Safety, Youth & Women, School of Education, University of Southern Queensland, Toowoomba, Australia and ²Department of Child Safety, Youth & Women, School of Psychology and Counselling, University of Southern Queensland, Toowoomba, Australia

Abstract

Integral to the protection of children against ongoing abuse and neglect and trauma experiences are teachers and school-based staff. This paper aims to discuss and reflect on the practice frameworks, models, approaches and programs that exist in mainstream school contexts to address the developmental and learning needs of children in primary schools who have experienced trauma in their early childhood years. This paper explores the importance of enablers, finding exceptions to the practices that often limit the support of ongoing protection of children in schools and the importance of the willingness, confidence and capacity of school-based staff. This paper proposes areas of future research to address the identified gaps existing for children with developmental trauma trying to learn and exist in a schooling system that is struggling to meet their needs.

Throughout the past three decades, a richer understanding of the impact of early childhood abuse and neglect has infiltrated many social systems in modern society. Indeed, the adverse impact of developmental trauma experiences on the educational, physical, emotional and mental health of children is well established throughout the literature.

Mitchell et al. (2017) discussed the impact of developmental trauma on the social-behavioural success and academic capacity of students and the subsequent challenging behaviours they display, which then leads to these students experiencing exclusionary practices that interrupt their academic and social development. Children who grow up living in poverty will often attend school burdened with stressors that negatively impact their social and emotional development and, due to the trauma associated with poverty, displays significant challenging behaviours. Within a schooling context, these behaviours can cause mental health concerns and affect their capacity to integrate successfully into classrooms and attend to their learning (Blitz et al., 2020).

Children who are deemed by state child protection services as being harmed or having an unacceptable risk of harm may be removed from their family of origin and placed into out-of-home care. Children who are deemed to be at risk of harm but are not removed from their family of origin will often be matched with a pre-statutory intervention service, such as an intensive family support (IFS) service. These cohorts of children are among the most educationally vulnerable in our communities.

An understanding of the effects of abuse and neglect rarely occurs as one subtype, with the impact being more severe for multi-trauma-type experiences based on the concept of cumulative harm, where the effects on the child can be seen as chronic, recurrent and prolonged (Walsh et al., 2019). Developmental trauma is defined as trauma experiences that are invasive, of an interpersonal nature, are sustained, and can occur in utero, during infancy or during early childhood. Traumatic events that can result in developmental trauma are influenced by a number of factors, including the age of the child, the nature of the maltreatment, the relationship between the child and the perpetrator, the balance of risk and the protective factors in the child's life.

The consequences of prolonged traumatic events may span multiple developmental domains and include negative changes to brain structure and functioning and undermine normal developmental processes (Bartlett et al., 2018). Complex trauma can include abuse and neglect and may affect a child's attachment with their caregivers, as well as their cognitive functioning, concept of self, social relationships and emotional regulation (Kisiel et al., 2013). This differs significantly to a traumatic event that is acute in nature but an isolated incident, such as a significant weather event or a car accident. Traumatic events that are not repetitive and prolonged rarely result in developmental trauma outcomes.

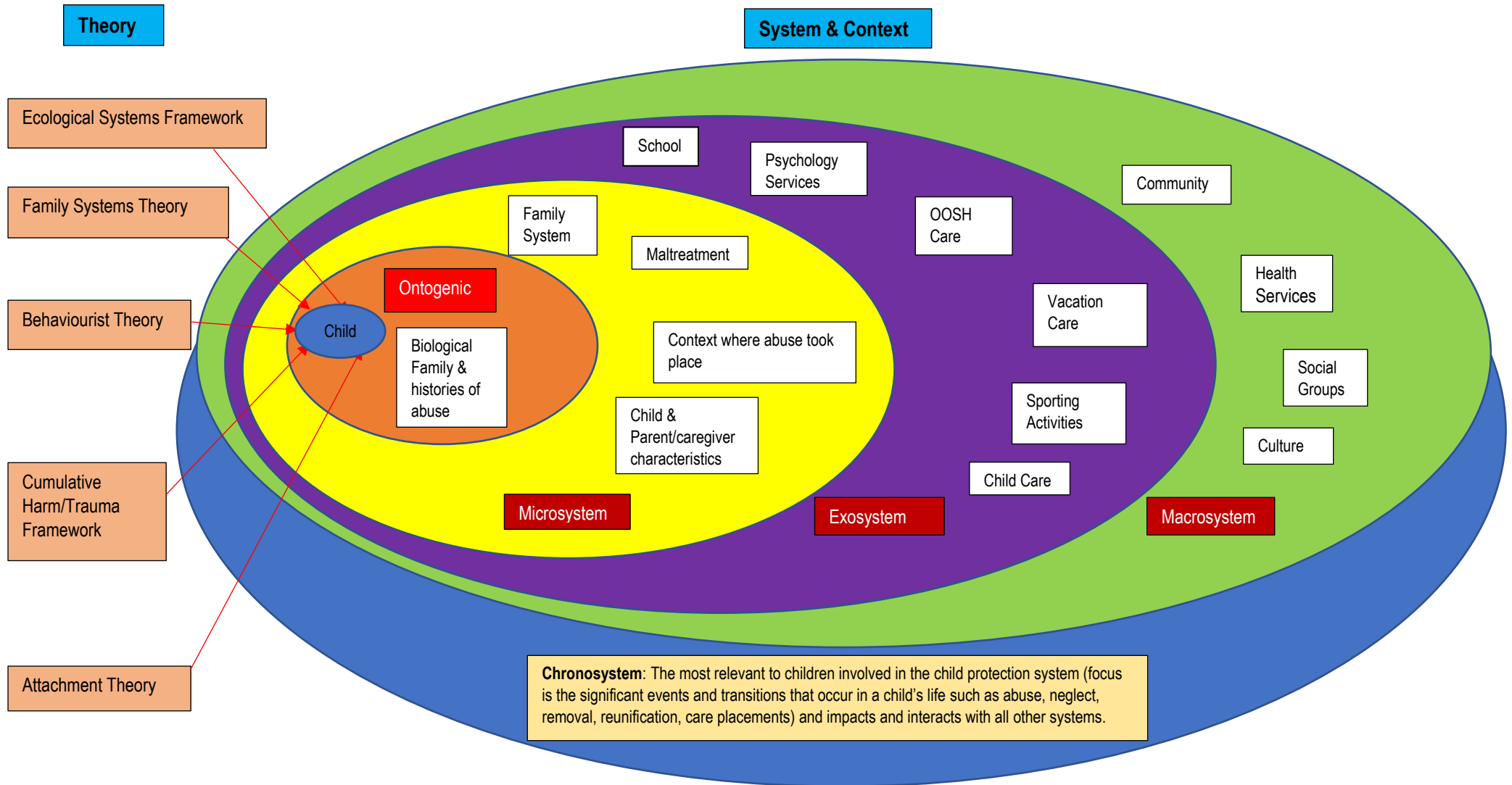
Gubi et al. (2019) described the single incident traumatic events that frequently dominate the media landscape (e.g. school shootings, kidnappings and natural disasters) as events that result

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Figure 1: Visual representation of the frameworks of practice, systems & contexts within the ecological-transactional Model



Attachment Theory

John Bowlby was a psychoanalyst who first described the theory of attachment in 1969. Bowlby researched the impact of separation between infants and their mothers and hypothesised that extreme behaviours by infants and young children were an evolutionary mechanism to avoid separation from a parent or reconnecting with a parent following a separation. Bowlby believed these behaviours were reinforced through natural selection and enhanced the child's chances of survival (Ackerman, 2020). Normal development is expressed through play and exploratory activity in children, requiring a familiar attachment figure to regulate the child's psychological arousal by providing a balance between soothing and stimulation, known as co-regulation. This facilitates a child to develop a biological framework for dealing with future stress. Attachment provides a launching pad from which children can explore and make sense of their social and physical world (Bacon & Richardson 2001).

Attachment Concerns

Attachment issues are exacerbated by long periods of maltreatment, given that children tend to mimic the attachment modelled to them by their parents and caregivers; the more disorganised and inconsistent the parent is, the more disorganised the child will be (Streeck-Fischer & van der Kolk 2000). Trust issues and social distress can arise when a child lacks security and support from the primary caregiver and may evolve into anxiety and anger (Streeck-Fischer & van der Kolk 2000). Trauma is increased when a child's source of harm is also their source of safety and attachment (Cook et al., 2005). Problems in schooling contexts occur when the child lacks trust and faith that the adults will keep them safe. Abuse and neglect in childhood impact the brain's neurology as it develops. The developmental domains and impacts on social relationships with others are also affected. Disordered attachment styles often result from poor attachment behaviours when children are young, and this affects

relationships throughout the child's life, including relationships with peers and teachers. Babies exposed to ongoing and consistent harm are more likely to experience insecure or disorganised attachment with their primary caregiver (Bromfield & Miller, 2012).

Trauma Theory

One definition of the trauma theory is when something happens in a child's life that is so uncomfortable and harmful that it overwhelms their ability to cope: 'At the moment of trauma, the victim is [made] helpless by overwhelming force... Traumatic events overwhelm the ordinary systems of care that give people a sense of control, connection and meaning.' (Herman, 1992, p. 5)

An altered neurological state occurs when an alarm reaction occurs due to a traumatic experience. The body releases chemicals and enzymes, such as cortisol and adrenaline, creating vulnerabilities in the body's neurological systems and having a detrimental impact on the child's developing brain (Van der Kolk et al., 1996). The trauma theory understands that children's brains develop in spurts, known as critical periods of growth, with the first of these starting at age two and concluding at age seven and the second occurring during adolescence. The number of connections (synapse) between neurons doubles at the start of these critical periods. It is known that two-year-old children have twice as many synapses as adults. These connections between the brain cells are when learning occurs, and, with twice as many synapses, the brain learns at an incredible rate during these critical periods. Therefore, children's experiences in these phases have long-term implications for their development.

Children who are normally subjected to traumatic experiences inclusive of neglect and abuse during early childhood experience a delay in development and socialisation. A close and secure attachment gives children the confidence to explore new elements in an environment, including close, emotional relationships. However, these attempts at connection

by adults with traumatised children can make them feel unsafe (Sorrels, 2015). According to Dye (2018), the loss of control and trust is at the heart of any traumatic experience.

According to Schimmenti (2011), parental emotional neglect is widely posited as an antecedent of an anxiety disorder. Children with a disorganised attachment are unable to interact freely with their peers, which may lead to withdrawal from social interactions and often an aggressive outburst when they feel rejected (Jacobvitz & Hazen, 1999). Traumatized children have a tendency to isolate themselves from others since they fear being rejected (Schimmenti, 2011). According to van der Kolk and Weisaeth (1996), many traumatized children normally fight and try hard to manoeuvre to fit in an environment.

Behaviourist Theory

The behaviourist theory is based on the premise that all behaviour is learnt through interactions with the environment and is a form of communication to access something or someone or to avoid/escape someone or something. The theory is widely used in education to eliminate or replace a challenging behaviour with a more adaptive behaviour deemed socially appropriate for the context. The theory adopts the approach that behaviour is either positively or negatively reinforced. An assessment known as a functional behavioural assessment is used to understand why challenging behaviour occurs by analysing the environment and circumstances relating to it (Chandler & Dahlquist, 2014). When conducting a functional behaviour assessment, there are two main goals. The first is to remediate the student's challenging behaviour and replace it with more appropriate behaviour, and the second is to anticipate and prevent the development of the behaviour (Chandler & Dahlquist, 2014). Additionally, it is important to consider the four main assumptions of a functional behaviour assessment before applying it to a student. These assumptions include that challenging and appropriate behaviour are supported by the environment. All behaviours serve a specific

function, positive intervention strategies can change the challenging behaviour, and a functional behavioural assessment is a team-based strategy (Chandler & Dahlquist, 2014).

Family Systems Theory

The family systems theory appreciates that relationships can either ‘soothe’ or ‘activate’ a person's mental health and well-being. Therefore, the focus is to explore the quality of relationships and relationship dynamics rather than solely focusing on an individual's symptoms. Dr Murray Bowen is the founder of the family systems theory, and he suggests the family is viewed as an emotional unit, and individuals cannot be understood fully in isolation from one another. The theory is an approach to understanding human functioning and how developmental trauma is influenced by epigenetics, where consequences of historical and intergenerational trauma can impact an individual. This theory is relevant since it facilitates a clearer understanding of interpersonal connections and relationships, along with family dynamics, and how these elements can be protective or act as risk factors when a young person is exposed to trauma.

Trauma-Informed Care

With increasing recognition of the pervasiveness of child abuse and neglect and the impact of traumatic stress on children and families, awareness is growing of the importance of ‘trauma-informed’ approaches to psychological interventions. Trauma-informed care refers to understanding, anticipating and responding to issues, expectations, and special needs that a person who has been victimised may have in a particular setting (Hanson & Lang, 2016). At a minimum, trauma-informed practitioners must endeavour to do no harm (i.e., to avoid re-traumatising or blaming clients for their efforts to manage their traumatic reactions; Fallot & Harris, 2008). Trauma-informed care requires a commitment from practitioners and services to understand traumatic stress and develop strategies for responding to the complex needs of survivors.

A frequently cited framework of trauma-informed care is the four ‘R’s’ proposed by the Substance Abuse and Mental Health Services Administration (SAMHSA) (2014). Briefly, the four ‘R’s’ describe key aspects of how routine care is modified to accommodate all clients' social and emotional needs in a service system, particularly for those who may have experienced traumatic events. The four ‘R’s’ are *realisation* (realising trauma and its effects on individuals), *recognition* (recognising the signs and symptoms of trauma), *responses* (use responses that appropriately embrace trauma understanding across the multiple tiers of service delivery), and *resistance* (resisting practices that could inadvertently re-traumatise individuals) (Chafouleas et al., 2016; SAMHSA (2014). Many organisations across the globe are adopting the trauma-informed care (TIC) approach to assist with meeting the needs of people they support who have experienced trauma and those of caring professionals (Christian-Brandt, Santacrose, & Barnett, 2020). A TIC approach encompasses a trauma-informed model that guides an organisation’s behaviour (Hopper et al., 2009). Administrators and researchers are now adopting this framework of practice in educational contexts through the tiered approach, similar to the public health model, where universal, secondary and tertiary tiers inform intervention and prevention strategies.

Trauma-Informed Care in Schools

As the prevalence and impact of trauma and traumatic stress are increasingly understood (e.g., Felitti et al., 1998), the push for schools to provide trauma-informed interventions and services has correspondingly increased (SAMHSA, 2014). This demand is in part driven by burgeoning evidence demonstrating positive outcomes for school-based, trauma-specific interventions for reducing traumatic stress reactions. An additional driver may be the increased accessibility of schools' social, emotional, and behavioural supports. In general, referrals for school-based mental health services are more successful than referrals to

community agencies (Evans & Weist, 2004). This trend appears to extend to trauma-specific interventions (Langley et al., 2010).

Children presenting as at risk of harm and who display trauma-based behaviours comprise 5–15% of the student population in any given school (Department of Education, Queensland, 2019). The provision of service by schools to this cohort is complex and often viewed as problematic by school administrators and teaching staff due to the challenging behaviours exhibited by these children (Powell & Davis, 2019). The lack of service and support for these children is a social justice and equity issue in Australian communities. It continues the current pattern of children who have been affected by trauma experiences being vulnerable and isolated from schooling contexts (Family Matters Report, 2020).

The Department of Education, Training and Employment (2012) acknowledges the need for educators to understand and recognise the history of children experiencing abuse or neglect and to respond to their needs with compassion, patience, and empathy. They additionally advocate for fostering relationships with educators and providing a nurturing context for these students, as supported by Goldfinch (2009) and Morris et al., (2011). Building meaningful relationships between these students and educators, peers, and other significant adults at school is integral to success in and out of the classroom (Clark & Alvarez, 2010). McInerney and McKlindon (2014) highlighted the importance of building trust since students who have experienced trauma might question the reliability of relationships, mistrust connections with teachers and classmates, and find it difficult to respond appropriately to social cues and actively participate in social situations. Building personal relationships with students generally progressively occurs when working in small groups or one-on-one situations with educators (Jaycox, et al., 2009). This can be beneficial in building trusting relationships and encouraging progress academically, socially and behaviourally (Stein et al., 2003).

McInerney and McKlindon (2014) emphasised the need for schools to develop appropriate frameworks and programs to respond to trauma in schools and to educate students while responding to trauma sensitively. They detail strategies, such as strategic planning, staff training, reviewing and planning for individual cases, confidentiality, policy reviews using trauma sensitivity, community partnerships, and overall flexibility, as integral to developing positive school culture and infrastructure (McInerney & McKlindon, 2014). Jennings (2018) further maintained the importance of staff training and professional development in trauma identification and support, stating that trauma-sensitive classrooms and schools can reduce trauma symptoms, improve student performance, increase positive behaviour, and improve overall school retention. This is supported by Overstreet and Chafouleas (2016), who also enforce that school leaders need to be committed to the goal of developing a trauma-sensitive school and should encourage strong working relationships between school staff and mental health professionals.

Alisic et al., (2012) highlighted the difficulties that teachers face when tasked with implementing intervention programs or treatment pathways for students who have experienced trauma. This study found that teachers were generally uncertain about their role in supporting children's recovery and felt their training was inadequate (Alisic et al., 2012). Adelman and Taylor (1998) emphasised the importance of guidance counsellors in primary schools for supporting teachers in their role of educating these students. However, the research emphasises the lack of guidance counsellors in this role in Queensland schools and how these conflicts with the increased need for their services (Alao et al., 2010).

Impact on Teachers When Working with Developmental Trauma

An additional gap in trauma and education research exists in the area of teacher distress. Much research exists on teacher burnout and teacher wellbeing promotion. However, Alao et al., (2010) highlighted the need for further study on how schools can support teachers

supporting students who have experienced trauma. Brunzell et al., (2018) conducted studies regarding trauma-informed practices and trauma-impacted classrooms and how teachers can meet students' needs. However, little information exists on how this work may impact the educators and support staff working with these children and how systems can support their mental health and wellbeing. Teachers are often at the frontline concerning childhood trauma, responding to emotional and behavioural crises in schools daily and hearing about the trauma the student has endured (Hydon et al., 2015). This contributes to teachers carrying emotional burdens, stress, and anxiety, along with lower rates of wellbeing (Alisis, 2012; Blitz et al., 2016; Caringi et al., 2015), impacting teacher attrition rates (Caringi et al., 2015). Burnout refers to job-related exhaustion, depersonalisation and cynicism and lower levels of self-efficacy and self-worth (World Health Organisation [WHO], 2019). This is commonly observed among health care workers, teachers, and other caretakers (Maslach & Leiter, 2017). Vicarious trauma or secondary traumatic stress is defined by stress reactions or symptoms that mirror Post-Traumatic Stress Disorder (PTSD) and is regularly experienced by teachers, healthcare workers, and child protection practitioners who hear the stories of trauma-related incidents experienced by children, often at the hands of their parents or caregivers (Caringi et al., 2015; Hydon et al., 2015; Stamm, 2010). Researchers have found high rates of occupational stress, including burnout and vicarious trauma among teachers (Abraham-Cook, 2012; Denham, 2018). Burnout has been linked to negative student behavioural and academic outcomes (Herman et al., 2018) and lower job satisfaction (Fisher, 2011; Reilly et al., 2014; Shaalvik & Shaalvik, 2015). Teachers in lower-income and higher minority schools have higher rates of vicarious trauma and burnout (Abraham-Cook, 2012) and attrition from teaching roles (Brunetti, 2001); Ingersoll & May 2011; Ingersoll & May 2012). Overall, the available research indicates that compassion fatigue among teaching staff is prevalent and disproportionately impacts teachers.

More schools are adopting a trauma-informed care approach to meet the needs of teachers and caring professionals and the young children they serve (Guarino & Decandia, 2015). This approach is guided by six key principles: safety, trustworthiness, peer support, collaboration and mutuality, empowerment and culture, and historical and gender issues (Substance Abuse & Mental Health Administrators; [SAMSHA], 2014). Trauma-informed care models have been implemented within child protection systems, criminal justice institutions, and schools to assist trauma survivors in their recovery (Wilson et al., 2013). Despite calls for teachers to adopt a trauma informed pedagogical approach in schools and classrooms, research on the effectiveness of trauma-informed care approaches in school settings is sparse and current publications tend to focus on theoretical approaches to implementing trauma-informed care in schools rather than evaluations of effectiveness (Christian-Brandt et al., 2020).

Areas of Controversy

While many researchers acknowledge the impact trauma, abuse and neglect can have on a child's mental health, social competence, academic achievement, and behaviour, few highlight the difficulties in moving forward to address these needs through proven, sustainable, and strategic intervention programs (Domitrovich & Greenberg, 2000). Guhn (2009) discussed the impact of poverty and parental disengagement on students' progress and remarked that many of the strategies employed to negate the impact of trauma, abuse and neglect suggest the involvement of and communication with caregivers, such as school-family-community partnerships. In many cases of child neglect, abuse and trauma, the caregivers hold responsibility for not being able and willing to provide adequate care for their children or protect them from harm (Department of Education, 2019). With intervention programs commonly relying on or advocating for the active support and involvement of parents, caregivers, and families, it can be challenging for these to be successfully

implemented for students who have received abuse, neglect or trauma from these same parents, caregivers, and families (Guhn, 2009).

Commitment by Schools and Systems for Trauma-based Training

Currently, the main institutions engaged with vulnerable children include education and child protection authorities. Education professionals are the most likely cohort to have frequent (in many cases, daily) contact with children due to the often hidden and secretive nature of abuse and neglect, specifically the sexual abuse of children. Additionally, they may have access to personal and family information (Goldman & Grimbeck, 2015).

Consideration needs to be given to children with developmental trauma and teachers' decision making to support these vulnerable children. Teachers need to feel confident and equipped with knowledge and skills to manage the children's multiple and complex needs in a classroom setting. Many competing factors may influence these decisions for a teacher, and one of those considerations is the larger state government focus and initiatives.

Alvarez et al.,'s (2010) study evaluated child maltreatment training programmes and highlighted the need for future educational training and professional development to include content on definitional issues, the prevalence of child abuse and neglect, the consequences of abuse and neglect experienced in childhood, theories about the development of abusive and neglectful behaviours in adults, the recognition and referral of abused and neglected children and adults, responses to children who have experienced abuse and neglect, mental health interventions, and the prevention of child abuse and neglect.

Across the globe, there are ongoing concerns from academics relating to the lack of depth and breadth of training and commitment to schools and systems to ensure their teachers have the skills to manage children who have historically or are currently experiencing harm through exposure to abuse and neglect (Treacy & Nohilly, 2020). There is no compulsory training in pre-service teacher education courses and only a small online child protection

course that lasts for one hour in Australian schools annually. Teachers can access unmoderated online courses and subjects through tertiary education at their own volition. However, it lies with individual schools to decide if they wish to engage in staff training days focusing on childhood trauma and the pedagogical approaches that could assist with managing individual students and the instruction of groups in the classroom.

An examination of the current Queensland Department of Education Strategic Plan (2019–2023) highlights the state schools improvement strategy as part of the Advancing Education Action Plan. The focus for teachers over the next four years includes enhancing Kindergarten participation, digital technologies curriculums, coding and robotics programmes, and Asian language development. The professional development focus for classroom teachers is in the curriculum area of Science, Technology, Engineering and Mathematics (STEM), learning Asian languages, and teaching Asian communication skills. The strategic plan highlights these curriculum areas and professional development as ‘focus areas in preparation for the next generation of IT entrepreneurs in a global world’ (Department of Education Strategic Plan, 2019–2023).

According to Hunt and Broadley (2019), teachers in Australia are not compelled during pre-service or in-service training to complete courses on child abuse and neglect or education pertaining to legal requirements for mandatory reporting. In Queensland, only 14% of teachers in public schools have reported receiving education on child abuse and neglect and the legal obligation for teachers to report suspected abuse to child protection authorities (Mathews, 2011).

Since many teachers are unaware of the signs for detecting child abuse and neglect, it is arguable that school staff are not equipped with the skills and practices to engage with children with developmental trauma. This is supported by Buckley and McGarry (2011), who stated that of 103 schoolteachers from Irish schools in a questionnaire survey, nearly two-

thirds of respondents reported uncertainty or a lack of confidence in being able to identify child abuse or knowing how to support children who had experienced childhood abuse and/or neglect.

Responding to Trauma

Trauma and attachment theories are intrinsically linked, given that the failure of a primary caregiver to provide connection, safety, love, and kindness during the critical years of neurodevelopment nurtures feelings of shame, low self-esteem, and an inability to self-regulate and build relationships (Ainsworth & Bowlby, 1991). Children who have experiences of trauma require a trauma-informed pedagogical approach, which is justified from the perspectives of trauma, attachment, and behaviour theories as a pragmatic guide to supporting student engagement through environmental, curriculum and instructional adjustments.

As social beings, our primal need is to form safe, comforting relationships (Colozino, 2014). Children deprived of secure relationships develop self-protective behaviours to ensure their safety/survival (Crittenden, 2017). Intervention becomes critical for these children in the school environment as their brain state focuses on survival rather than learning (Plumb et al., 2016). Therefore, trauma-informed practice and acknowledging the fundamental and influential role attachment theory plays in supporting students requires a whole school approach (Plumb et al., 2016; Wolpol et al., 2016). This includes, at the foundations, creating relationships between staff, students and caregivers based on trust and an environment of safety (Plumb et al., 2016; Wolpol et al., 2016). Wiest-Stevenson and Lee (2016) stressed the importance of trauma-informed intervention to be driven by the administration and explicitly communicated through school policy, procedures, plans, resources, and processes. For example, the School Wide Positive Behaviour Support (SWPBS) incorporates a multi-tiered system of support (MTSS), crisis management plans, screening tools for at-risk students and

wraparound support services in the community (Cavanagh, 2016). This ensures that trauma-informed intervention is not the responsibility of the support staff or class teacher in isolation but is a collaborative approach with school administration, parents, caregivers and external agencies that may be working with the student and/or the family (Wolpow et al., 2016). This approach provides supportive frameworks that nurture relationships and practices that are preventative, responsive, and restorative to address the negative impacts of trauma (Wiest-Stevenson & Lee, 2016; Schonert-Reichl & Lawler, 2010).

The Department of Education (2018b) aims to address the complex needs of students by implementing the Student Learning and Wellbeing Framework (Department of Education Student Learning and Wellbeing, 2018). This initiative embraces student learning and wellbeing through three key elements: 1) creating safe, supportive, and inclusive environments, 2) building the capability of staff, students, and the school community, and 3) developing strong systems for early intervention (Department of Education, 2018b).

As discussed, trauma, maltreatment or abuse during childhood can have implications for students' mental, emotional and behavioural development (Jennings, 2018; Panlilio, 2019). Panlilio (2019) advocated a three-tiered approach to educating these students, which is supported by Clark and Alvarez (2010) and Lewis and Sugai (1999). These models of support are designed to address the academic, social, emotional and behavioural needs of students and ensure the success of all students in educational settings (Adelman & Taylor, 1998). In Queensland, this is known as the School Wide Positive Behaviour and Support model (SWPBS) (Figure 2). Clark and Alvarez (2010) described tier one as universal supports aimed at all students for preventative and proactive supports across all settings. Tier one provides opportunities to use screeners to identify students requiring more intensive support and allocates students to tier two supports as required (Clark & Alvarez, 2010). Tier two supports are more targeted group interventions using proven, directed and intensive

instruction (Adelman & Taylor, 1998). Tier three focuses on students who have not noticeably benefited from the tier one and tier two approaches. Clark and Alvarez (2010) described this as an intensive and individual intervention. Social and emotional teaching and learning programs are designed to address the needs of tier three students.

Gresham (2017) discussed how social and emotional learning programs correspond well with the tier three approach, with a few key skills being targeted for individual students based on their needs. For students who have experienced trauma, neglect or maltreatment, the one-on-one nature of the tier three approach is beneficial since it enables the fostering of positive relationships with educators and encourages positive feedback, encouragement, and self-monitoring opportunities in a safe and nurturing environment (Gresham, 2017). The impact of these programs provided to students in Queensland primary schools through intensive and individual approaches rather than whole-school or tier one approaches has limited documentation.

As previously mentioned, Figure 1 highlights the ecological systems theory of human development proposed initially by Bronfenbrenner (1979), whereby a multilevel and transactional framework emerged to explain the influences and competing demands on a child or young person. This theoretical framework is applied to school-wide positive behaviour support and community system to explain the ecological impacts on a child who has experienced developmental trauma. As discussed previously, the ecological systems model, represented in a cylindrical diagram (Figure 1), begins with a core circle that highlights the child and the impact on that child by their parent or caregiver, along with the parent's history of abuse, neglect and being parented (Tillbury et al., 2007) and how this impacts the child currently.

The second circle draws attention to the family, siblings, and the schooling context, including the classroom teacher and the child's relationships with these key persons. This is

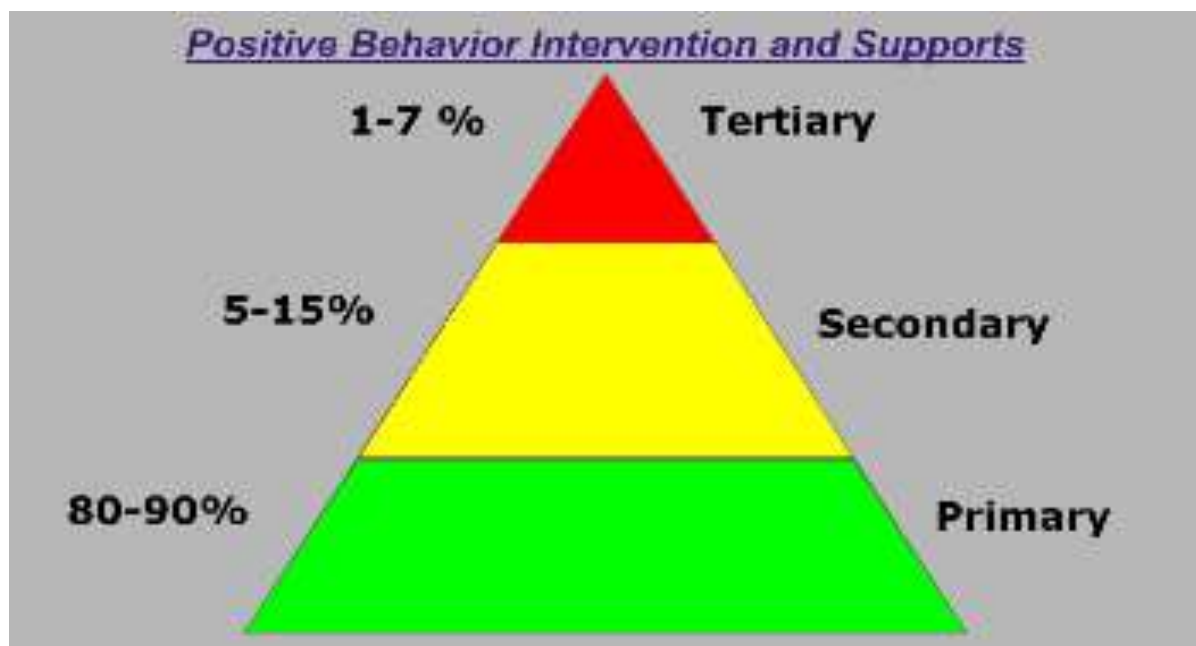
the microsystem and focuses on interactions between the child and the teacher and examines how the child, peers and the teacher perceive and respond to each other (Scannapieco & Connell-Carrick, 2005). It is here in the micro-system where trauma-informed pedagogy could be enacted by the classroom teacher. Positive relationships or teachers being relational with students has proven to achieve more positive outcomes and greater academic successes (Perry 2009). Trauma-informed frameworks have been shown to make a significant difference for children who have experienced the effects of trauma, abuse, and neglect (Perry, 2009).

The third circle is the mesosystem (Figure 1), drawing attention to the entire school as an influential social structure, including school leadership, other teachers, teacher aides, and administrative and auxiliary staff. This is the system grounded in the concept of trauma-informed care. A school environment will embrace a particular model of care, significantly influencing the practices of the classroom teacher and flows toward the child and their family (Childs, 2014). The mesosystem is where the school climate and culture are determined and can include the expectations of teachers' professional development priorities and classroom practices. Here in the mesosystem, the school-wide positive behaviour support framework is enacted (Figure 1).

Several schools in Queensland have adopted the school-wide positive behaviour support framework, which adopts three-tier prevention and intervention method to support all students and has been shown to have positive outcomes for students and teachers (McIntosh et al., 2016) (Figure 2). As of 2010, it is believed that 80% of students can comfortably navigate their education and remain in this green zone. Crone et al., (2015) claimed that observations of a function should be applied at all levels of this tiered model and argued that the tier one approach, if explicit at this entry-level, will lessen the need for interventions at tiers two and three. Crone et al., (2015) argued that the establishment of consistent

consequences and expectations would dampen rule infractions at this level. However, it must be considered that if the targeted social skills instruction recommended by Crone et al., (2015) and Fabiano and Pyle (2019) are not offered in tier one, a greater number of students will move up to tier two. Currently, the yellow band percentage sits at 15% (see Figure 2). It is vital to accept a correlation between disengaged students and the approaches to social and emotional learning programs in education (Cannon et al., 2013). The remaining 5% are in the red or high-risk zone. This tier is for candidates who require functional behavioural analysis (FBA) and behaviour support plan (BSP) interventions.

Figure 2: School-wide positive behaviour support model used in Queensland Schools



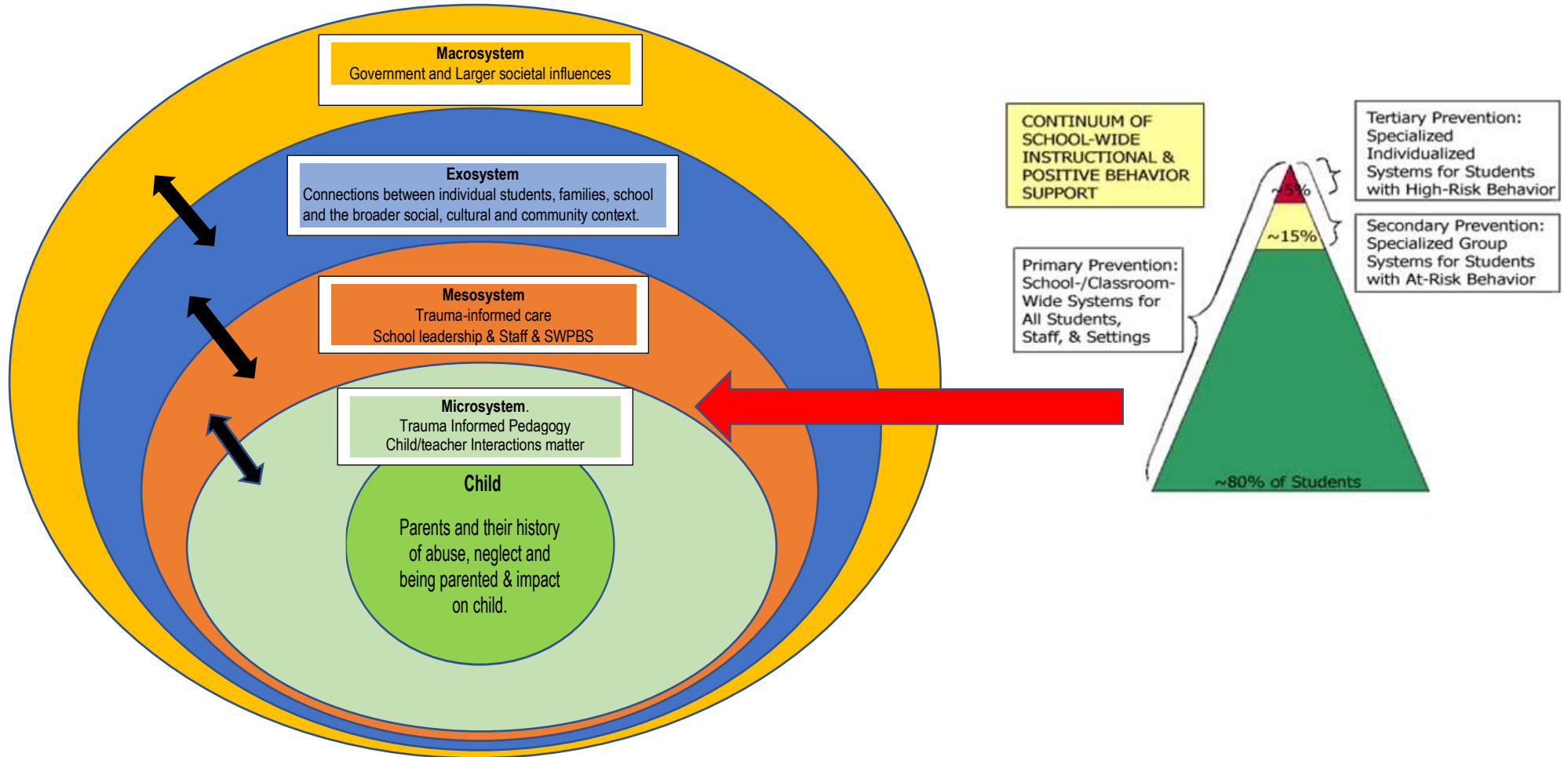
Conversely, as discussed in the literature on the school to prison pipeline phenomenon (Elias, 2013), the community expectations in some communities (exosystem) have a zero-tolerance approach to non-compliance, aggression and emotional and social challenges that result in challenging and disruptive behaviours. This results in the mesosystem (school community) engaging in more punitive responses, such as suspensions and expulsions. In more severe cases, students are arrested at school (Elias, 2013). This results in high rates of

student non-engagement and more at-risk students entering the justice system (Heitzeg, 2009). An approach such as this flows through the microsystem and influences how the classroom teacher responds to challenging behaviours, stimulating a threat response from a child with a trauma background and resulting in a punitive response of a classroom teacher and school administrator, furthering the trauma impact for the child.

This adapted theoretical framework (Figure 3) promotes a holistic analysis and is multidimensional, demonstrating the impact of many systems on the teacher and child. This framework highlights the differences in trauma-informed care (mesosystem) and trauma-informed pedagogy (microsystem), where the classroom teacher utilises relational practices that focus on enhancing child development and classroom learning through healing, growth, and achievement. Strategies embraced when engaging in trauma-informed pedagogy are strength-based, therapeutic and focused on relationships, language, and modelling.

Based on the ecological systems framework it is conceivable that teachers may be impacted by several barriers at different system levels that may impact their decision to engage with trauma-based professional development and training. The interplay of factors occurring at the macrosystem, exosystem and mesosystem will significantly support or deter a teacher's views, perceptions, confidence, and practice in the classroom setting based on influences, expectations and agreements made by the school leadership team with the community and government departments.

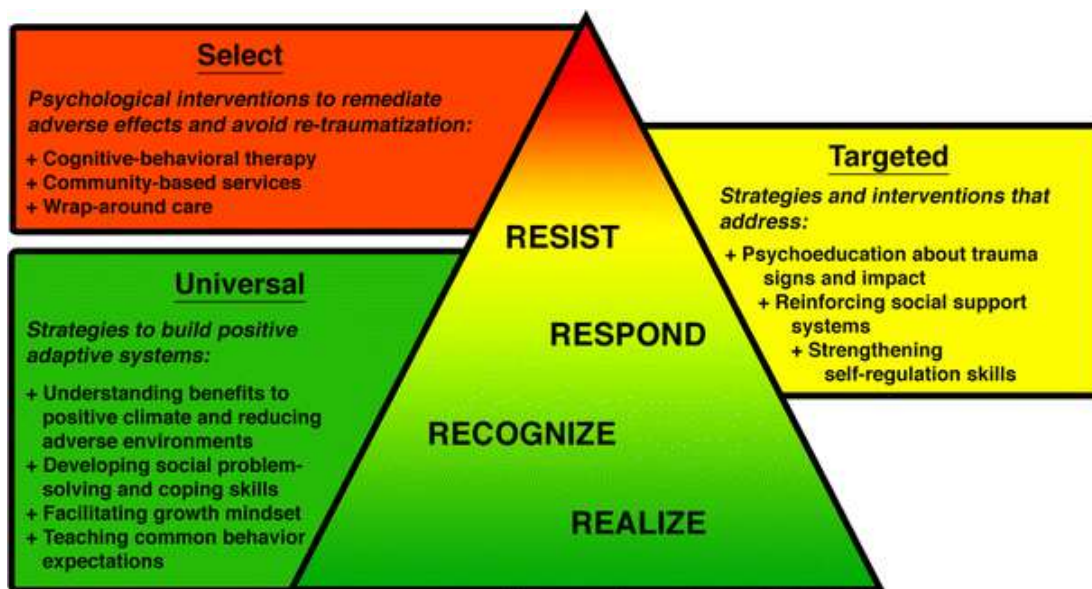
Figure 3: Adaptation of the ecological systems model to demonstrate a multilevel and transactional framework applied to school-wide positive behaviour support (SWPBS) and community systems to explain the ecological impacts on a child who has experienced developmental trauma.



Adapted Framework to Support Trauma-Informed Care in Schools

With consideration being given to the school wide positive behaviour support framework (Berger, 2019), this multi-tiered framework has been shown to increase emotional regulation in students (Bradshaw et al., 2015) and reduce problem behaviours (Bradshaw et al., 2015; Kelm et al., 2014). An adapted version of this framework has been proposed by Chafouleas et al., (2016), incorporating trauma-informed care approaches into existing structures and pedagogical practice.

Figure 4: Chafouleas et al's. (2016) multitiered framework for school-based service delivery



Similar to the SWPBS framework, the adapted version (figure 4) by Chafouleas et al., (2016) highlights the continuum of the least to the most intensive support and is representative of a pedagogical practice that will reduce adversity and promote the individual development of self-regulatory skills. The adapted framework focuses on trauma-informed practice that will be delivered universally across the school at tier one. Targeted strategies and interventions will address trauma-based behaviours and support the acquisition of adaptive skills in tier two. They will focus on remediation and more intensive support for children at tier three. The SWPBS and adapted version emphasise the importance of capacity-building to ensure that key skills and factors of the framework are consistently employed to

achieve successful school-wide implementation across the school and the community. These factors include the training, education, coaching and leadership support of classroom teachers (Splett et al., 2013). In tier one, the intent is to have a workforce across the school understanding what constitutes trauma and the neurological impacts of trauma on the developmental domains of a child. Tier one focuses on having teachers and administration staff who can respond to students and their trauma-based behaviours to remediate and reduce further trauma impacts. This requires staff to recognise the connections between challenging behaviours and trauma experiences. The capacity of schools to provide more targeted interventions at tiers two and three requires staff to have a strong understanding of pain-based behaviours. This requires staff to be trained and supported in practice, informed by the theories and frameworks discussed in this exegesis. Staff supporting students deemed at tiers two and three require a higher level skill-set. This involves promoting a level of expertise that supports remediation for children with trauma histories, community and school leadership tolerance, and the ongoing training, coaching and mentoring of classroom teachers and administrative staff.

Training, Coaching, Mentoring and Supporting Trauma-informed Practice Within a School

Professional development, training and accessing educational opportunities are fundamental components of a school becoming trauma-informed in its approach to managing students with trauma experiences and who are exhibiting pain-based behaviours. An analysis of findings from implementation science discusses the importance of a consensus within the school community to ensure that new and innovative practices are absorbed by a workforce and implemented as part of practice (Metz et al., 2015).

Core competencies considered significant to frameworks of trauma-informed practice include establishing a context founded on trust, safety, security and belonging. Practices

paramount to establishing these safe and secure contexts include relational constructs between the staff and students that allow children with a trauma background to have teachers aware of therapeutic and preventative responses when a student experiences a trigger that would likely lead to behavioural escalation, re-victimisation, and further maltreatment (Wolpow et al., 2011).

Training and furthering professional development and understanding requires coaching and mentoring components to assist teachers in cementing and applying the new concepts. The sustainability of content learnt during the educative sessions is paramount when a teacher applies the new learning and acquires a new skill set. This process requires coaching and mentoring support and is particularly useful when teachers acquire skills related to relational pedagogy (Stormont et al., 2015) and using positive instructional and behaviour management strategies in the classroom (Hershfeldt et al., 2012). When scaffolding a skill base with teachers in trauma-informed care for their classrooms and across the school, it is important that community and organisational infrastructure is present to support the implementation of trauma-informed practice at the school-wide level (Metz et al., 2015). The competent and capable contexts are the foundation for the successful implementation of innovative change when providing structure and support to the teaching workforce within a school environment to effectively manage children with regulatory behavioural needs. School leaders and administrators may acknowledge the need for tools, systems, structures, and practices to become informed in trauma-informed care and support the implementation of a new pedagogical approach.

Significant growth in the promotion of trauma-informed practices within individual schools or clusters of schools is occurring within Australia and internationally (Howard, 2019). For example, the University of California has recently evaluated the Healthy Environments and Response to Trauma in Schools (HEARTS) program, which implemented

a three-tiered framework to mitigate the impacts of complex trauma among its students. In Australia, clusters of schools in Southern Tasmania are working alongside the Australian Childhood Foundation to implement the Transforming Trauma Project over three years. Intensive training, coaching, and mentoring alongside the whole school implementation process has occurred in both examples, and the results of the evaluations have indicated success for the teachers, students, and communities (Australian Childhood Foundation, 2020; Dorado et al., 2016; Howard, 2019).

Trauma Aware Education

National guidelines for trauma aware education (2020) have been developed to support schools, early childhood services and schooling systems to become trauma aware in response to international and national cognizance of the impacts of trauma associated with childhood abuse and neglect. A core theme in the guidelines is the importance of training for school leaders, administrative staff, and classroom teachers. The guidelines discuss the importance of leaders and staff being aware of the impacts of complex childhood trauma on children and young people and how this affects their capacity to engage in learning. Students who have out-of-home care require schooling staff to be trauma aware and able to adjust their pedagogical approach to cater to their special learning and relational needs. The guidelines also note that children who may not be under statutory orders but are still living with the outcomes of complex trauma also require schooling staff to interact and relationally support them. These students may not be identified as having experienced developmental trauma. However, trauma aware practices will be inclusive of all children and young people in the educative setting.

National guidelines (2020) have been developed for education systems and consist of 10 overarching guidelines focused on leadership in schools and becoming trauma aware to support educators in their schools. This encompasses school leadership teams providing

trauma-sensitive workplaces to reduce the burnout and rates of vicarious trauma for staff as they work with children and young people struggling with the outcomes of complex trauma. For the purposes of this exegesis, it is important to differentiate the difference between the concepts trauma aware and trauma informed. Trauma aware schooling requires system changes, embedding trauma aware education practices and approaches at the school and system levels (see Figure 3 for the interrelated layers in the ecology of the system). Trauma informed relates to practice and the training and educative strategies underlying principles of the guidelines and focus on pre-service and in-service teachers. The key strategies, skills, responses, and practices that are achieved through ongoing coaching, mentoring and support to teachers and that form the basis of pedagogical practice are instrumental to the success of the overarching trauma aware guidelines.

PRACTICAL CONTEXT

CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

Introduction

The primary goal in making decisions related to methodology is to maximise the likelihood that the frameworks and approaches selected will field results that answer the research question. This section describes the design adopted for this research project. The research project has three objectives, including exploring the barriers and enablers to mainstream classroom teachers engaging in professional development opportunities about childhood abuse and neglect, the most viable method of delivery for teachers to learn about trauma-informed classroom pedagogy, and the willingness and capacity of mainstream teachers to engage in learning opportunities related to trauma-informed classroom practice.

Philosophical Assumptions

It is well understood in the literature that researchers bring a set of beliefs and paradigms to a study that will orientate and guide the nature of the research. This is referred to by Cresswell (2018) as a philosophical worldview, believing this is based on the researcher's discipline orientations, past research experiences and research communities. Cresswell (2018) described the philosophical assumption proposed in a study as being 'a basic set of beliefs that guide action' (Guba, 1990, as cited in Cresswell, 2018, p. 17). The philosophical assumptions are fundamental and intrinsic to understanding our social reality and the dynamic relationships between research questions, philosophical assumptions, and choices of methodology (Sommer-Harrits, 2011). The concept of a paradigm is to explain methodological differences in the ontological (the existence of what is known) and epistemological (the study of the acquiring and origins of knowledge) assumptions and how they fit together to construct our social reality and worldview. Therefore, the philosophical

worldview of the researcher is reflected in their paradigm since it refers to research practices and choice of methods in how the researcher conducts the research within a research community (Mesel, 2012). Ontology and epistemology are the basis of the research paradigm and fundamental to understanding the perspectives of the researcher.

The philosophical paradigm proposed in this research is a pragmatic worldview, whereby more than one method is employed to gain an understanding of the problem. Pragmatists are concerned with how knowledge is applied; they have a need to understand what works and solutions to problems (Creswell, 2018). Pragmatism is focused on the research problem and will query and utilise all approaches available to yield an understanding of the concerns. According to Creswell (2018), pragmatists do not see the world as an absolute unity and agree that research always occurs in social, historical, and political contexts, and their mixed methods studies will reflect social justice and political aims. This paradigm reflects the researcher's sense of person relating to worldviews, approaches, and interpretations resulting from studies undertaken. Like many mixed-methods researchers, pragmatists may look to several approaches to collect and analyse data rather than subscribing to only one method. As outlined later in this chapter, this approach is reflected in the methodology, and the research process is diagrammatically represented in Figure 5.

Pragmatism is not committed to any single approach and will be methodologically pluralistic and creative when utilising the strengths of both qualitative and quantitative methods. The pluralistic approach of this research project included the researcher's personal views, along with a qualitative study (Study 1), to establish patterns and themes regarding barriers and enablers affecting the uptake by mainstream primary school teachers of professional development and training opportunities regarding the acquisition of knowledge and skills related to trauma-informed practices. Once the qualitative data was analysed, and patterns and themes established, a survey tool was developed to assess whether the results

from the qualitative study could be generalised to a larger sample of the teaching population. Within the paradigm of pragmatism, a sequential mixed-methods approach addressed the ‘what’ and ‘how’ of this research problem and enabled opportunities to gain a deeper and more comprehensive understanding using differing methods (Creswell, 2015).

Ontology, Epistemology, and the Researcher

Ontology and epistemology are two ways to consider a research philosophy. Ontology is the study of being and deals with the nature of reality. Ontology is a mindset or belief that reflects the researcher's perception about what constitutes fact and its place in the world (Neuman, 2011). The research philosophy that has been embraced related to this research project is pragmatism, assuming an orientation towards solving practical problems in the real world and asking the researcher to focus on two different approaches to enquiry. Pragmatism is described by Goldkuhl (2004) as having an interest in the ‘*what is*’ but also the ‘*what might be*’. Pragmatism can be understood as a philosophy that fully acknowledges a mutual permeation of knowledge and action to change what exists (Goldkuhl, 2004). The researcher’s ontological stance reflects this approach in determining if roadblocks and barriers exist for teachers to partake in professional development to enhance their pedagogical practice and cater for children who have experienced developmental trauma. A pragmatic paradigm reflects the researcher’s beliefs and practices to use what works (Figure 3). These actions appear significant and fundamental to the methods used in this research project. This ontology is evident in using a mixed-methods pragmatist approach, which does not imply or anticipate research questions but recognises human actions as a fundamental way of making the social world meaningful. In this research project, teacher choices regarding engagement in trauma-informed classroom practice learning opportunities will allow meaning to be derived and understood concerning the roadblocks and barriers that might prohibit this engagement. The mixed-methods paradigm also argues the importance of

obtaining interview and survey data to inform the researcher of the barriers and actions that could improve and increase teacher engagement in future professional development opportunities for enriching trauma-informed practice.

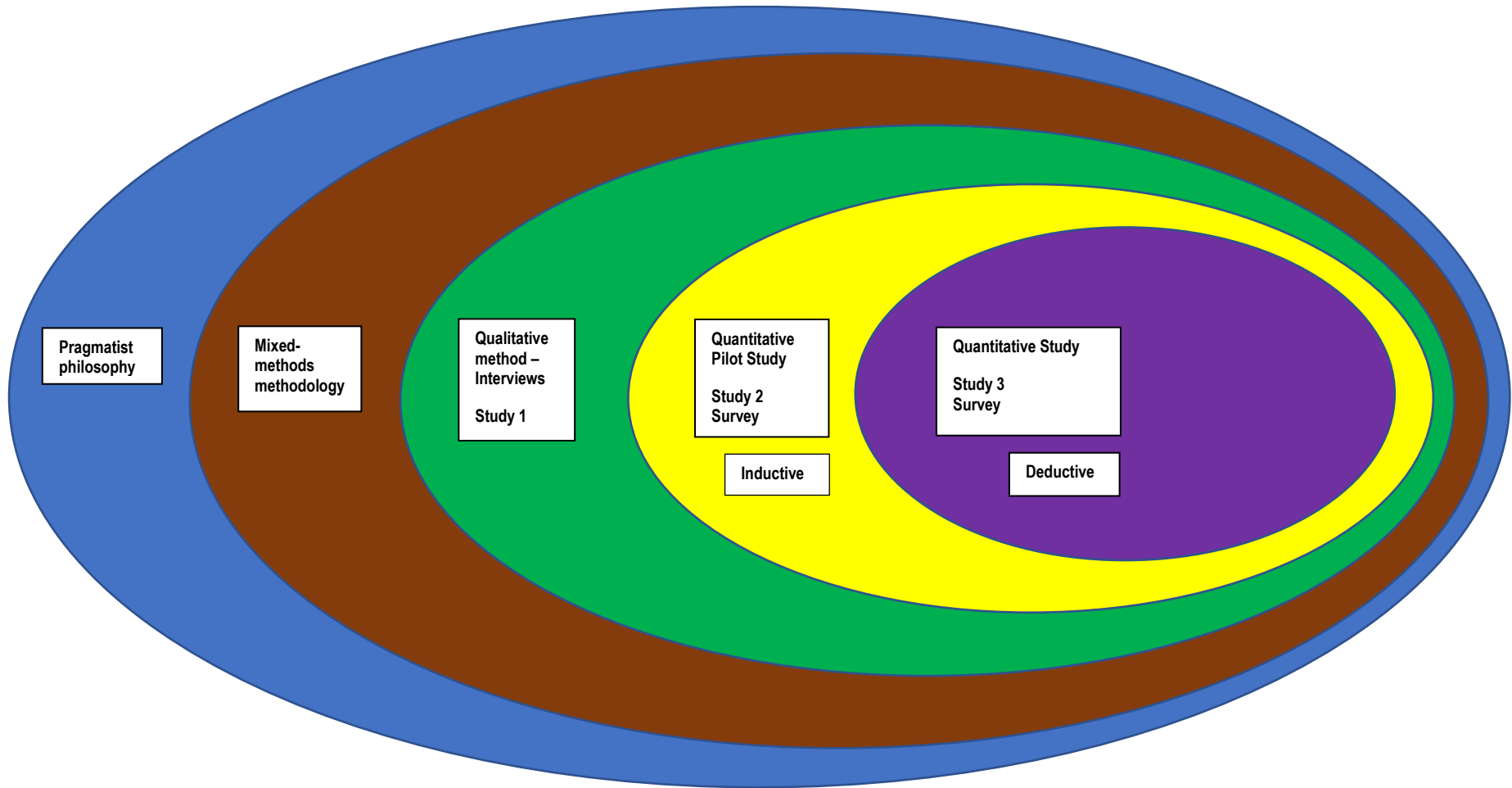
Ontology refers to questions regarding the nature of reality independent of the researcher (Creswell, 1994), whereas epistemology refers to theories of knowledge, nature, sources of knowledge, and the capacity of research participants to possess knowledge (Childers & Hentzi, 1995). The pragmatist researcher argues that a continuum exists between objective and subjective viewpoints, and knowledge construction is contextual in nature and influenced by cultural, historical, and political factors. A pragmatist's approach tests the veracity of the facts through dialogue, along with the usefulness and consequences of the knowledge obtained (Giacobbi et al., 2005). This perspective reflects the researcher's epistemological views since reflection and analysis of inquiry will consider knowledge construction's practical, moral, and ethical consequences. Lincoln and Guba (2000) conceded that the pragmatist would consider the practical concerns with human existence; the research questions and the consequences of inquiry are of utmost importance.

Axiology and the Researcher

One of the four fundamental concepts that constitute a philosophy of knowledge is axiology (i.e., understanding the nature of ethics and values; Biddle & Schafft, 2014). It is acknowledged that a postpositivist will fully minimise the influence of values within their research possible to maintain 'objectivity, thus increasing research validity' (Teddie & Tashakkori, 2009). In contrast, pragmatist researchers believe that values play a large role in conducting research and drawing conclusions from their studies (Teddie & Tashakkori, 2009). The pragmatic inquiry focuses on knowledge as having the capacity to be wrong and needing constant revision, and pragmatists believe this is achieved through the product of experience (Biesta, 2010; Dewey, 1916/2009; Maxcy, 2003). Therefore, research design and

methodology may take a multitude of forms. In this research project, a mixed-methods sequential explanatory design approach of a qualitative nature, followed by quantitative nature, is what the researcher has judged will most effectively produce knowledge given available data, possibilities for analysis, and available resources. The needs of the inquiry itself direct the actions or methods that the researcher employs to direct her inquiry. Hence, the decision to engage in a mixed-methods study is to obtain insight into the roadblocks mainstream teachers perceive as a barrier to engaging in trauma-informed professional development. The researcher's view is that the qualitative research of this mixed-methods approach will be value-laden. However, it will provide valued knowledge from the participants. The researcher will acknowledge her own values and prejudices based on beliefs and experiences relating to the philosophical perspective, approaches, method, and data collection choices (Saunders et al., 2009), allowing values to play a vital role in interpreting the results using subjective and objective reasoning.

Figure 5: Methodological research approach outlining the research process in this exploratory sequential mixed-methods research project



Methodology – Exploratory Sequential Mixed Methods (ESMM)

The principal aim of methodological decision-making is to determine approaches to gather evidence to answer the research questions. In gathering and analysing information, decisions concerning practice effectiveness, enriching policy, and advancing social justice issues and socially inclusive practices can result (Alston & Bowles, 2012).

The purpose of considering the fundamental underpinnings of the various research philosophies and approaches is to elicit the assumptions of each, guiding the choice of a paradigm for this research project. Consequently, the philosophical perspective adopted by this researcher is that of a research paradigm of pragmatism, drawing heavily on inductive and deductive reasoning.

The rationale behind the choice of approach is based on the research questions. Using qualitative and quantitative approaches better addresses the research problem than using just one approach independently (Cresswell & Plano Clark, 2011). The pragmatic approach accepts that multiple realities exist in any given context, and the researcher's paradigm is largely dependent on the research questions the research project is attempting to address (Saunders et al., 2009). The pragmatic research philosophy enables the use of mixed methods as the mode of data collection, facilitating the opportunity to be both objective and subjective when analysing the views of the participants (Saunders et al., 2009). The pragmatic approach helps provide grounding, where the research can avoid becoming immersed in issues of insignificance rather than issues of truth and reality (Cresswell, 2009; Tashakkori & Teddlie, 2003). The pragmatic research approach is multi-purpose in nature, allowing for this research project to be well placed and questions to be addressed that do not sit comfortably within a wholly qualitative or quantitative approach (Ihuah & Eaton, 2013). The pragmatic research approach focuses on the problem and tries to find practical solutions using mixed methods.

An exploratory sequential mixed methods (ESMM) approach begins with qualitative research. Then, using the findings, it builds on those results to explain them in more detail using quantitative research (Creswell, 2018). This methodology has a rigorous data collection and analysis process that guarantees validity and trustworthiness (Strauss & Corbin, 1998). In the research project, an inductive, or ‘bottom-up’, qualitative method (Frith & Gleeson, 2004) was used to develop a comprehensive understanding of enablers and barriers for engaging in professional development focused on trauma-informed pedagogical practices by mainstream classroom teachers. The use of this inductive approach means that the themes identified are strongly linked to the data themselves (Patton, 1990). This formed the basis of Study 1 and the use of thematic analysis to explore the lived experience of adults and to understand the influence of this lived experience of mainstream in-service teachers. Following an inductive-deductive mixed-methods cycle, Study 2 used quantitative measures to confirm the relationships and themes identified in Study 1 to validate the findings proposed. This strategy was intended to determine whether qualitative themes can be generalised to a larger sample (Creswell, 2014).

In this mixed-methods approach, qualitative approaches were used to gather perspectives and knowledge from mainstream classroom teachers to understand the enablers and barriers and their influence on engagement in professional development and training opportunities related to developmental trauma and trauma informed teaching practices. The use of quantitative methodologies provides the opportunity to validate the data and demonstrate outcomes that have credibility and trustworthiness for the broader community. This is further supported by Rowan and Wulff (2007) who maintain that ‘inquiries in quantitative research can be enhanced by first being grounded in real life situations and observations through having conversations or interviews from an open perspective’ (2007, p. 451).

Grounded in quantitative research, theories, and frameworks is the concept of determining and measuring constructs. The examination of the literature surrounding trauma-informed care and classroom practice and integrating trauma and attachment theories and frameworks across the developmental lifespan results in an understanding of key constructs to examine when considering a teacher's intentions in engaging in the professional development of trauma-informed pedagogy. Farran et al., (1995) discussed the importance of highlighting the constructs to be measured when engaging in quantitative research and integrating and synthesising current knowledge. This quantitative research was informed by themes and patterns that emerged from the qualitative research. However, it was envisaged these constructs would include teacher burnout, vicarious trauma, support and leadership when managing students' challenging behaviours and considering the impact of working within a whole school approach to trauma-informed care and accessibility to professional development opportunities. The quantitative data generated through the dissemination of a survey tool, occurred initially as a pilot study involving 15 teachers. Following amendments that needed to be made to the survey tool, Study 2 included 300 mainstream teachers in Queensland state schools and did not include results from the participants in Study 1. This survey was used to collect data to test the hypotheses established once Study 1 was completed and the themes and patterns analysed.

Method

Mixed-methods research is increasingly being used as a methodology in the health and human sciences to better understand issues and ensure participants' voices are being heard (Guetterman et al., 2015). This research project occurred via a mixed-methods approach as it aligned with the research goals embedded within a paradigm of pragmatism. This study has a theoretical lens reflective of social justice and strong political aims embedded in Australian communities whereby children who have suffered trauma are entitled

to an education that is equitable and fair, not dissimilar to their non – traumatised counterparts. The assumption is that collecting data from a qualitative process (Study 1) of interviewing participants and then exploring these results using a quantitative survey method (Study 2 and Study 3) will provide a comprehensive understanding and appreciation of the research questions. Guetterman et al., (2015) discussed the importance of integrating qualitative and quantitative data as the centrepiece of the mixed-methods approach, whereby the data from each approach becomes interdependent in addressing research problems and hypotheses. In this exploratory research project, data integration began with qualitative data collection, whereby interviews with participatory engagement occurred (interviews in Study 1) and then analysed, resulting in themes and patterns emerging. It builds from qualitative results to a quantitative component through the development of a survey instrument that encapsulates the themes and patterns determined in the analysis of the qualitative study. This survey instrument was trialled in a pilot study before its implementation with a larger survey group (Study 2). This merging of the qualitative and quantitative results enabled embedding or integrating data typical of an exploratory mixed methods approach.

Study 1: Qualitative Data Collection and Analysis – Interviews

Data Collection

In this mixed-methods approach, a qualitative approach using interviews was employed to gather data on the willingness and capacity of mainstream classroom teachers to engage in professional development related to childhood abuse and neglect and trauma-informed pedagogy and on enablers and barriers when teachers do not engage. Semi-structured interviews were used in Study 1 of the research project, allowing the researcher to follow a set outline of topics with pre-tested questions and prompts in each section (Alston and Bowles, 2012). Informed consent for participation in the interview was obtained from each participant, and interviews occurred via an intermediary platform, including Zoom or

Microsoft teams (MST). Each interview was audio-recorded and later transcribed for analysis. There were 16 in-service teachers from three separate State Queensland Primary Schools, with five teachers from each school participating in the interviews. The researcher approached the school principals prior to the research project commencing. The researcher negotiated a time to discuss the project with the entire school staff at a staff meeting and asked for volunteers to be part of both studies.

The researcher coded the interview transcripts into themes and sub-themes and analysed the qualitative data through a process consistent with thematic analysis and presented in a joint display. Example questions included: How do you determine the professional development priorities for yourself each year? What are the main factors that influence your decision concerning training and professional development?

Data Analysis

Inductive analysis of the data set using a thematic analysis method allowed for themes to be identified. Inductive analysis was selected (as opposed to a theoretical or deductive approach) to ensure the form of thematic analysis was data-driven and that the coding of the data occurred without attempts to fit it into a pre-existing coding frame or the researcher's preconceptions (Braun and Clarke, 2006). The six-step process proposed by Braun and Clarke (2006) was pursued to establish the themes that evolved from the semi-structured interviews in Study 1. The researcher conducted the transcription of the interviews to ensure familiarisation with the data collected. Braun and Clarke (2006) describe the six phases of analysis as guidelines with elements of flexibility, including basic precepts that need to be applied to ensure a fit with the research questions and data. Ely et al., (1990) discussed that the six-step thematic analysis process is a recursive process rather than a linear process, whereby movement between the phases is encouraged. The six-step process commenced with:

1. Familiarising with the data to ensure immersion in the data to appreciate the depth and breadth of content searching for meanings, patterns, and concepts before commencing coding;
2. Transcribing verbal data, whereby the data gathered through the 16 interviews was transcribed into a written form. Lapadat and Lindsay (1999) believe this phase is an interpretive phase where despite being time-consuming and often viewed as mechanical, it is a key phase of data analysis when meaning is created;
3. Generating initial codes from the data whereby the codes identify a feature of the data, allowing for data to be organised into meaningful groups that may form the basis of repeated patterns. Coding occurred through tagging and naming sections of text within each data item;
4. Searching for themes through sorting codes into potential themes, analysing codes and considering how codes combine to form over-arching themes and sub-themes occurred (Braun & Clarke 2006); and
5. Reviewing, defining and naming themes through developing a data map and a detailed analysis of each theme and sub-theme occurred.
6. The themes that became evident in Study 1 were used to build an instrument to be used in Study 2 of the project.

As discussed by Cresswell (2018), the intent of this research design was to explore with a sample initially so that the information gathered could be utilised in a later quantitative phase to enable the testing of the themes.

Participants

Mainstream in-service classroom teachers from state primary schools in Southwestern Queensland were offered the opportunity to engage in the research study. Teachers were provided with an information brief about the research (including details of the study and

approved confidentiality/ethics documents) and the researcher's contact details. The sample size was 16 mainstream classroom teachers, five from each respective school and an additional teacher who wished to be included from one of the schools. The researcher attended a staff meeting at each school to present the research project and invite volunteer participants to contact the researcher to participate in the interview.

Each participant had the opportunity to review and consider their specific interview responses following the transcribing of interviews by the researcher, adding an additional layer of integrity to the dataset.

Study 2: Develop Survey Instrument and Pilot Study

Data Collection

The findings from Study 1 of the research project informed the quantitative study design (Study 2) of the research project. The development of a measurement instrument in the form of a survey occurred following careful analysis of data gathered in the initial exploratory phase (Study 1). At this point, a joint display (table) was developed, outlining the themes from Study 1, the response format for the survey, and each item's content to ensure data integration from the qualitative approach to the quantitative tool, merging the two approaches. Guetterman et al., (2015) discussed that this joint display provides a method and cognitive framework for integrating the qualitative and quantitative approaches. This was an intentional process with a clear rationale to enhancing the integrated qualitative and quantitative data's interpretation to ensure the mixed methods generated new inferences.

Kroll et al., (2012) discussed the exploratory mixed-methods approach as best suited for research questions in areas with limited prior knowledge existing, thus making this approach feasible for examining enablers and barriers for in-service mainstream teachers engaging in professional development for trauma-informed pedagogy. Kroll et al., (2012) discussed the results from interviews used to shape the content of quantitative surveys and

key questions regarding particular themes contributing to the item pool of the survey. Key themes from Study 1 were used to inductively create a structured survey to enable the researcher to determine how generalised the informational interview findings were to the research question.

Cresswell (2018) described a survey design as providing a quantitative description of trends, attitudes and opinions of a population and assisting researchers in answering descriptive questions and making inferences about relationships between variables and how the sample results may generalise to a broader population of interest. Variables anticipated to evolve from the themes generated through analysis of the interviews include teacher motivations, teacher capacity, the support offered to teachers through school leadership, school priorities regarding teacher development, strategic planning by the Education Department, community expectations of managing children with trauma, school ecology related to teacher development, and the mode of delivery when learning about sensitive topics. The development of survey questions was guided using an implementation science framework, and the psychometric properties of the survey were evaluated using the data collected. The theoretical domains framework (TDF) will be utilised as the basis of the survey design to investigate the survey tool's reliability and validity.

Some example questions included, 'Is there a relationship between teachers' capacity to fulfil the requirements of training relative to childhood trauma while meeting the expectations of the department's action plan?' And 'Is there a relationship between the expectations of professional development and the community expectations of the school culture (macrosystem)?'

The primary purpose of the survey design was to empirically evaluate and test the themes and patterns that emerged from Study 1 to assess whether these themes could be generalised across a larger population sample. Once the themes drawn from Study 1 had been

utilised to construct a draft of the survey, a pilot study of 15 participants was employed to test for face validity before the commencement of the larger survey in Study 2 (Nastasi & Hitchcock, 2016). The pilot testing of the survey design is discussed by Dillman (2007) as important since it is a method to gauge the usefulness of the survey tool in providing information related to the themes determined in Study 1. Bird and Dominey-Howes (2007) discussed the importance of determining if a survey instrument is appropriate to the task for which it has been designed by trialling the tool prior to the larger sample being engaged. Parfitt (2005) supported the instrument being trialled with a minimum of 15 participants. The four aspects of a survey that need consideration during a pilot study, according to Bird and Dominey-Howes (2007), include (i) question design and format, (ii) survey length, (iii) survey output and (iv) aims of the survey. These four aspects are further developed in Table 1.

Table 1: Aspects of a survey considered during the pilot study

Aspect	Description	References
Question design & format	<ul style="list-style-type: none"> • Were the questions understood by participants? • Do any questions need rewording? • Should any questions be omitted? • Did any questions require the use of prompts? 	Campbell and Machin (2000), Kitchin and Tate (2000), Collin (2003), Punch (2003), Fehily and Johns (2004), McGuirk and O’Neill (2005), Parfitt (2005)
Survey length	<ul style="list-style-type: none"> • How long did it take participants to complete the survey? • Was the length appropriate? 	Kitchin and Tate (2000), Collin (2003), Punch (2003), Fehily and Johns (2004), McGuirk and O’Neill (2005), Parfitt (2005)
Survey output	<ul style="list-style-type: none"> • Were the data recorded in an appropriate format for analysis? • Was the coding format appropriate for multiple responses? 	Campbell and Machin (2000), Kitchin and Tate (2000), Collin (2003), Fehily and Johns (2004), McGuirk and O’Neill (2005), Parfitt (2005)
Aims of survey	<ul style="list-style-type: none"> • Did the survey fulfil the aims of the study? 	Kitchin and Tate (2000), Collin (2003), McGuirk and O’Neill (2005)

Reference: Table adapted from Bird and Dominey-Howes (2007)

Study 3: Quantitative Study

Data Collection & Data Analysis - Study 3

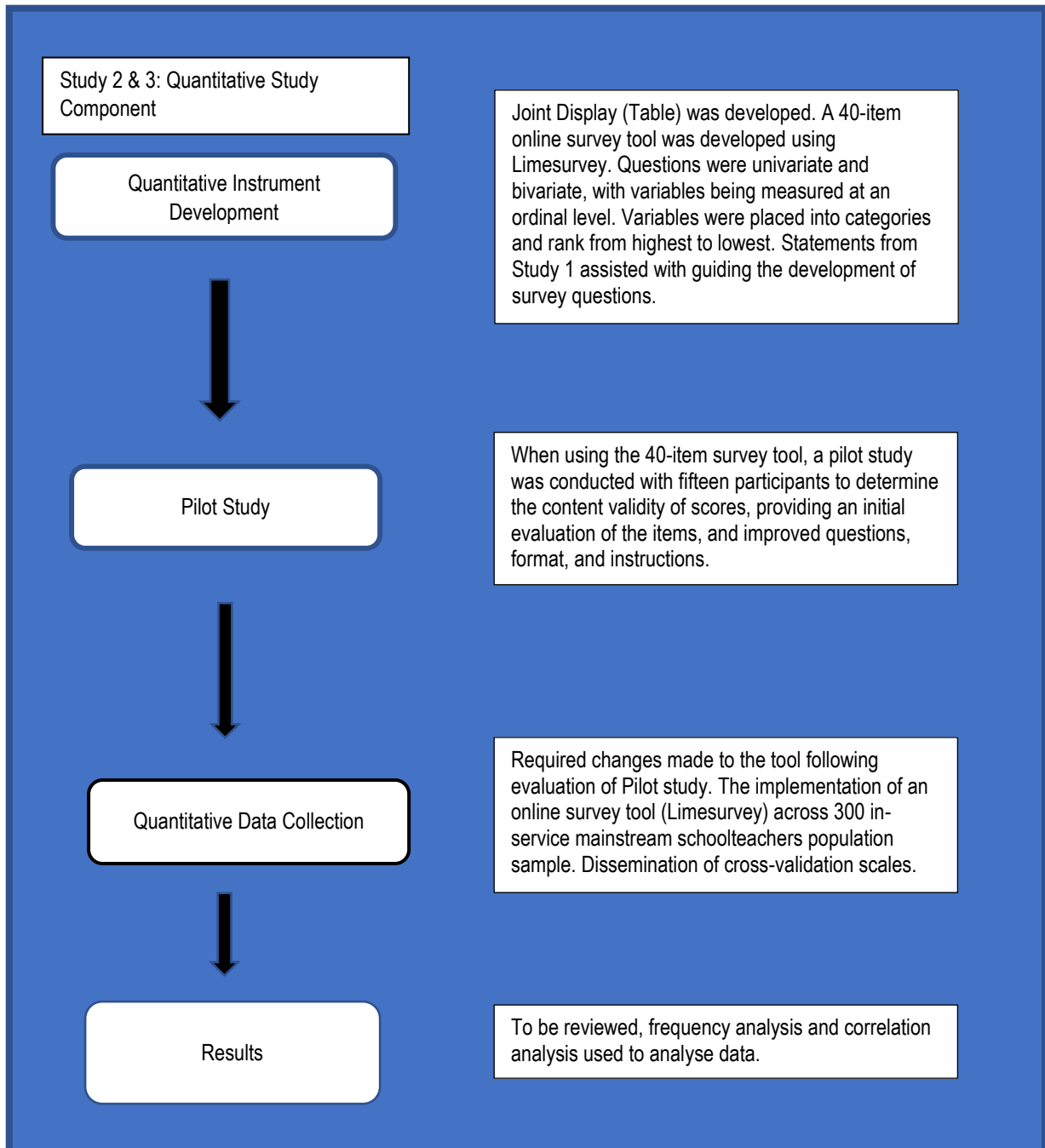
The survey method was the preferred approach in Study 2 and Study 3 of this research project based on the descriptive research questions and desire to determine relationships between variables.

The quantitative data analysis included the following factors:

1. Questions utilised in the survey were univariate and bivariate. The reporting of the quantitative results began with descriptions of the sample and results from the univariate questions to portray a general picture of the larger population (Alston and Bowles, 2012). After the more generalised understanding, a more complex statistical analysis was performed to investigate relationships between two variables (Alston and Bowles, 2012). Once the themes from Study 1 were established and the variables determined, hypothesis statements were developed, guiding the development of the survey instrument (Study 2).
2. The variables were measured at an ordinal level, whereby it was possible to divide variables into categories and rank them from highest to lowest. This was useful when determining the most suitable mode of delivery to enable a teacher to engage with training, considering the differing categories of barriers to engagement in trauma-informed pedagogy training.
3. Inferential statistics were used to inform the researcher as to whether the patterns and themes established in Study 1 of the research project were able to be generalise to the wider population of mainstream classroom teachers. Alston and Bowles (2012) discussed inferential statistics being used when a random sample is drawn from the larger population.

4. Statistical techniques and tests used in the analysis of the quantitative data included frequency analysis and correlation analysis.

Figure 6: The strategy for Study 2 and Study 3 of this research project.



Participants

The sample included 300 mainstream classroom teachers, including teaching staff of grades Prep to Grade 6. The form of data collection in the survey design (Study 2) utilised the internet, whereby a link to the university online survey product, Limesurvey, was sent to participants. This online survey product was used to ensure the acceleration and provision of a quality survey research process at an affordable rate for ongoing assistance with facilitating data collection into spreadsheets for data analysis. This reduced the likelihood of data-entry errors and had the capacity to accelerate hypothesis testing (Cresswell, 2018).

The recruitment of teachers in both Study 1 and Study 2 occurred via the Department of Education. Department of Education school principals were approached directly by the researcher. With the principal's endorsement, the researcher presented the research project to the school staff at a negotiated time. Following inferential support being obtained and a letter of permission being offered to the researcher for this study (Appendix G), all participants engaged with the project on a voluntary basis.

Ethical Considerations

Ethics, values, and right and wrong behaviours underpin societal norms and expectations and represent the fabric of an orderly existence (Anand and Daft, 2007). This work-based project focused on teachers rather than on individuals known to have experienced trauma. Additionally, initial volunteer screenings included a trigger warning to alert teachers who may have experienced trauma in the past as a component of the consent form. This was a mitigating factor to assist in the prevention of any unintended grief or retriggering of past trauma for participants. This study did not infringe any societal standards or values.

The following ethical considerations have been addressed. Mainstream classroom teachers may have experienced trauma in early childhood, and engagement in the study could trigger an emotional response and contribute to re-traumatisation. The selection of

participants who are aware of their traumatic experiences and have self-care strategies in place were considered, and participants were alerted about the purpose of the study. Support services were selected, and information regarding access to support services was provided to all participants. This was further explored in the ethics application to the university.

Study 1 and Study 2 Ethics Application

The research project required an ethics application to be submitted to the University of Southern Queensland before the commencement of Study 1. Parallel to this timeframe, an ethics application was submitted to the Department of Education Queensland for approval. An amendment to both ethics applications was required before the commencement of Study 2 since pertinent information was derived from Study 1 to inform Study 2. This was further explored in the relative ethics application.

Chapter 4: Results

Study 1

In this exploratory sequential mixed-methods (ESMM) research project, Study 1 was a qualitative study, whereby 16 semi-structured interviews were conducted with practising mainstream primary school teachers. The teachers consisted of 13 female teachers and three male teachers, all working in regional primary schools in Southwestern Queensland. The range of working experience as a mainstream primary school teacher ranged from five to 15 years across the cohort interviewed, with five teachers acting in leadership roles during their teaching career.

Qualitative Study Outcomes

Commonalities among the teachers interviewed included each of the teachers expressing clear views related to children's behaviours as a choice the child makes when they become up regulated (demonstrating externalising behaviours) and demonstrate behaviours that are dysregulated, disruptive, and dangerous to themselves or others around them. The

teachers were unanimous in their responses, voicing they believed suspension and expulsion were the only credible consequences for children who displayed these challenging behaviours in the schooling context. None of the 16 teachers interviewed were aware of trauma-informed care principles and how they applied in the schooling context.

Discussion regarding the impacts of traumatic experiences on a student's capacity to engage in relationships, an understanding of attachment, the neurological impacts on development, and the ability to engage in learning were mostly unknown by the teachers interviewed. Teachers mostly stated they were aware that a child's trauma caused the child some challenges but did not recognise that historical trauma from early childhood impacted a child in later years. They mostly believed that trauma needed to be current or recent to cause behavioural disturbances. An example of a response relating to the impacts of cumulative harm or early childhood trauma in the first 1,000 days is provided:

'The child was living in a lovely middle-class home, with pool and nice clothes and wanted for nothing, he was living with his grandparents, he may have had trauma when he was a baby, but he wouldn't remember it, so his behaviour wasn't really due to trauma' (P7).

Analysis of the transcriptions obtained from each of the interviews was coded into first, second and third order themes (Appendix A). The themes determined through the third order were then further analysed against the transcriptions, five main overarching themes, and seven sub-themes. These are represented in Appendix B. These five themes include:

- (i) Child-centred focus and conflicting demands
- (ii) Timely professional development related to a child
- (iii) A teacher's emotional response to childhood trauma
- (iv) Principles of trauma-informed care integrated into school culture
- (v) Mode of learning specialised skills

These five themes and seven sub-themes are represented diagrammatically in Appendix C. These themes and sub-themes are discussed comprehensively in Article 2 (*roadblocks and enablers for teacher engagement in professional development opportunities aimed at supporting trauma-informed classroom pedagogical practice*). A shorter overview is outlined below.

A common focus through the research that addresses the attrition rates of teachers departing the profession (Griffiths, 2020) is the increasing demands of the role with layers of administration, along with additional demands on curriculum delivery, while attending to student welfare needs and associated planning requirements relative to students with additional and diverse learning needs. The core theme of ***child-centred focus and conflicting demands*** is the importance of differentiating the curriculum and disciplinary responses to be child-focused and responsive to individual needs. This, coupled with the ever-increasing administrative demands leaving minimal to no resources for engaging in professional development. Seven of the 16 teachers discussed the emotional exhaustion, limited time, and increasing demands to be involved in extra-curricular loads, impacting their capacity to engage in professional development and the application of new knowledge into their classrooms.

An additional sub-theme that crossed several core themes was ***awareness of a child's needs and required support***. A common narrative includes the lack of information given to teachers of a student's changing circumstances. Changes highlighted included the change of placement, a child who is safely planned out of their home, contact with biological family members, separation of siblings, and caregivers becoming sick or hospitalised. Interviewees were clear in their discussions that it is impossible to understand the purpose of a child's behaviour unless there is knowledge of the circumstances. Nine of the interviewees discussed having a limited understanding of the neurological impacts of trauma, and 13 of the 16

teachers discussed having a limited understanding of childhood mental health conditions and how these impact a child's learning.

The core theme related to the *timely professional development related to a child with trauma* emerged with teachers discussing that when they have become aware of past or current traumatic experiences that students have disclosed, they have felt a sense of powerlessness at times to help the student since they have felt ill-equipped with having the knowledge base and skill set to provide differentiated disciplinary measures to support the child. The teachers discussed that the only possible response was to have the child removed from their classroom, often resulting in an out-of-school suspension. The 13 teachers who responded to discussions in the interviews spoke of feeling annoyed and agitated at the child's behaviour since they were mostly unaware of the background information and adversity the student may have experienced. These respondents perceived the student's disruptive behaviour as antagonistic rather than a regulatory need by the child often seeking connection.

This core theme contributed to the third core theme of *teachers' emotional responses linked to choices about professional development*. Eight interviewees spoke of attributing a student's behaviour and presentation in the classroom to a neurological disorder, common comorbidity with child abuse and neglect. The interviewees discussed that it is often easier to process and emotionally deal with the behaviour when it is diagnosed and unlinked to abuse. Discussion occurred related to not having to cognitively process what the student endured when there is a lot of knowledge regarding the actual events and impacts on the student's development. One teacher stated the following:

'It's enough trying to cope with the behaviours and having pressure to get the students to a certain academic standard, I know I wouldn't have the energy, time or headspace to start

learning or attending classes or training on childhood trauma, it is just too much to ask of teachers' (P5).

The teachers interviewed were forthcoming with their reluctance to involve children in the child protection system. While all teachers interviewed spoke of their mandatory reporting responsibilities, they felt ill-equipped to deal with abuse and neglect disclosures and felt that they had no concept or knowledge of the child protection authorities' thresholds and decision-making guidelines. The teachers interviewed overwhelmingly spoke of there being low levels of knowledge base within their schools regarding support and supervision of teachers when working with the child protection services, outcomes for children, and the emotional toll on teachers when making a report to the authorities. The interviewees saw these low levels of knowledge, skillsets, and support as a significant barrier to the uptake of professional development related to trauma and trauma-informed practice. A consistent suggestion to enabling greater involvement by mainstream teachers included identified child protection positions that dealt with the pragmatics of reporting incidents and disclosures and supporting teachers to manage disclosures made by students and families, along with assisting staff with navigating the child protection authorities and understanding decisions made in response to notifications.

The age-old cultural ways that schools operate are reflected in the policies, practices and systems with the Education Departments throughout Australia and other parts of the western world. These are deemed to be at odds with what is needed for healthy nervous systems to function well. When conditions in schooling systems are not optimal for children who have experienced traumatisation, the results are seen as students being re-traumatised, misunderstood, punished, labelled, suspended, isolated, and excluded.

Trauma-informed care in a schooling system refers to understanding, anticipating, and responding to concerns, worries, issues, expectations, and any special needs that a student

may have in a schooling setting (Lang et al., 2016). Trauma-informed care principles are grounded in an understanding of and responsiveness to the impacts of trauma. They are summarised by Harris and Fallot (2008) in eight key elements that can be applied across the schooling community in practices and interventions applicable to staff, students, and parents. In this qualitative study, a core theme that emerged from the interviews was all teachers interviewed were unaware of the term ‘trauma-informed care’ and how it could be integrated into school culture. The importance of trauma-informed care in enabling the psychological, physical, and emotional safety for all staff, students and parents/carers, along with the provision of opportunity for students who have experienced abuse and neglect to rebuild a sense of felt safety, control and empowerment, was not well understood by the interviewees.

Sub-themes of this core theme that emerged from the interviews is the recognition of the need to acquire additional pedagogical skills and trauma awareness integrated across the school setting. Twelve of the 16 teachers interviewed discussed their need to obtain additional instructional skills that supports a trauma-sensitive approach to children in their classrooms to access learning. The term trauma-sensitive approach lends itself to schools and teachers within schools understanding the impacts of trauma experiences on a developing brain and responding in a relational manner that supports the child to be integrated into the classroom and accessing their social engagement system so they can engage in learning (Plumb et al., 2016). The interviewees spoke of not being able to access formalised academic tuition due to time constraints and the magnitude of their current workload during school hours, after school and on the weekend. The interviewees spoke of in-class mentoring and coaching as an option, with intensive and consistent support to acquire additional skills. The teachers interviewed discussed that the Queensland Department of Education focus on STEM, literacy, and robotics as core areas of growth and part of the strategic direction and has been their aim in recent times.

The final core theme that emerged from the interviews was the mode of learning specialised skills. This theme targeted the enablers that support teachers being able to accommodate learning to acquire a skill set to increase their confidence and competence as they were enabled to apply the skills as they acquired them. A sub-theme of integration of trauma-informed care with practice training targeted the preferred mode of learning of in-class coaching and mentoring facilitated by expert practitioners in trauma-informed pedagogy. Discipline-specific experts placed in the school context were overwhelmingly argued as the best approach for teachers to learn and apply the necessary skills to accommodate the needs of students with trauma-based behaviours. A second sub-theme, the layer of additional school-based supports, emerged from the interviews and consisted of supports that included:

- In-class teacher mentoring and coaching and frequent constructive feedback (P7, P8, P10, P15)
- Frequent and ongoing school professional development sessions that are scaffolded to support learning and trauma integration across all staff and faculties (P5, P7, P9, P12, P15).
- Regular peer-based consultative sessions in school time, whereby specific cases are analysed, and practice suggestions are brainstormed and applied. This needs to be led by a trauma/education expert so that all levels of leadership and teaching staff receive the same information (P3, P6, P7, P8, P12, P14)
- Regular peer support sessions, whereby the risk associated with the student's behaviour is shared to reduce the isolation for teachers. Interviewees discussed teacher stress and burnout and why attribution rates are often due to teachers feeling left to deal with the student alone with minimal support since it is seen the student 'belongs' to a particular

teacher due to being in that teacher’s classroom for that year (P1, P3, P8, P9, P11, P13, P15).

- A community of practice, whereby the cross-pollination of skills is shared with teachers from other schools in the district to share expert advice, therapeutic activities, and strategies, including common special days and events, such as staff development, guest speakers, and integrated allied health support recommendations and training (P2, P4, P7, P12, P13, P15)

The results of study one is further discussed in the article titled “Roadblocks and Enablers for teacher engagement in professional development opportunities aimed at supporting trauma-informed classroom pedagogical practice.”



Final Qualitative
Study Article.pdf

Roadblocks and Enablers for teacher engagement in professional development opportunities aimed at supporting trauma-informed classroom pedagogical practice.

Simone Collier, India Bryce, Karen Trimmer, Govind Krishnamoorthy

University of Southern Queensland

Introduction

Exposure to childhood trauma experiences is increasingly referred to in the literature as an epidemic (Blaustein, 2013). During 2018-19 the Australian Institute of Health and Welfare (AIHW, 2021) reported that 174700 Australian children received child protection services that consisted of either an investigation, a care and protection order or were placed in out of home care due to child abuse and neglect. This report also highlighted that Aboriginal and Torres Strait Islander (ATSI) children were eight times more likely to receive child protective services than their non-indigenous counterparts (AIHW, 2021). It is worth noting that such figures may not accurately represent the number of children at risk, as many concerns go unreported to authorities for a variety of reasons. Thus, estimates of exposure to other Adverse Childhood Experiences (ACEs) in Australian children are likely to be higher (Moore et al., 2015).

The pervasiveness of childhood trauma and the impacts of toxic stress have continued to be appreciated and this knowledge is now beginning to be applied to a range of sectors in our communities (e.g., Felitti et al., 1998). Consequently the urgency for educational bodies including schools to provide trauma-informed practice and services has continued to rise (SAMHSA, 2014). Evidence demonstrating outcomes for children when engaged in social-emotional interventions and specialised, bespoke behavioural supports has resulted in reduction of traumatic stress reactions (Rolfesnes & Idsoe, 2011) Teachers are increasingly expected to assume pedagogical responsibility for student proficiency in the social-emotional developmental domain (Reeves & Le Mare, 2017). Whilst teachers are being expected to absorb the responsibility of student's acquisition of social-emotional knowledge and skills, minimal focus has been given to the teacher's preparedness to be knowledgeable and competent in this area (Jennings and Greenberg, 2009; Waajid, Garner and Owen, 2013; Alisic, 2012).

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The survey design was based on a dialectical thinking framework with a seven-point Likert scale containing a polar view of trauma-informed pedagogical views. This included favourable trauma-informed statements and unfavourable trauma-informed statements. Therefore, options for each item reflected the opposite or polar view of that statement. Forty survey items were developed to approach the logic of the research problem dialectically by viewing the research problem and its solutions as concepts undergoing a dialectical process to tap into each new factor that emerged from the analysis of Study 1. Dialectical thinking refers to the ability to view issues, problems and worries from multiple perspectives through a process of analytical reasoning. Each of the five sections of the survey design was correlated with the five themes determined through Study 1 and the thematic analysis. A draft dialectical scale for the survey was developed and the following items corresponded with the themes and sub-themes obtained from the thematic analysis in Study 1. An overview of the items corresponding to the themes and sub-themes is listed below.

Theme 1: Teacher's emotional response to outcomes for children with trauma

Sub-theme: (Questions 1–4) Teacher's emotional capacity linked to the child's behaviour

Sub-theme: (Questions 5–8) Teacher's emotional capacity linked to broader outcomes for the child

Theme 2: Child-centred focus

Sub-theme: (Questions 9–14) Awareness of children's needs

Sub-theme: (Questions 15–17) The child is the centre of the education process

Theme 3: Timely communication related to the child and their needs

Sub-theme: (Questions 18–19) Awareness of children's circumstances

Sub-theme: Questions (20–21) Awareness of student's changing needs

Theme 4: Mode of teacher learning specialised skills

Sub-theme: (Questions 22–25) Recognising the need to acquire specialised pedagogical skills

Sub-theme: (Questions 26–30) Accessing trauma-informed skills

Sub-theme: (Questions 31–32) Alternative modes of skill acquisition

Sub-theme: (Questions 33–35) Additional layer of school-based support

Theme 5: Integrating principles of trauma-informed care into school culture

Sub-theme: (Questions 36–38) Applying trauma-informed care principles

Sub-theme: (Questions 39–40) Trauma integration within schools as an enabler of learning about trauma

An initial dialectical thinking survey (Appendix D) was developed based on the Arctic survey attitudes related to the trauma-informed care scale, developed by the Traumatic Care Institute. The developed survey was sent out to five content experts in the field of childhood trauma. The feedback prompted rewording items to ensure each item was clear and polar opposites reflected in the statements. Only one concept per item was evaluated. The items related to the themes/sub-themes and terms used would likely be familiar to the audience, and the intent of the item was clear for later analysis. The initial survey design was then further developed into the Limesurvey tool through the University of Southern Queensland. Following a pilot study of 30 surveys being completed by mainstream classroom teachers, three consultative sessions occurred with a quantitative data specialist technician. Based on feedback from the pilot study (Study 2), additional changes were made to further enhance the survey design. These changes included further demographic questions added, consent formalised to suit the tool, modifying the Likert scale from ‘strongly disagree’ to ‘strongly agree’, ensuring the statements were at the correct end of the scale, and restricting access to the survey if the participant indicated they were not a current mainstream teacher.

Further discussion and analysis occurred concerning the four categories recommended for consideration in the pilot study (Table 1) (Bird & Dominey, 2007). These categories consisted of the question design and format, survey length, survey output, and survey aims. Discussion with the quantitative data technician resulted in these categories being met adequately. The final survey tool is located in Appendix E.

The results from Study three are analysed and discussed in the following article titled, “Validating the barriers and enablers for teachers accessing professional development of trauma informed pedagogy.” (Under journal review)



Article 3 Final
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Validating the Barriers and Enablers for Teachers Accessing Professional Development of Trauma Informed Pedagogy

Adverse childhood experiences (ACEs) include several types of childhood abuse and neglect. These range from physical and emotional abuse, and exposure to community, parental and school violence, to child exploitation and incarceration of a parent (among others). Compounding such ACEs is the presence of factors such as disability, poverty, and discrimination.

From infancy through to adulthood, childhood trauma can change how an individual perceives themselves and the world around them. This affects how information is processed and how one behaves in response to their environment. Childhood trauma impacts all developmental domains, and without appropriate early interventions, altered cognitive processes and behavioural responses can lead to long-term problems such as challenges with learning, self-regulation, impulse control, and social and emotional development. Many individuals who experience multiple ACEs are likely to engage in risky health and social behaviours, have poorer physical and mental health outcomes, and may also experience an earlier death compared with those who have not experienced ACEs (Centre for Disease Control (CDC), 2010; Felitti et al., 1998).

The biopsychosocial consequences of ACEs and their prevention is a pressing concern in many Western countries, as well as an increasing concern for schools and teachers. When teachers are uninformed about the impacts of trauma on child development, often the needs of children who have experienced or are currently experiencing childhood abuse and neglect will go unrecognised and/or not attended to or responded to (Bomber, 2020). This can result in both student(s) and school staff

CONCLUSIONS & CREATIONS

Discussion

Throughout this research project, both Study 1 and Study 3 identified that relationships are crucial for teaching. It is apparent that positive rapport is a powerful amulet for both the teacher and the student to continue with engaging in a schooling context. According to Minkel (2021), a positive connection between a student and their teacher assists with preventing burnout, and student engagement is more likely when they experience a relational connection with their teacher. With classroom teachers reportedly leaving the profession in large numbers (Edweek, 2022), the research question of identifying barriers and enablers for mainstream teachers to access professional development and training opportunities to develop skills in trauma-informed classroom pedagogy is more prevalent. With the rise of anxiety in students due to the global pandemic since 2020, the capacity for more students to demonstrate regulatory behaviours has been reduced. According to the United Nations Educational, Scientific and Cultural Organization (UNESCO), 91% of children have been affected by the COVID-19 pandemic due to isolation at home when schools have been closed for long periods, family members are becoming ill and fearful of changing government rules, and parental mental health and substance abuse issues impact the safety and wellbeing of children (Crawley et al., 2020). Children who struggle with anxiety will inevitably struggle to regulate, and this behaviour is exhibited in classrooms as dysregulated, externalised, and disruptive. For many children who present in this manner, childhood trauma is the reason.

Enablers and Barriers to Professional Development for Trauma-informed Pedagogy

Study 1 revealed five key themes consistent throughout all interviews with mainstream classroom teachers. These themes were then tested in Study 3 and found to be consistent with the results in Study 1. Interestingly, the theme of timely communication about

the child and their circumstances was shown as a significant predictor of a teacher engaging in child-focused interventions. Second, the emotional response of teachers was shown to be highly predictable when the variables of timely communication of information regarding a student's changing circumstances become apparent to the teacher. Further, when the mode of learning about trauma-informed practice occurs via the learning preferences of the teacher, engagement in professional development is more likely. Teachers are more likely to engage in professional learning about trauma-informed pedagogy when they perceive a direct need for the skills. Trauma-informed pedagogical practice incorporating the theories of attachment, trauma, and behaviour is essentially student instructional strategies that are relational in nature, incorporating differentiated discipline responses and a differentiated curriculum. When teachers are given timely communication regarding a student in their classroom and the students circumstances from external stakeholders or their leadership team, the teacher perceives the need to respond in a relational, compassionate, and empathetic manner as immediate (Collier et al., 2021). Each of the enablers identified could be understood as a barrier for teachers to engage in professional development aimed at trauma-informed pedagogy. When a teacher is unaware of a child's circumstances, is not given information about the child's changing circumstances in a timely manner, or misreads the child's regulatory needs, the teacher's emotional response towards the child will be negatively affected. The child is perceived as disruptive, belligerent and needing to be taken out of the room to avoid affecting the other student's learning and prevent the teacher from teaching the class. Other barriers include when a teacher has an absence of knowledge regarding the impacts of trauma on the developing brain and is not supported to engage in professional development that suits a teacher's learning preferences. These factors will all become barriers to the teacher's engagement in professional development opportunities.

Theoretical Implications of this Research Project

An understanding of mainstream classroom teachers and their contributions to barriers and enablers was consistent through both Study 1 and Study 3. A key implication of the research program is the question; Is the role of a mainstream classroom teacher changing? Teachers and schools are coming to terms with the role of teachers as protective agents of children due to being the professionals that have the most face-to-face time with students across their childhood and adolescent years. Teachers are the professionals who can impact safety, healing, and recovery of a student's social and emotional well-being as they face the impacts of childhood trauma. The need for teachers to balance their core mandate of imparting knowledge from a curriculum is now inadvertently coupled with needing to support increasing numbers of children to cope with toxic stress so they can engage in learning. Results from this research project highlights the raw reality for mainstream classroom teachers and the broader system, school, and government leadership. Key policymakers can enable teachers or place barriers in the way of teachers becoming skilled, competent and resilient in their role to include psychosocial support of children who have been exposed to trauma. Through the pivoting of existing structures, reducing the contrasting demands of a teacher's current role and implementing frameworks of practice that enable teachers to learn (Appendix F), these core skills can be supported in a functional and accessible way. The core learnings of this research have policy implications when considering the intersect between the child protection system and the education sector, given the client/student and their needs are common across both domains. Teachers are agents of change for children and families and the importance of acknowledging what facilitates or enables a skilled workforce to accommodate the needs of vulnerable children so protective elements are enhanced, and less harm occurs is an overpowering reality. Rather than continuing with a "business as usual" approach with an insurmountable number of barriers to the teaching workforce becoming trauma informed, an approach such as the Embrace framework (Appendix F) requires due

consideration. This framework was developed as part of this research project as a contribution to practice informed by the results of this research project. The core elements of the Embrace model are informed by the answers to the research question and are consistent with the literature, as outlined in the literature review in this exegesis.

The theoretical frameworks that inform the changing roles of teachers includes attachment, behaviour, and trauma theory. For teachers to be enabled to engage in professional development to enhance their knowledge and skill base of childhood trauma and trauma informed practice is ensuring that attachment, behaviour and trauma theories inform their pedagogy and their relationships in their day-to-day interactions with children, both in and out of the classroom and within the school community. Teachers need to see a purpose to their engagement in professional development and when understanding attachment and trauma theory core principles and how these relate to their professional role, they are likely to perceive a benefit. Teachers are interested and committed to outcomes for children as a core value and this was an overwhelming outcome in both study 1 and study 3. When this strong underpinning core principle is coupled with an integral understanding of these theoretical concepts a powerful response to children in the school community is more likely to result, furthering enhancing outcomes for children and a richer trauma aware school environment for staff and students alike.

Practical Implications

The mode of engaging in professional development and training was discussed in both Study 1 and Study 3 of this research project. Participants discussed the mode of learning about trauma-informed pedagogy as a key consideration to the level of their engagement. The current practices in schools often involve school leadership teams determining strategic directives for the school year, and due to multiple competing demands, that may be unplanned at times, they consist of piecemeal initiatives not seen as a whole school approach

to particular foci. After-school workshops are one approach, and the suggestions from Study 1, confirmed in Study 3, include initiatives such as a coaching and mentoring model implemented by an allied health place-based hub within the school grounds. Suggestions that have been offered provide a strong basis for a changing framework to support new ways of teachers being offered professional development as schools move to trauma-informed care contexts. An alternative framework of practice to support teachers to engage in learning and professional growth and be well supported in working with traumatised children while being integrated into a multi-tiered school culture has been developed as a result of this research (Appendix F).

A secondary benefit anticipated to be a result of this framework implemented in schools is that as a teacher's knowledge base grows with the support from allied health and childhood trauma professionals is the capacity of the classroom teacher to develop an awareness of other students who may be struggling with regulatory needs, learning and mental health disorders that will impact on their development, academic growth and possibly school disengagement. With a teacher's capacity increasing with the opportunity to engage in formalised supervision sessions, workshops, and community practice opportunities with experts and other teaching staff, learning is exponential. The expected benefit for students is they will receive earlier intervention than would otherwise have not occurred.

Limitations

Teachers come to recognise their roles are changing to be more inclusive of psychosocial support of children who have experienced trauma and the need to adopt a more relational pedagogical initiative. The daily reality for teachers consists of many challenges when putting these approaches. While the current study has several strengths in acknowledging the enablers and barriers to teachers learning about and acquiring the skills and knowledge, limitations of this study are noted. The number of participants was initially

320. However, the number of participant data decreased to 174 due to only partial completion of the survey. Future investigations may consider greater numbers of participants to conduct confirmatory analyses to test the relationship between variables further to assist with accurate predictions of barriers and enablers when considering practice frameworks to support teachers in engaging in trauma-informed professional development.

Another limitation was teacher engagement in the study. The uptake of teachers in the survey was minimal initially, and a recruitment company for research studies was required to assist with gathering participants. Consequently, the population was broader and across continents, including American, Canadian, and Australian teachers. This may have skewed results since it was a mixed cohort of mainstream primary school teachers. Study 1, the qualitative study, provided rich and meaningful data across 16 participants. The recommendation for further studies includes the number of mainstream classroom teachers being significantly larger to determine with greater certainty the core themes and patterns that will determine the enablers and barriers. The research project relied on teachers' participation despite maximum diversity in teachers' views being sought. Teachers uninterested in childhood trauma, engagement in teacher professional development in trauma-informed practice, and childhood trauma's impacts on learning may have been underrepresented.

Future Research

Beyond the limitations of this research project, the identified themes and sub-themes from Study 1 may be used within a schooling context to develop a skills matrix for each teacher to systematically explore individual teachers' views, attitudes, values, beliefs, strengths, and areas of development. Subsequently, this could be measured against the matrix and become focus areas for future training when implementing a new framework of practice, as suggested by Appendix F. Developing bespoke training is a need for a teacher based on working with a student with regulatory needs in the classroom, which could be the role of the

allied health team and support hub instrumental to the framework in Appendix F. An analysis of teacher behaviour in the classroom would provide a rich baseline to develop the skills matrix when considering the core themes in Study 1 and the students' individual needs in the classroom. The findings from this research provide direct input into school leadership's knowledge bank to ensure enablers are increased through core framework changes and the barriers for teachers for engaging in professional development are reduced.

Conclusion

This research project has evolved by carefully considering professional practice and determining work-based research gaps. This doctoral journey has resulted in evaluating research questions in the workplace and determining the best-fit program of study to answer these professionally related questions. This professional studies pathway of learning, project design, planning, and implementation unique to this program have answered the research questions and raised further questions suitable for future research. The research program aimed at exploring the enablers and barriers for mainstream classroom teachers to engage in professional development and training in trauma-informed classroom pedagogy has resulted in a work-based project with a research component and a 'triple dividend', benefiting the individual, the organisation, and the profession (Ferguson et al., 2018).

Self-development is the individual dividend whereby the research project has been workplace-based, and the research study that has evaluated it has significantly contributed to the principal researcher's self-development professionally and personally. The learning goals have included improvements in critical thinking skills, increases in knowledge, the application of the new information, research skills and scaffolding skill acquisition to support new workplace expansions. The organisational dividend has included benefits to the workplace and practice domains within programs that constitute significant risks to others. The research study evaluating the work-based project has provided contributions to new

program development, frameworks of practice, training opportunities for other key staff, problem-solving opportunities, new data and analysis, and insights into strategic and business opportunities whilst providing some thought-provoking responses to the initial research question. The professional dividend is the contributions made to academia and professional practice with information and knowledge contributions made to gaps identified in the literature. The rigorous research design in this research project has facilitated sound academic evidence, contributing to developing a new framework of practice as an alternative. As a mid-career professional, this work-based learning through work-based research has significantly contributed to the triple dividend model as a movement towards an ‘advanced practice professional’ (Ferguson et al., 2018). The workplace has conceived this through this mixed-method work-based research in the doctoral program.

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Appendix A

Data analysis table of coded data into themes from interviews in Study 1.

Data Extracted	Coded for	First-order Themes	Second-order Themes	Third-order Themes
<p>'I wasn't really informed about the children that I was going to be teaching, and I found a lot of their home lives were brought into the classroom, but I was not informed about this trauma the children had'.</p> <p>'A lot of the issues from home do affect their schooling. And I think, like being informed of the challenges that then would have probably been a lot easier in the classroom'.</p>	<p>~ Limited information about the child</p>	<p>~ Unaware of the child's needs</p> <p>~ Minimal knowledge of circumstances</p> <p>~ Concerns about the child's problem</p> <p>~ Unaware of the impact of trauma or adversity</p> <p>~ Impact of trauma on the child</p> <p>~ Child's history and impacts on learning</p> <p>~ Not informed about trauma circumstances</p> <p>~ Teachers often last to know about changing circumstances of the child</p>	<p>~ Knowledge related to what the child needs</p> <p>~ Teachers don't understand the impact of trauma on learning/socio-emotional cognitive development</p> <p>~ Uninformed about changing circumstances for the child (not able to be responsive to child's needs)</p> <p>~ Knowledge of the child's circumstances</p> <p>~ Feeling empowered to assist the child</p> <p>~ Recognising there is a problem</p>	<p>~ Child centred focus</p> <p>~ Lack of awareness of the impacts of trauma on children and the need to attend training</p> <p>~ Minimal communication among stakeholders</p> <p>~ Knowledge of circumstances supports intervention</p>
<p>'I learnt the hard way, it's taken me years to figure it out that I had to build a relationship with those children to then find out what was happening for them. This is something I</p>	<p>~ Importance of relationships when teaching</p> <p>~ Impact of trauma on learning</p> <p>~ Student disengagement</p>	<p>~ Desire to assist the child</p> <p>~ Limited understanding of trauma impacts</p> <p>~ Relational behaviour helps</p> <p>~ Trauma impacts learning</p>	<p>~ Teachers are compassionate and want to help and support children in challenging circumstances</p> <p>~ Outcomes for children affected by knowledge on</p>	<p>~ Relationships are key to success</p> <p>~ Some teachers unaware of relational benefits</p>

<p>thought I would have been told prior, because it really did affect their learning, I've affected their learning and possibly caused further trauma earlier on'.</p> <p>'He didn't want to be at school. And then one day he had what I thought was a real gun at school. It turned out to be a fake one, that looked very real. And I just got the class out and afterwards I fell apart and I think after that, you know, I left teaching, he was expelled from school and of course this affects his ongoing learning.'</p>	<p>~ Outcomes for children</p>	<p>~ Being informed to assist the child</p> <p>~ Limited understanding of the child's circumstances</p>	<p>childhood trauma and application by teacher</p>	<p>~ Teacher compassion linked to outcomes for children</p>
<p>'I have a lot of children that experience abuse at home, one little girl is intellectually impaired, and her mum was quite abusive, and she was actually doused in fuel by her mom for being naughty. On her birthday, she was neglected and locked out of the house for the majority of night and then sent to school, she had a lot of trauma behind her and</p>	<p>~ Trauma experiences make it hard to teach the child</p> <p>~ Impact on the teacher when exposed to a child's trauma</p>	<p>~ Children with traumatic experiences are resistant to learning</p> <p>~ Teacher confidence to manage the child's behaviours</p> <p>~ Knowledge of the child's circumstances</p> <p>~ Children with trauma experiences bring their trauma to the classroom</p>	<p>~ Vicarious trauma and burnout are more likely when teachers don't understand why the child is misbehaving</p>	<p>~ Vicarious trauma and leaving the profession is more likely when teachers are not supported to engage in trauma-informed practice</p>

<p>would then bring it into the classroom. It was really challenging to teach her when she had so much baggage from home, of course. So, yeah, that was really, really hard, It really affected me'.</p> <p>'Its just not a priority. Teachers are just expected to focus on curriculum and deal with behaviours. These processes, I think, take a long long time to develop and to put in place because there's so many checklists and have toos. I still think we're somewhere off the beginning as there isnt support and professional development for teachers is not readily available, as one it can be very expensive to attend as the school's not paying often. You often have to put up the money to get training yourself. There are some professional developments but it's on top of what the leadership and the Department see as a priority. But I still don't</p>		<p>~ Vicarious trauma for teachers</p>		
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<p>actually the PD that is available really prepares you for each individual child with trauma as it shows in so many different ways’.</p>				
<p>‘I had another little boy tell me that he was touched by his dad. That’s hard to hear but then made me understand why he was so shy and why he didn’t want to be happy and things like that. So, you know, it wasn’t unless I’d be investigating, that I knew anything about the children and what had happened to them, what baggage they were bringing from home, and then I didn’t know what to do about it and was I causing further harm, I dunno’.</p> <p>‘Like if I knew a bit of their background and the knowledge of what was going on, then I think it would have been easier for them and myself.</p> <p>And I think we need to learn how is the best way that children can feel</p>	<p>~ Knowledge assists with understanding children’s behaviour</p> <p>~ Knowledge makes it easier to understand the child</p>	<p>~ Knowledge assists with understanding</p> <p>~ Communicating with children who have experienced trauma</p> <p>~ No information from authorities working with the child</p> <p>~ Worries about causing further harm</p> <p>~ Struggles with skill level</p> <p>~ Not informed of the child’s circumstances</p> <p>~ Teachers questioning children</p> <p>~ Disempowerment and unsure of how to assist the child</p> <p>~ Knowledge assists with supporting children with experiences of adversity</p>	<p>~ Importance of being informed</p> <p>~ Collaborative community responses</p> <p>~ Absence of collaboration</p> <p>~ Teacher confidence</p> <p>~ Teacher competence</p> <p>~ Absence of understanding cumulative harm</p> <p>~ Support and kindness when teachers are aware of trauma’s impacts</p> <p>~ Communication with children</p> <p>~ Empathetic responses come with knowledge</p> <p>~ Relational engagement</p>	<p>~ Teacher understanding and application of the principles of trauma-informed care</p>

<p>comfortable in telling us, making it less invasive for them’.</p>		<p>~ Skills of communicating with children who are mistrusting of adults</p>		
<p>‘I think teachers don't really learn from teachers as we are too busy, and we don't always come with the knowledge that children might have a lot of baggage, and I think there should be a least annual training for teachers to know about these children and how to help them and deal with it’.</p>	<p>~ Demands on teachers ~ Too busy</p>	<p>~ Pressures on teachers ~ Poor time management ~ Unable to be present and available to children with challenging behaviours ~ Teachers do not have the knowledge about the trauma-informed practice and have no time to learn it ~ Frequency of training ~ Minimal understanding of how to deal with children who have experienced trauma</p>	<p>~ Teachers are too busy and lack the capacity to make changes in current circumstances ~ No time or capacity to be an active learner</p>	<p>~ Overwhelmed with the teaching role ~ Limited capacity to learn new information</p>
<p>‘Often after a training or PD the reality of classrooms overtakes and then it’s gone’. ‘I don't know, I feel like if you don't review it often enough, or you don’t have a support officer in your room when the kid is kicking off and there are no opportunities to talk it out after an incident, you end</p>	<p>~ Usefulness of professional development (PD) ~ Applying knowledge in the classroom</p>	<p>~ PD is available ~ PD is being attended ~ Application of new knowledge into the classroom requires additional supports ~ Upskilling is done separately in the school/classroom</p>	<p>~ PD is not a complete answer on its own ~ PD is not useful when not able to be applied ~ No opportunities to upskill and enhance practice knowledge or application ~ Teaching staff are overwhelmed ~ Skill development requires coaching and mentoring,</p>	<p>~ Acquisition of specialised skill set and mode of support and learning</p>

<p>up going back in to doing your normal way of managing and then you get - your stress levels get to a certain point that you forget what you've been taught and yeah, it becomes cyclic very quickly'.</p> <p>'When you go to a PD and everyone's going to take different parts away from it. So, I reckon to have someone that has expertise in the areas of kids, trauma and classrooms come back and say well have you thought about doing it this way or looking at it through different eyes in your classroom as well would definitely be beneficial. I think it would make you more comfortable doing those practices as well'.</p>		<ul style="list-style-type: none"> ~ Knowledge base is enhanced by PDs ~ Application of new knowledge needs support ~ Skilled support staff with no judgements on teacher's current practice ~ PDs need to be used further with other approaches 	<p>case consultation with support staff who understand pedagogy, classroom operations and dealing with overwhelmed professionals</p> <p>~ Possible communities of practice</p>	
<p>'It needs to be led from the top down and everyone needs to be part of this as you're going to experience that child out in the playground, so every teacher needs to be informed. And every staff</p>	<ul style="list-style-type: none"> ~ Leadership involvement ~ Whole of school ~ Consistent approach to all children across the school community 	<ul style="list-style-type: none"> ~ School leadership is important ~ School culture is impactful ~ Approach needs to be integrated into the PBL across the whole school 	<ul style="list-style-type: none"> ~ Changes to the school culture will facilitate a different response from all children ~ Trauma integration needs to be the focus for schools 	

<p>member really needs to be trained in that area because you're going to interact with these children on a daily basis'.</p>				
<p>'You know, I don't think there's enough support out there in schools really, teachers are just so busy, it's a low priority for leadership'.</p> <p>'Leaders in the school need to release us, time is a big problem, they do all these PDs and then kinda throw ya under the bus by saying ok we have made sure you've got the knowledge, now go and do XYZ. They don't give you any time to process it, plan for it, understand the application of it and take nothing else off your plate so you can do those things. There needs to be a coaching element and other key professionals in the school like psychologists, not just guidance officers who are shared by a region and only do assessments, I mean people who know</p>	<ul style="list-style-type: none"> ~ Teachers not feeling supported ~ Teachers are too busy ~ Other strategies other than the delivery of new information is required ~ Other key allied health professionals would be advantageous in a school setting ~ More accessible leaders in the school context 	<ul style="list-style-type: none"> ~ Support by leadership is required ~ Teachers feeling isolated, unable to manage the trauma-based behaviours ~ Misalignment between accessing information and application in the classroom ~ New information needs to be supported to be applied in a classroom context ~ Learning strategies for teachers ~ Problem solving and engagement by school leaders supports teachers 	<ul style="list-style-type: none"> ~ Leadership and teachers feeling overwhelmed ~ Teacher confidence ~ Teacher's confidence in leadership ~ Leadership support ~ Teacher confidence in dealing with children facing adversity ~ Community of practice to support classroom implementation of trauma-based approaches ~ Leadership is instrumental for change across the school community ~ Support for new information to be pedagogically implemented ~ Allied health and a holistic approach in the school context ~ More inclusive leadership 	

<p>trauma and also other professionals like a speech therapist who can teach the teacher and support the kid in the room’.</p> <p>‘The leaders don’t know what happens in the meetings with Child Safety or other mental health professionals, they need to come and see whats happening so they can support teachers to use different strategies, there is no coordination, its kind of adhoc, unplanned and then the kid blows up and straight away suspension.</p>				
<p>‘Well, those children often become disengaged from school because teachers don’t know what to do with them, its hard to do our job, no wonder teachers are leaving in droves’.</p> <p>‘And it was at that point something happened in the classroom when I was on a contract that I realised I can't handle teaching in Australia anymore. It's just</p>	<p>~ Student disengagement</p> <p>~ Teachers feeling disempowered</p> <p>~ Children with trauma backgrounds are hard to teach</p>	<p>~ Empowerment to deal with adversity</p> <p>~ Pedagogical support to deal with hard to teach children</p>	<p>~ Teacher confidence</p> <p>~ Teacher competence</p> <p>~ Teacher confidence and competence affects the attrition rates of teachers</p> <p>~ Support types affect teacher attrition rates</p>	

<p>one of the many schools with chronic problem behaviours. The usual teacher was on stress leave because of the class and wasn't coming back. And I was on a contract for her. That school's quite bad, and I just thought I can't keep teaching in these schools. And so, then I went on and worked in retail, which was lovely'.</p>				
<p>'I think the best way to learn about kids with trauma would be probably to have support by an expert that has been involved with the kid and understands trauma, you get me'.</p> <p>'I don't reckon you can learn from someone that just fronts up from regional office and leaves at the end of the day and gives you a sheet of paper and "says there you are, off ya go." I think it needs someone that has been exposed to the student, understands teachers and the complexity of the job and who can give</p>	<ul style="list-style-type: none"> ~ On the job training ~ Itinerant officers not effective ~ Support from staff who understand the pressures of the profession ~ Support by staff who are familiar with teachers and the impacts of trauma ~ Different approaches needed to support the teacher to know what to do with challenging behaviours 	<ul style="list-style-type: none"> ~ In school training and support ~ Skilled professional support ~ Trauma-informed and trauma-responsive professionals required ~ Familiarity with the child ~ Support from staff who understand trauma ~ Knowledge and skill application by support staff to assist teachers 	<ul style="list-style-type: none"> ~ Teacher confidence in skilled support staff ~ On the job training in classrooms ~ Support staff who know the children ~ Support staff who are part of the school culture ~ Support staff who are placed based on the school ~ Engagement of collaborative stakeholders within the school context ~ Use of different approaches/frameworks models to support teachers 	<ul style="list-style-type: none"> ~ Trauma Integration within the school

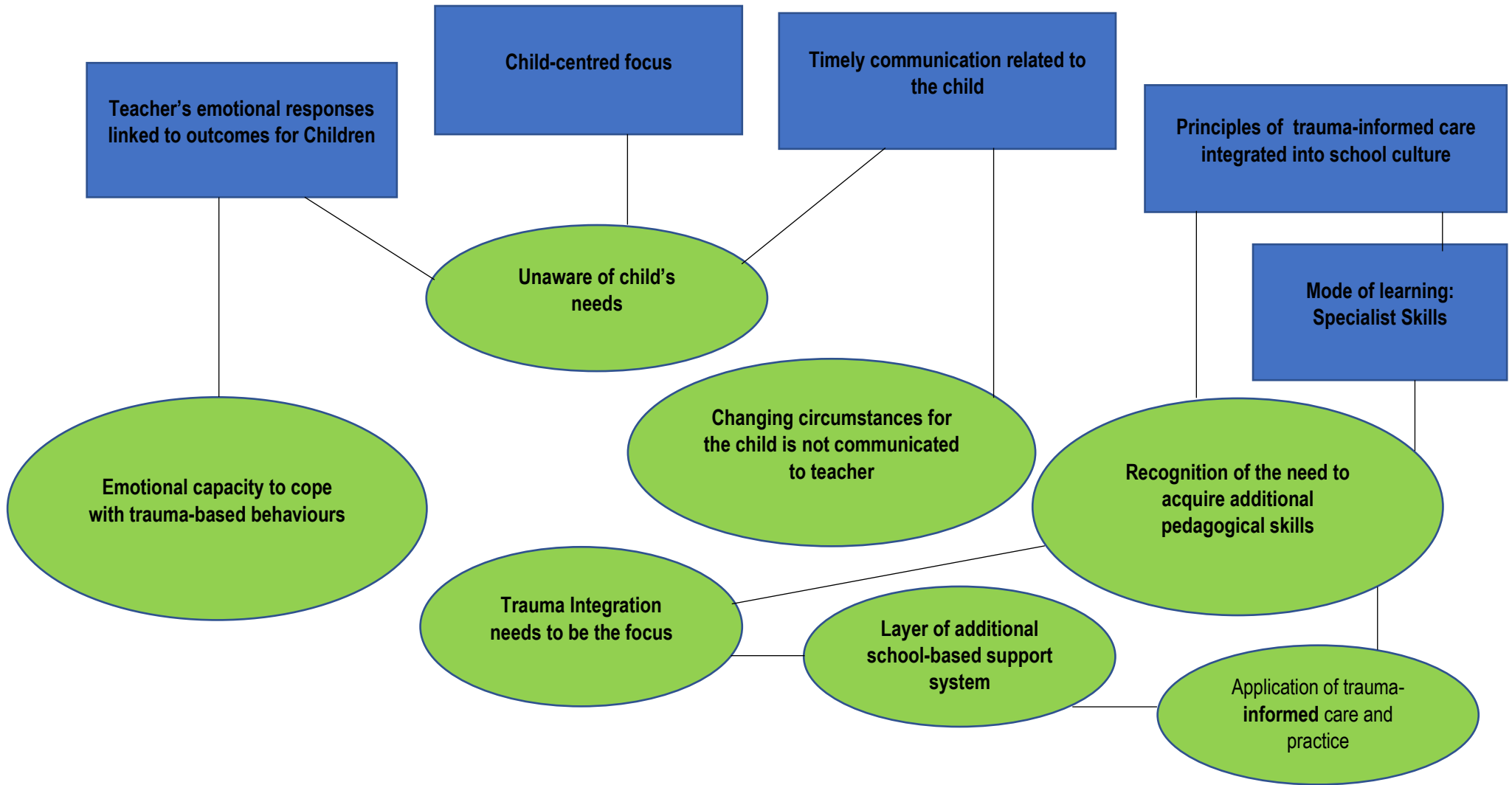
<p>you details about what you're doing well and what you need to change. Ways of how to deal with different situations, depending on the child. But, I think we need someone that gets trauma, the kids and teachers and ways to deal with it., not a blow in, ya know, they need to know the pressure teachers are under every day'.</p> <p>'Right now, I know it would be really beneficial to have a buddy teacher, more experienced teachers, other agencies who know the kid and mum perhaps that could talk about what's happening in class as well as at home and then have brainstorm about what could happen differently to help the kid not get suspended and start to learn for god's sake, fresh eyes ya know'.</p>				
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Appendix B: Thematic Analysis

Theme: Child-centred focus	Theme: Mode of learning specialised skills	Theme: Timely communication related to the child	Theme: A teacher's emotional response linked to outcomes for children	Theme: Principles of trauma-informed care integrated into school culture
<p>S/T: Unaware of child's needs</p> <ul style="list-style-type: none"> ~ Not advised by the leadership of the child's needs ~ Unaware of the child's needs ~ Unaware of the impact of trauma or adversity on child ~ Impact of trauma on the child ~ Child's history and impacts on learning ~ Not informed about trauma circumstances ~ Teachers are often last to know about the changing circumstances of the child 	<p>S/T: Recognition of the need to acquire additional pedagogical skills</p> <ul style="list-style-type: none"> ~ Understanding the impact of trauma on learning and socio-emotional cognitive development ~ Belief that children have choices in responses ~ Unclear about child developmental domains and impacts from trauma and adversity ~ Do not understand the trauma continuum ~ Minimal understanding of types of traumas or harm ~ Unaware that training would assist teachers 	<p>S/T: Changing circumstances for the child is not communicated to the teacher</p> <ul style="list-style-type: none"> ~ Incident awareness ~ Changes in family dynamics, residences, visitations, medications, diagnoses, care and orders not communicated to the teacher ~ Historical trauma not communicated to the teacher ~ Teacher avoidance of issues ~ Poor attendance at case reviews and planning meetings by stakeholders ~ Minimal or no support for FBA assessments and 	<p>S/T: Emotional capacity to cope with trauma-based behaviours</p> <ul style="list-style-type: none"> ~ Understanding emotional responses to challenging behaviours ~ Vicarious trauma leads to high attrition rates and burnout ~ Teachers are compassionate and want to help children but are unaware of how to ~ Suspension of children allows teachers to teach better-behaved children ~ Student disengagement is a worrying response 	<p>S/T: Application of trauma-informed care and practice</p> <ul style="list-style-type: none"> ~ Holistic responses to a child ~ Not causing further harm through managing behaviours ~ Concept of cumulative harm is not recognised ~ Inappropriate responses by teachers can cause additional harm ~ Teachers are unaware of the skill required to manage trauma-based behaviours ~ Teacher confidence ~ Teacher competence <p>S/T: Trauma Integration needs to be the focus</p>

	<p>S/T: Layer of additional school-based support system</p> <ul style="list-style-type: none"> ~ PD is not enough ~ Supported application of skills over time ~ Teaching staff overwhelmed with job requirements. ~ Skill development requires coaching, mentoring, and case consultation with support staff who understand pedagogy, classroom operations and dealing with overwhelmed professionals ~ Possible communities of practice 	<p>reviews by regional education staff</p> <ul style="list-style-type: none"> ~ Importance of being informed of changes ~ Absence of collaboration ~ Teacher confidence ~ Teacher competence 		<ul style="list-style-type: none"> ~ Leadership is integral to a trauma-responsive approach ~ Whole school response ~ School culture is impactful for staff and students ~ The trauma-informed approach needs to be integrated into the PBL across the school community ~ Teacher confidence to manage children facing adversity ~ Children with trauma behaviours are a low priority for leadership ~ Allied health professionals should support the implementation of new practices ~ Support staff part of the school culture ~ The focus is curriculum, not wellbeing
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Appendix C: Thematic Map



Appendix D: Initial Survey

Beliefs and Views Towards Training on Trauma-informed Practice in the Classroom

Mainstream teachers who work in primary school classrooms in Australia have opportunities to engage in training and development focused on understanding trauma-informed pedagogy.

Trauma-informed pedagogy is based on attachment theories, and trauma-informed practices build and develop the relational aspects of the teacher/student dyad.

Instructions

For each of the 40 items below, select the circle along the dimension between the two options that best represents your personal view or belief while working in your role as a mainstream primary school teacher in the past six months.

Example

I think eating apples is boring. (1) (2) (3) (4) (5) (6) (7) I think eating apples is delicious and very healthy.

I believe that....

- | | | |
|---|-----------------------------|--|
| 1. I feel compassion when teaching children with a trauma history. | (1) (2) (3) (4) (5) (6) (7) | I don't believe trauma impacts a child's behaviour. |
| 2. I can help children manage their behaviours and improve their well-being. | (1) (2) (3) (4) (5) (6) (7) | I don't believe it's a teacher's role to support a child's well-being. |
| 3. I find it difficult to help children with trauma-based behaviours when I know they have suffered harm. | (1) (2) (3) (4) (5) (6) (7) | I can cope with all responses from students since I expect challenging behaviours can acknowledge what has happened to them. |
| 4. I am aware of vicarious trauma and have sound strategies I implement as required. | (1) (2) (3) (4) (5) (6) (7) | I am unaware of how a child's trauma history and behaviours impacts me. |

5. My role should include focusing on the child's learning and emotional and social development.

① ② ③ ④ ⑤ ⑥ ⑦

My role is only about teaching the curriculum.

6. The suspension of students does not work and causes further trauma.

① ② ③ ④ ⑤ ⑥ ⑦

The suspension of students with challenging behaviours is a consequence and teaches the child what to do next time.

7. Long-term student disengagement from education is a factor I can influence.

① ② ③ ④ ⑤ ⑥ ⑦

Long-term student disengagement from education isn't anything I can influence.

8. Children with a history of trauma struggle with making decisions regarding their behaviours.

① ② ③ ④ ⑤ ⑥ ⑦

Children with a history of trauma have the same opportunities to make choices about their behaviours as all other children.

9. I am unfamiliar with the developmental needs of the students I teach.

① ② ③ ④ ⑤ ⑥ ⑦

I feel fully informed about the developmental needs of the children I am teaching in my classroom.

10. I am unaware of the changing circumstances of the students in my classroom.

① ② ③ ④ ⑤ ⑥ ⑦

I am kept fully informed about the changing needs of the students in my classroom.

11. I am unaware of the spectrum of needs the students in my classroom have.

① ② ③ ④ ⑤ ⑥ ⑦

I am fully aware of the spectrum of needs that children in the age range I teach can have.

12. I am aware of the impact on students when they experience hard times.

① ② ③ ④ ⑤ ⑥ ⑦

Hardships do not affect children's behaviours in the classroom.

13. I am not confident that I have the skills to assess or teach a child who has experienced harm.

① ② ③ ④ ⑤ ⑥ ⑦

I am fully confident that I can assess and meet the learning needs of a child who has experienced harm.

14. There are no additional teaching strategies that I need to learn to teach a child who has experienced trauma.

① ② ③ ④ ⑤ ⑥ ⑦

I am aware of the teaching skills, strategies, and resources available to support students who have experienced trauma.

15. A teacher's role is far greater than merely teaching the curriculum.

① ② ③ ④ ⑤ ⑥ ⑦

Teachers are trained to impart knowledge from the curriculum only.

16. Teachers are trained to adapt the curriculum and instructions to support the learning of all children regardless of their challenges.

① ② ③ ④ ⑤ ⑥ ⑦

I am not trained to teach and support students with developmental disabilities or who have trauma-based behaviours

17. I am willing to put aside the curriculum and the 'must dos' and focus on the child.

① ② ③ ④ ⑤ ⑥ ⑦

Teachers do not need to learn about a specific cohort of students. I am already too busy.

18. Teachers do not need to know anything about the history of students.

① ② ③ ④ ⑤ ⑥ ⑦

Teachers need to know about a child's history and background, particularly when they have experienced hard times.

19. Teachers do not require information about what is happening for the student. Teachers do not need to be part of a stakeholder group to support the student.

① ② ③ ④ ⑤ ⑥ ⑦

Teachers need to be considered as a key partner in a stakeholder group that supports the child.

20. Teachers are rarely advised when a student's circumstances change.

① ② ③ ④ ⑤ ⑥ ⑦

Teachers are well-considered and consulted when a student's circumstances change.

21. Teachers learn about how to meet the needs of all students with a trauma background.

① ② ③ ④ ⑤ ⑥ ⑦

Teachers are not required to meet the needs of students other than learning Needs.

22. Trauma impacts the student's capacity to learn at the same pace as their peers.

① ② ③ ④ ⑤ ⑥ ⑦

Trauma is not an excuse to not learn at the same pace as one's peers.

23. Trauma does not impact on the developmental domains, such as the cognitive, emotional, social and physical domains.

① ② ③ ④ ⑤ ⑥ ⑦

Trauma impacts all developmental domains of a child.

24. Students behave in challenging ways since it's a form of communication.

① ② ③ ④ ⑤ ⑥ ⑦

Children behave in challenging ways because of their parents and to annoy their teachers.

25. It isn't reasonable or fair to good students to have to tolerate a student with disruptive and challenging behaviours in the room.

① ② ③ ④ ⑤ ⑥ ⑦

I believe all students have a right to be managed in the classroom based on their individual needs.

26. It is reasonable to expect teachers become skilled in how to meet the needs of children with a trauma background.

① ② ③ ④ ⑤ ⑥ ⑦

It's unreasonable to expect teachers to attend training on trauma informed practises.

27. Whole school professional development (PD) is enough to learn the skills needed to teach students with a trauma background in my classroom.

① ② ③ ④ ⑤ ⑥ ⑦

Much more than whole school professional development is needed to learn the skills required to teach the children with trauma.

28. A barrier to engaging in future PD sessions is the huge loads on teachers.

① ② ③ ④ ⑤ ⑥ ⑦

Teachers should acquire the skills regardless of the current demands.

29. Reductions in current teaching and additional loads need to occur prior to any concentrated skill development being considered.

① ② ③ ④ ⑤ ⑥ ⑦

There is no requirement to change the teaching or additional task loads for teachers to learn additional skills.

30. Teachers are largely unwilling to engage in more formal areas of study to obtain additional skills to teach students with trauma backgrounds.

① ② ③ ④ ⑤ ⑥ ⑦

Most teachers are willing to engage in more formal modes of study to learn the skills required to meet the needs of students with trauma.

31. Teachers are largely unwilling to spend time engaged in a consultative process with peers and experts in childhood trauma to support skill development.

① ② ③ ④ ⑤ ⑥ ⑦

Teachers would embrace the opportunity to engage in a consultative process to support skill development and assist with particular students and their needs.

32. Teachers would not agree to in-class mentoring and coaching as a mode of learning new pedagogical practices.

① ② ③ ④ ⑤ ⑥ ⑦

In-class mentoring and coaching supported by frequent feedback to scaffold learning new skills would be embraced by teachers.

33. A permanent education role in a school as a childhood trauma specialist to focus on teacher development would be a waste of money.

① ② ③ ④ ⑤ ⑥ ⑦

A permanent role in schools held by a teacher who is also a child trauma specialist to focus on teacher development would greatly assist teacher development and improve outcomes for students.

34. A permanent role that supports child protection, teacher development and reducing rates of suspension would not be a wise investment.

① ② ③ ④ ⑤ ⑥ ⑦

A permanent role that supports child protection, teacher development and focuses on alternatives to suspending students would be an asset and improve outcomes for children.

35. A communities of practice model shared with other schools in the district would be unsupported by teachers and considered a waste of time.

① ② ③ ④ ⑤ ⑥ ⑦

A communities of practice approach shared with other schools in the district would be of enormous value for teacher development.

36. Becoming a trauma-informed school would be a waste of everyone's time.

① ② ③ ④ ⑤ ⑥ ⑦

Every school needs to consider what it means to be trauma informed and embrace the principles for staff and students.

37. Teachers don't care about being trauma-informed.

① ② ③ ④ ⑤ ⑥ ⑦

Teacher competence and confidence are main factors affecting schools engaging in learning about trauma-informed care and practice.

38. Teachers don't want to know about cumulative harm and how it affects students.

① ② ③ ④ ⑤ ⑥ ⑦

Teachers want to learn about concepts, such as cumulative harm and how it impacts a child's learning capacity and well-being.

39. Embedding trauma-informed practice into our school culture won't make any difference to teacher's wanting to learn about trauma-informed pedagogy.

① ② ③ ④ ⑤ ⑥ ⑦

Embedding trauma informed practices into school culture will greatly assist as an enabler of teachers to develop skills in trauma-informed pedagogy.

40. Allied health professionals based in a hub within schools would not be of any great value.

① ② ③ ④ ⑤ ⑥ ⑦

I believe allied health professionals based in a school-based hub would support teachers with learning about and adopting trauma-informed practices in the school.

Appendix E: Final Survey tool

Exploration of enablers and barriers to mainstream classroom teachers engaging in professional development focused on trauma-informed pedagogy



Human Research Ethics Approval Number - H20REA184

Developmental trauma is defined as traumatic experiences that occur in utero, during infancy or in early childhood years. The impact of these traumatic experiences undermines normal developmental processes for the child. Such trauma may include abuse and neglect and may affect attachment with caregivers, cognitive functioning, self-concept, social relationships, and emotional regulation capacity. Children with developmental trauma face challenges that hinder their academic success, school engagement, relationships, and social and emotional development.

Schools are fundamental to a timely response to suspected harm to children. The pupil-teacher relationship is unique in the sense that no other adult in authority enjoys such an intense, continuous, and private relationship with a child. Teachers in schools are well placed to identify changes in a child that may be a result of experiencing harm and that teachers are best placed to respond therapeutically to children who may exhibit behaviours indicative of developmental trauma. However, there is disparity and confusion regarding how this can occur within the school context. Scholars strongly acknowledge that schools play a strong role in the protection of children and that when this protective factor is no longer active in a child's life, the child becomes increasingly vulnerable.

Consideration needs to be given to children with developmental trauma and teachers' decision-making to support these vulnerable children to feel confident and be equipped with the knowledge and skills to manage the children's multiple and complex needs in a classroom setting.

This project is being undertaken as part of a Doctor of Professional Studies Program. It aims to (a) explore any roadblocks or barriers that may exist for teachers engaging in professional development to acquire additional knowledge and skills to manage children with developmental trauma and vulnerabilities in the mainstream classroom and (b) identify the perceptions/views of mainstream teachers regarding the most viable modes of delivery for learning about childhood abuse, neglect and developmental trauma.

The research team requests your assistance because of your work as a mainstream classroom teacher in a Queensland State school. We would like to collate your thoughts and views via a survey to better understand if barriers and roadblocks exist to engaging in this choice of professional development and, if so, what those roadblocks may be and what improvements or adjustments could be made regarding the delivery of training to better support teachers with the implementation of trauma-informed pedagogy in the classroom.

Participation

Your participation will involve completing an online questionnaire that will take approximately 10 minutes of your time.

Questions will focus on previous training or knowledge base related to learning about childhood trauma and the impacts on learning, brain development, behaviour, and well-being. Questions will also focus on motivations to engage with future training content to learn about classroom pedagogy to support vulnerable children.

Your participation in this project is entirely voluntary. If you do not wish to take part, you are not obliged to. If you decide to take part and later change your mind, you are free to withdraw from the project at any stage. You may also request that any data collected about you be withdrawn and confidentially destroyed. If you do wish to withdraw from this project or withdraw the data collected about you, please contact the research team (contact details are at the top of this form).

Your decision whether you take part, do not take part, or to take part and then withdraw, will in no way impact your current or future relationship with the University of Southern Queensland or the Queensland State Education Department.

Expected Benefits

It is not expected that this project will directly benefit you. The outcome of this project will be an increase in additional information to support innovation and service delivery to teachers. This may have a direct impact on all children in the future and will be particularly evident in the schools that participate in the study since individual schools can make direct well-informed decisions related to ongoing in-service staff training and support.

A secondary outcome expected from this project is a significant contribution to practice within the educational field and the child protection field through the research design.

Risks

There are minimal risks in participating in the questionnaire, such as thinking about the impacts of childhood trauma abuse and neglect when teaching children who may have experienced developmental trauma. This may create times when you have some uncomfortable feelings or emotions. There is no greater risk beyond this level.

If you need to speak to someone immediately, please contact Lifeline Crisis line 13 11 14.

There is support and assistance available to you if this situation should arise. Below is a list of contact numbers to call and people to assist you, including police (to report a crime), parent line (for concerns regarding parenting) or relationships Australia (relationship to domestic and family violence support).

Police Link: 131444

Parent Line Telephone counselling: 1300301300

Relationships Australia: 1300 364 277
<https://www.relationships.org.au/>

Employee Assistance Program (EAP) through the Queensland Government. External provider to Queensland Department of Education staff is LifeWorks by Morneau Shepell's (LifeWorks) on telephone: 1800 604 640.

You may also wish to consider consulting your general practitioner (GP) for additional support.

Privacy and Confidentiality

The data collected from you will be de-identified, so the research team will only know it has come from you. You will create your own anonymous identity code, and only you and your researcher will know the code. You can use this code to request your information be withdrawn from the project at any stage.

At the end of the research, you will be emailed a copy of the findings of the research. Only the research team will have access to your email address, which will not be used for any other purpose other than those outlined.

The survey data will be available to other researchers after the project has been completed, the doctoral degree awarded, and all associated articles published. This data will be available in a redacted form. The survey data will be made available by request only unless a journal publisher requires a redacted version of the data.

Any data collected as a part of this project will be stored securely per the University of Southern Queensland's Research Data Management policy.

All comments and responses will confidentially be treated unless required by law.

Consent to Participate

Clicking on the 'Submit' button at the conclusion of the questionnaire is accepted as an indication of your consent to participate in this project.

Questions or Further Information about the Project

Please refer to the research team's contact details at the top of the form to answer any questions or request further information about this project.

Concerns or Complaints Regarding the Conduct of the Project

If you have any concerns or complaints about the ethical conduct of the project, you may contact the University of Southern Queensland Manager of Research Integrity and Ethics on +61 7 4631 1839 or email researchintegrity@usq.edu.au. The Manager of Research Integrity and Ethics is not connected with the research project and can facilitate a resolution to your concern in an unbiased manner.

Thank you for taking the time to help with this research project. Please keep this sheet for your information.

Research Team Contact Details

Principal Investigator Details

Simone Collier

Email: simone.collier@usq.edu.au

Mobile: 0437828509

Professor Karen Trimmer

(Educational Leadership) School of Education

Email: karen.trimmer@usq.edu.au

Telephone: +61 7 4631 2371

India Bryce

Lecturer (Human Development, Wellbeing & Counselling)

School of Education

Email: india.bryce@usq.edu.au

Telephone: +61 7 46311192

Govind Krishnamoorthy

Lecturer (Psychology)

School of Psychology & Counselling

Email: Govind.Krishnamoorthy@usq.edu.au

Telephone: +61 7 3812615

There are 12 questions in this survey.

Are you currently a mainstream primary school teacher? Please describe.

If you are not a current mainstream primary school teacher, please do not progress with this survey.

Thank you for your time.

*

Only answer this question if the following conditions are met:

Your is

Choose one of the following answers

Please choose **only one** of the following:

- Yes
- No

Make a comment on your choice here:

Mainstream teachers who work in primary school classrooms in Australia have opportunities to engage in training and development focused on understanding trauma-informed pedagogy. Trauma-informed pedagogy is based on the use of attachment theories and trauma-informed practices to build and develop the relational aspects of the teacher-student dyad.

For each of the items below, indicate your agreement by selecting from the seven options: In my professional opinion, while working in your role as a mainstream primary school teacher in the past six months, I strongly disagree, mostly disagree, slightly disagree, neither agree nor disagree, slightly agree, mostly agree, strongly agree.

*

Please choose the appropriate response for each item:

	Strongly Disagree	Mostly disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Mostly agree	Strongly agree
Trauma experiences impact significantly on a student's behaviour in the classroom.							
It is a teacher's role to help students manage their behaviours and improve their well-being in the classroom.							
Teachers struggle to help students with trauma-based behaviours when they cannot acknowledge what has happened to the student.							
Teachers are aware of the impacts a student's trauma history can have on them and have sound strategies to implement as required.							
Teachers feel compassion when teaching students with a trauma history.							

	Strongly Disagree	Mostly disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Mostly agree	Strongly agree
A teacher's role should include focusing on the student's learning and their emotional and social development.							
Suspension of students with challenging behaviours does not work and may cause further trauma.							
Long-term student disengagement from education is a factor teachers can influence.							

Instructions

For each of the items below, indicate your agreement by selecting from the seven options:

In my professional opinion, while working in your role as a mainstream primary school teacher in the past six months, I strongly disagree, mostly disagree, slightly disagree, neither agree nor disagree, slightly agree, mostly agree, strongly agree.

*

Please choose the appropriate response for each item:

	Strongly Disagree	Mostly disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Mostly agree	Strongly agree
Students with a trauma background may struggle with making decisions regarding their behaviours.							
Teachers are unfamiliar with the developmental needs of the students they teach.							
Teachers are unaware of the changing needs of the students in their classrooms.							
Teachers are fully unaware of the spectrum of needs that the students in their classroom have.							
Teachers are unaware of the impact on students when they experience hard times.							
Teachers are not confident they have the skills to assess a student's needs who have experienced harm.							

	Strongly Disagree	Mostly disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Mostly agree	Strongly agree
Teachers are unaware of the teaching strategies available to support students who have experienced trauma.							
A teacher's role is far greater than teaching the curriculum.							
Teachers are not trained to adapt the curriculum and instruction to support all students regardless of their challenges.							

Instructions

For each of the items below, indicate your agreement by selecting from the seven options:

In my professional opinion, while working in your role as a mainstream primary school teacher in the past six months, I strongly disagree, mostly disagree, slightly disagree, neither agree nor disagree, slightly agree, mostly agree, strongly agree.

*

Please choose the appropriate response for each item:

	Strongly Disagree	Mostly disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Mostly agree	Strongly agree
Teachers are willing to learn about the cohort of students with trauma backgrounds in addition to delivering the curriculum.							
Teachers need to know about a student’s history and background, particularly when they have experienced hard times.							
Teachers need to be considered key partners in a stakeholder group that supports students with developmental trauma.							
Teachers are rarely advised when a student’s circumstances change.							

Instructions

For each of the items below, indicate your agreement by selecting from the seven options:

In my professional opinion, while working in your role as a mainstream primary school teacher in the past six months, I strongly disagree, mostly disagree, slightly disagree, neither agree nor disagree, slightly agree, mostly agree, strongly agree.

*

Please choose the appropriate response for each item:

	Strongly Disagree	Mostly disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Mostly agree	Strongly agree
Teachers should be learning more about how to meet the needs of students with a trauma background.							
Trauma impacts a student’s capacity to learn at the same pace as their peers.							
Trauma does impact the developmental domains, such as cognitive, emotional, social, and physical.							
Students behave in challenging ways as a form of communication.							
All students have a right to be managed in the classroom based on their individual needs.							
It is reasonable to expect that teachers attend training on trauma-informed pedagogical practice.							

	Strongly Disagree	Mostly disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Mostly agree	Strongly agree
Much more than whole-school professional development is needed to learn the skills required to teach students with a trauma background.							
Excessive workload is a barrier for teachers engaging in future Professional Development sessions.							
Reductions in current teaching and additional task loads needs to occur prior to any concentrated skill development being considered.							
Most teachers are willing to engage in more formal modes of study such as University courses to learn the skills required to meet the needs of students with trauma backgrounds.							
Most teachers would embrace an opportunity to engage in a consultative process with childhood trauma experts to support skill development and to assist with particular students and their needs.							

	Strongly Disagree	Mostly disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Mostly agree	Strongly agree
In-class mentoring and coaching supported by frequent feedback to scaffold the learning of new skills would be embraced by most teachers.							
A permanent role held by a teacher who is also a student trauma specialist would greatly assist teacher development and improve outcomes for students.							
A permanent role that supports student protection and teacher development and focuses on alternatives to suspending students would be an asset and improve outcomes for students.							

Instructions

For each of the items below, indicate your agreement by selecting from the seven options:

In my professional opinion, while working in your role as a mainstream primary school teacher in the past six months, I strongly disagree, mostly disagree, slightly disagree, neither agree nor disagree, slightly agree, mostly agree, strongly agree.

*

Please choose the appropriate response for each item:

	Strongly Disagree	Mostly disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Mostly agree	Strongly agree
A Communities of Practice approach shared with other schools in the district would be of enormous value to teacher development.							
Every school needs to consider what it means to be trauma-informed and embrace the principles for staff and students.							
Most teachers care deeply about being trauma-informed.							
Most teachers want to learn about concepts such as cumulative harm and how it impacts a student's learning capacity and well-being.							
Allied health professionals based in a Hub within schools would greatly value supporting teachers with learning about and adopting trauma-informed practices.							

Instructions

Please answer the following questions:

Demographic Questions (optional)

Your age at time of completing the survey

Please choose the appropriate response for each item:

	20–30 years	31–40 years	41–50 years	51 years and over	Prefer not to say
Age at time of completing survey					

Gender Identity

Please choose the appropriate response for each item:

	Female	Male	Non-binary
Gender			

Number of years working in mainstream Primary School Classrooms

Please choose the appropriate response for each item:

	Less than 1 year to 5 years	6–10 years	11–15 years	16–20 years	21–25 years	26 years or more

Have you engaged with any education or training in childhood trauma? *

Choose one of the following answers

Please choose **only one** of the following:

- Yes
- No
- Some short workshops in Special Education have been completed

Make a comment on your choice here:

Location of current school *

Please choose the appropriate response for each item:

	Regional	Remote	Metropolitan

Any further comments (optional)

Please write your answer here:

Thank you for taking the time to help with this research project.

Submit your survey.

Thank you for completing this survey.

Embrace Framework

Trauma Focused Framework of Practice for Mainstream School settings

The Embrace Framework is designed to embrace all staff and students within a school setting to support the well-being and learning opportunities for each member of the school community.



CONTENTS

<u>1. INTRODUCTION</u>	Error! Bookmark not defined.
<u>1.1 Purpose</u>	Error! Bookmark not defined.
<u>1.2 Audience</u>	Error! Bookmark not defined.
<u>1.3 Background</u>	Error! Bookmark not defined.
<u>1.4 Trauma focused practice in Education settings</u>	Error! Bookmark not defined.
<u>1.5 Trauma-informed care in schooling systems</u>	Error! Bookmark not defined.
<u>1.5a Understanding the widespread impact of trauma and potential pathways to recovery</u>	Error! Bookmark not defined.
<u>1.5b Recognize signs and symptoms of trauma from a systems perspective</u>	Error! Bookmark not defined.
<u>1.5c Integration of trauma knowledge into policies, procedures, and practices in an effort to create a supportive environment that is intent on <i>not</i> re-traumatizing its staff or students</u>	Error! Bookmark not defined.
<u>2. Trauma-informed care Frameworks</u>	Error! Bookmark not defined.
<u>2. Trauma Informed Practice Frameworks</u>	Error! Bookmark not defined.
<u>2. THEORETICAL UNDERPINNINGS OF THE MODEL</u>	Error! Bookmark not defined.
<u>2.1 Cumulative harm and adverse childhood experiences (ACEs)</u>	Error! Bookmark not defined.
<u>2.2 Principles underpinning trauma-informed practice in schools</u>	Error! Bookmark not defined.
<u>APPENDIX 1: Frameworks of practice, systems & contexts and actions of the Embrace Framework</u>	Error! Bookmark not defined.
<u>APPENDIX 2: PROGRAM LOGIC</u>	Error! Bookmark not defined.

1. INTRODUCTION

1.1 Purpose

This document outlines the framework of service delivery for staff situated in a mainstream school inclusive of practice professionals, teaching, administration, and leadership staff members.

1.2 Audience

This document is designed to inform the work of Department of Education QLD employees, Department of Health and agency workers operating within the mainstream schooling context.

1.3 Background

Complex childhood trauma results in high levels of cumulative harm when the child is exposed to ongoing and repeated traumatic experiences that are interpersonal and include adverse experiences, such as abuse, neglect, community violence, discrimination, parental mental health, and exposure to domestic and family violence (Wamser-Nanney & Vandenberg, 2013). These types of adversity increase the child's lifelong potential for serious health-risk behaviours and serious health problems, as documented by the landmark adverse childhood experiences (ACE) study (Felitti et al., 1998).

Children who have experienced significant numbers of adverse childhood experiences (ACEs) over a long period can struggle with relational, emotional, and behavioural concerns since there is a significant impact on their developing nervous system. Complex trauma can lead to struggles in capacities to emotionally self-regulate and relate and connect to others in an adaptive manner (Kliethermes et al., 2014).

The learning capacity of children who have experienced high levels of cumulative harm is significantly compromised since their neurobiology is stressed due to the impacts of the perceived threat in their environment and the impact on their developing nervous system. These children perceive change as a threat. Consequently, their working memory comes under pressure since they will often disconnect from themselves and demonstrate maladaptive behaviours for the context and do not engage with the curriculum. School disengagement is largely the result of relational poverty (Bomber, 2020) since children feel disconnected from the adults in the schooling system, misunderstood and struggle to optimise their regulatory needs to learn and engage in the content with their peers.

As the prevalence and impact of trauma and traumatic stress become increasingly understood (e.g., Felitti et al., 1998), the push for schools to provide trauma-informed interventions and services has correspondingly increased (SAMHSA, 2014). This demand is partly driven by burgeoning evidence demonstrating positive outcomes for school-based, trauma-specific interventions on reductions in traumatic stress reactions (Rolfesnes & Idsoe, 2011). An additional driver may be the increased accessibility of social, emotional, and behavioural supports offered in schools. In general, referrals for school-based mental health services have been shown to be more successful than referrals to community agencies (Evans & Weist, 2004). This trend appears to extend to trauma-specific interventions (Langley et al., 2010).

When evaluating the effect trauma has within a school setting, Howard (2016) suggests that one in every five students sitting in a mainstream state education classroom has been affected by trauma. These students exhibit a range of challenging behaviours, often seen to sabotage relationships with educators and peers and suffer bouts of significant emotional dysregulation due to impaired physiological functions of the nervous system, endocrine, and brain and maladaptive emotional responses (Howard, 2018; McLean, 2016; Orygen The National Centre of Excellence in Youth Mental Health, 2018). Howard's study also highlighted the dire need for Australian education policymakers to endorse a set of core trauma practices to guide state schools in trauma-informed positive education (TIPE) strategies.

An examination of the current Queensland Department of Education Strategic Plan (2019–2023) highlights the State schools' improvement strategy as part of the Advancing Education Action Plan. The focus for teachers over the four years until 2023 includes enhancing Kindergarten participation, digital technologies curriculum, coding and robotics programs and Asian language development. The professional development focus for classroom teachers is on the curriculum area of Science, Technology, Engineering and Mathematics (STEM) and learning Asian languages and teaching skills. The strategic plan highlights these curriculum areas and professional development as 'focus areas in preparation for the next generation of IT entrepreneurs in a global world' (Department of Education Strategic Plan, 2019–2023). The Education Strategic Plan does not focus on children with trauma-based relational worries who struggle to access and engage with learning.

The Queensland Government's child protection legislation reforms, Supporting Families, Changing Futures stage three amendments commenced in October 2018 and included 'supporting permanency and stability' (Child Safety, Youth & Women, 2020). This includes a new permanency framework focused on all dimensions of permanency, including the relational, physical, and legal aspects. The Child Protection Reform Amendment Act (2017) discusses more than 60% of children and young people in care are on long-term orders until they turn 18 and the importance of timely decisions for children and young people are made. Further, meaningful plans for their future to promote positive life-long outcomes occur. The Amendment Act consists of a new permanency framework to promote timely decision making, stability and positive developmental outcomes for children and young people (p. 4, 2018).

There is a clear void between the key legislative imperatives of education and child protection to cohesively address gaps faced by children with developmental trauma. These two government sectors provide significant service delivery to children in the Queensland community but do not work cohesively to ensure the best outcomes for children.

This Embrace Education Model for mainstream schools is designed to support the Department of Children, Youth Justice and Multicultural Affairs to support permanency and stability. The Embrace Education Model aims to support the permanency framework by acknowledging the extent of cumulative harm for a child, the cumulative risk that exists and supporting change, healing, and stability in all areas of the child's ecology, including schools.

The foundations of the Embrace Model for mainstream schools consist of an understanding that placement and community stability is often undermined by the broader systems and contextual needs of a child's life, including when disengagement from schooling contexts occurs. **Appendix 1** highlights these systems within a child's ecology and demonstrates the fundamental practice frameworks that embrace all key systems. The Embrace Model for mainstream schools adheres to the foundations of relational permanency across all systems (including the school context) within a child's ecology, along with the physical permanency requirements needed to secure stability,

healing, and growth throughout childhood and in transitioning into adulthood. It supports decisions made that affect a person across their lifespan.

1.4 Trauma-focused practice in education settings

It is proposed that trauma-informed schooling has significant potential to address some of the longer-term and negative impacts of complex developmental trauma (Howard, 2019). There are many children and adolescent support agencies across Australia and internationally, including schooling contexts, that are motivated but piecemeal in their approach. It is proposed that without a systemic, trauma-informed framework for schooling, including whole-school policies and practices that detail classroom-based approaches and models, a schooling experience for children and young people who have and/or are experiencing trauma may hinder the recovery and healing of these children. These schooling institutions may inadvertently compromise the work of support agencies and organisations when they do not incorporate the trauma-focused policies into their practice, furthering the high costs of complex trauma to the community (Howard, 2019).

1.5 Trauma-informed care in schooling systems

The literature discusses the proven link between healthy socio-emotional development and academic success (SAMHSA, [2014](#); Alisic et al., [2008](#); Landolt et al., [2013](#)). For any school that contains students who have experienced trauma, the school must be equipped to deal with challenges that come with the resultant long term activation of the student's brain's stress response to achieve any curriculum engagement (Perry, [2000](#); Ford, [2013](#); Schore, [2001](#)). When a student's stress response is activated the, brain's capacity for memory consolidation, concentration, sustained attention and retaining and recalling information diminishes (Australian Childhood Foundation, [2010](#); Wilson & Conradi, [2010](#)). The consistency, predictability, and structured nature of a typical day in a mainstream school creates a suitable context in which trauma-informed interventions can be implemented successfully (SAMSHA, 2014). A consistent, predictable and structured environment for a child with a trauma background increases physiological regulation. Combined with a safe setting, this is likely to directly impact a student's recovery and tendency to engage with the curriculum (Australian Childhood Foundation, [2010](#); SAMHSA, [2014](#); Blodgett, [2012](#); Oehlberg & LCSW, [2008](#); Basch, [2010](#)) and social-emotional functioning (Landolt & Kenardy, [2015](#); Shonkoff et al., [2012](#); Blodgett, [2012](#); Ford, [2013](#)).

Research suggests that a trauma-informed educational approach is likely to address the socio-emotional and well-being needs of students exposed to trauma, increasing the likelihood of students engaging with the curriculum. SAMSHA (2014) discusses three core elements to trauma-informed care that underpin all trauma-informed policies, interventions, models, and practices, including the following:

- (i) understanding the widespread impact of trauma and potential paths to recovery;
- (ii) recognising signs and symptoms of trauma from a systems perspective; and
- (iii) integrating trauma knowledge into policies, procedures, and practices to create a supportive environment to **not** re-traumatise its staff or students.

(p. 9).

1.5a Understanding the widespread impact of trauma and potential pathways to recovery

This core element refers to school and key community members learning about trauma-sensitive practices within a schooling context. Within mainstream Australian schools, the professional development of school staff requires a cultural shift through building the capacity of teaching, administration, and leadership staff members to respond to students in a trauma-informed manner. This staff-focused approach is a fundamental element of a school's transformation and the conduit for providing a comprehensive overview of trauma, impacts of trauma on learning and well-being, and solutions and outworkings for the application of trauma-informed logic into daily interactions and engagements with students. This is further supported through the literature, where the well-renowned Berry Street Educational Model needs to be implemented as a whole-school, multi-tiered focus. Teachers need to be provided with explicit professional development time, mentoring, feedback, and reflection sessions to ensure the repair of disrupted attachment patterns with the students (Rosebury & Gascoigne, 2021). Berger (2019), Rosebury & Gascoigne (2021) and Miller & Berger (2020) have expanded initial studies on trauma-informed education strategies in an Australian context, examining different strategies that rural schools and schools in indigenous communities have trialled. While these reviews successfully ascertain that trauma-informed education facilitates healing in trauma-affected students and helps their family remove barriers to support, a comprehensive framework remains absent.

A study by Collier (2021) highlights a number of essential components that need to be inclusive for teachers to engage in the professional development of trauma-informed pedagogical practice. These elements became apparent in the qualitative study and were further confirmed in the quantitative study within the research project titled 'Roadblocks and Enablers for teacher engagement in professional development opportunities aimed at supporting trauma-informed classroom pedagogical practice' and include the following:

- In-class monitoring and coaching by a trauma expert
- Frequent scaffolded whole-school workshops
- Regular peer-based consultative sessions with current cases with specialist intervention
- Regular peer support sessions facilitated by a trauma expert
- Community of practice sessions with other school staff

1.5b Recognise signs and symptoms of trauma from a systems perspective

As discussed in the literature, many schools struggle with the dilemma surrounding the capacity to support vulnerable families of the students they serve and the pressure to focus on academic achievement (Perry & Daniels, 2016). The importance of schools acknowledging the benefits of partnering with key child and adolescent support agencies is a fundamental requirement. The agency staff are chartered with responsibilities to provide an avenue for schools to develop positive, active relationships with vulnerable families. Meanwhile, the agency coordinates care needs to reduce risk and increase capacity to address the needs of the student and the entire family. The literature discusses the tendency of vulnerable families to remain 'out of the loop', distant and dissociated with schools due to their own experiences with schools as a child and a parent. A further discussion also exists highlighting the need for school staff to be acutely aware of these vulnerabilities (Perry & Daniels, 2016) when agency staff attempt frequent dialogue between school and family to close the gap. School staff are acutely aware of the limited trust vulnerable families

can have in schools, and this only increases when communication is limited, along with inaccurate assessments being made of the family by schools. A working model may incorporate social or human services staff to actively engage in a care coordination role to support the connections between school and family and be a resource to school teaching, administration, and leadership staff.

1.5c Integration of trauma knowledge into policies, procedures, and practices to create a supportive environment that intends to *not* re-traumatise its staff or students

A clinical services team is place-based within a school context and consists of Allied Health professionals, including a psychologist, speech therapist, occupational therapist and child trauma practitioner, to provide the following services:

- (i) Evaluate needs and existing support structures within the school context
- (ii) Develop relationships with the administrators, leadership, and teaching staff to:
 - Provide classroom-wide workshops.
 - Provide 1-1 coaching and mentoring in the classroom, including frequent feedback loops regarding practice.
 - Trauma screen and complete small group clinical and 1-1 interventions with students.
 - Parent and community workshops.
 - Identify and enable teachers and school leadership to implement trauma-informed interventions.
 - Facilitate Communities of Practice and case consultations focusing on specific students.
 - Manage the child protection relationships and reporting between the school and the child protection authorities.

The key component of this core element is the relational aspect. Teachers will be more likely to engage and ‘buy-in’ to the learning and adoption of the trauma-informed strategies when they feel the support is authentic, non-judgmental, and trust is a component of the professional relationship.

In a recent article by Grove (2021), the concept of mental health hubs to address youth mental health in schools was discussed. In Victoria, Australia, mental health coordinators in 26 schools were being trialled with significant success. Grove (2021) discussed a significant decline in youth mental health, and this decline has accelerated throughout the COVID-19 pandemic. This key concept of this framework includes allied health professionals, mental health workers, social workers and support staff being operational by a place-based hub with school is furthering the model being trialled in the Victorian school system.

2. Trauma-informed care Frameworks

A framework for schools involves incorporating trauma-informed care approaches into existing pedagogical practices, whereby they are integrated into existing evidence-based, multi-tiered frameworks, such as the School-wide Positive Behaviour Interventions and Support (SWPBIS) framework (Berger, 2019; Chafouleas et al., 2016). SWPBIS is an evidence-based multi-tiered model that uses assessments and intervention for students displaying emotional and behavioural challenges with low, moderate and high-level interventions to address these challenges (Berger, 2019; Chafouleas et al., 2016). Research has shown that positive behaviour support (PBS) has been related to positive outcomes for both students and teachers (McIntosh et al., 2016), including increased emotional regulation in students (Bradshaw et al., 2015), reduced problem behaviours in students (Bradshaw et al., 2015; Kelm et al., 2014), and increases in teacher morale, efficacy and job satisfaction, leading to teacher longevity in the role (Bradshaw et al., 2008; Kelm et al., 2014; Ross et al., 2012).

Chafouleas et al.,'s (2016) adaptation of the SWPBS framework connects the four 'R's' framework with a multitiered framework to school-based service delivery (see Figure 1).

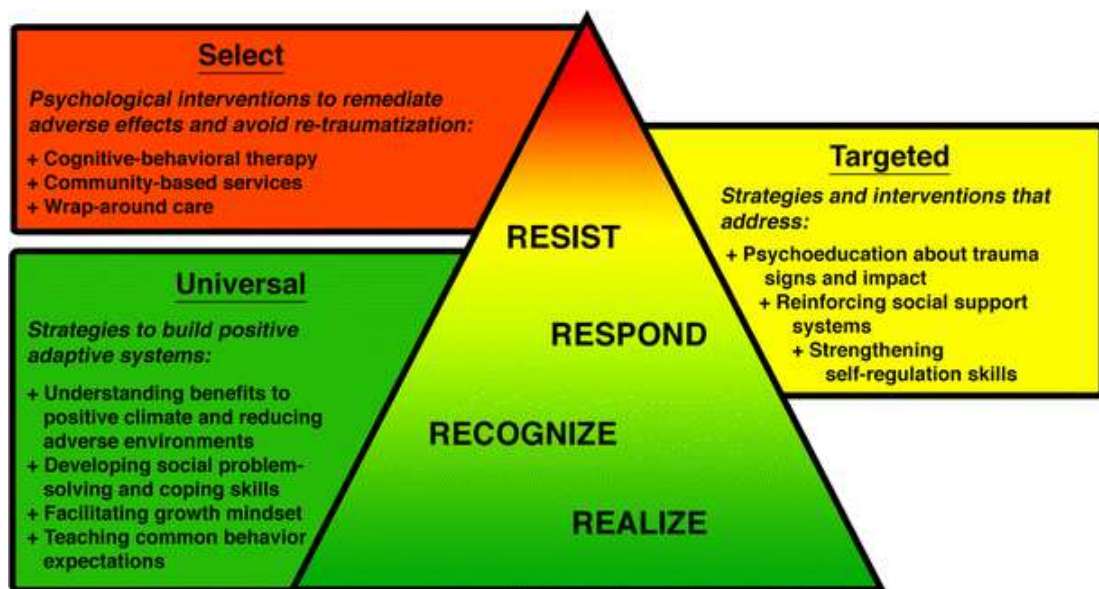


Figure 1. Chafouleas et al.,'s (2016) multitiered framework for school-based service delivery

The framework acknowledges the need for a continuum of least to most intensive supports, identified through assessment practices and allowing for early identification and ongoing monitoring. The continuum of least to most intensive supports represent practices that provide a positive environment (modifications that reduce adversity) and promote individual competence in self-regulation. Trauma-informed practices that might be delivered universally to all students at Tier 1, targeted to at-risk students at Tier 2, and selected for those few students demonstrating most intensive needs at Tier 3. As depicted, practices have been grouped into general categories across tiers, ranging from those applicable to all students (i.e., strategies to build positive adaptive skills) to those specifically addressing the range of needs presented by students exposed to trauma (i.e., psychoeducation through cognitive behavioural therapies).

SWPBIS emphasises that the key elements of capacity building necessary to achieve effective school-wide implementation includes training, coaching, mentoring, feedback, reflection and leadership support. These components are important for trauma-informed care pedagogical models since educators and school-based mental health professionals have not typically received training in childhood trauma or trauma-informed approaches (General, 2012; Splett et al., 2013). Adoption of universal (Tier 1) approaches to trauma requires an educated workforce knowledgeable about trauma and its impact on development that can employ skills and strategies that prevent and reduce its effect on students. School personnel may not identify or understand the connection between a child's behaviours and exposure to trauma without such knowledge and training. School staff may misunderstand trauma-related behavioural reactions as oppositional or defiant behaviour, inadvertently use discipline strategies that can serve as triggers for traumatised students, and miss opportunities to support social, emotional, and academic growth. Additionally, the ability of schools to provide more intensive (Tier 2 and 3) interventions requires a mental health workforce with the expertise to provide such services to children exposed to trauma.

3. Trauma-informed practice frameworks

Following on from the trauma-informed care frameworks that are whole-school approaches are the trauma-informed pedagogical practices that encompass principles applied in an integrated manner in each classroom during transitions and break-times and at extra-curricular schooling events.

1. **Multi-tiered service delivery model:** This framework encompasses a three-faceted approach across all key areas of a child’s school ecology to support stability and enable learning opportunities for a child. There are three core tenets of the multi-tiered approach to support teachers in becoming trauma aware and learning and adopting the strategies and interventions that support trauma-informed practice.

1. Psychoeducation across all levels within the school setting	2. Expert consultation, mentoring, coaching, feedback and reflection offered to staff	3. Direct therapeutic support and coordination to staff and students
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- Further to the SAMHSA core element number one, ***understanding the widespread impact of trauma and potential paths to recovery*** is the importance of staff ‘buy in’ and commitment to cultural change within the schooling context. Whole-school professional development opportunities which target complex developmental trauma and the neurological and biological impacts are supported in the literature (Howard, 2019; Perry & Daniels, 2016; Bomber, 2020). See Figure 2.
- **Individualised trauma-informed and evidence-driven interventions**

The Embrace Framework incorporates the **three core elements** of the SAMSHA (2014) trauma-informed care framework by focusing on ensuring that all professional members of a school community are engaged in frequent and ongoing psychoeducation. The learning opportunities will be varied and incorporate whole-school professional development, workshops across departments including infants, middle primary and upper primary and across all faculties in a high school setting, within individual classrooms. This will be done through a mentorship and coaching approach whereby expert consultations can occur, and feedback and reflection are consistent.

Psychoeducation and expert consultation will be available through case consultations regarding a specific child and their needs and communities of practice across schools in common regions and within single specific school settings on a scheduled basis. Trauma-informed interventions are chosen and implemented specifically to reduce the impacts of cumulative harm and meet the needs of each child based on relevant models and evidence-informed common elements proven to be effective. This will involve the child, adolescent, and family agencies working with the family to engage in the consultations and communities of practice to assist in continuity of service provision and close the gap between family and school. This is in line with the second core element of a trauma-informed care approach, ***recognising signs and symptoms of trauma from a systems perspective*** as outlined by SAMSHA (2014). See Figure 2.

- The third core element of the SAMSHA (2014) trauma-informed care approach, ***integration of trauma knowledge into policies, procedures, and practices to create a supportive environment that is intent on not re-traumatising its staff or students***, whereby the third core tenets of the multi-tiered approach of direct therapeutic support and coordination to staff and students occurs. The clinical team of Allied Health professionals and childhood trauma experts can offer direct clinical support to specific students, small groups of students and direct coaching and mentoring support to staff. The clinical team, along with social workers and other child and adolescent agency staff, will comprise a 'Hub' on the school grounds where they will become an integral part of the overall school community. The team will work alongside administration and leadership within the school to collaboratively find alternatives to suspension and expulsion of students to mitigate the re-traumatising of students. The team will work collaboratively with the staff to ensure high levels of self-care to mitigate burnout and vicarious trauma. See Figure 2.

2. Specialist trauma-informed care team - 'The Hub'

Child and Family Consultant: A liaison role bridges the gap that exists between family and school. This role will work with other key agencies to assist in lowering risk and supporting children and families, addressing needs such as school attendance, hygiene, nutrition, housing, financial problems, domestic violence, mental illness, and alcohol and drug use, and coordinates non-therapeutic supports. This role works closely with Child Protection authorities related to children in Out-of-Home-Care (OOHC), case meetings, behaviour intervention meetings, reporting and other matters. This role is actively working with staff to advise of changes in the family's circumstances and incident reporting that may have occurred and coordinates. It enables relationship building between teachers and parents/carers. This role coordinates case consultations, communities of practice and workshops for staff and community members.

Allied Health Practitioners: They provide high-quality discipline-specific assessment and therapeutic interventions to children. These health professionals are involved with staff training, case consultations, communities of practice, coaching and mentoring teachers and teacher aides, parents, and carers.

Mental Health Practice Lead: This reduces the pathologising and labelling of children and young people. Our students' mental health and well-being are critical factors when dealing with toxic stress children. To assist in lessening the family placement breakdowns when children and young people become disengaged from school and stop engaging in social-emotional and academic learning, a mental health lens to integrate neurobiological factors and trauma education into schools needs to occur. The mental health practice lead will lead the team in the Hub to offer the required coordination of supports across the school setting.

2. THEORETICAL UNDERPINNINGS OF THE FRAMEWORK

2.1 Cumulative harm and adverse childhood experiences (ACEs)

Staff involved with the Embrace Education Framework work with children who have experienced significant levels of trauma and cumulative harm. Cumulative harm is largely an Australian term, with international research using the more global terminology of complex trauma to encapsulate the lifespan implications of the accumulation of childhood adversity. A resource published by the Benevolent Society in 2011 states cumulative harm is the ‘effects of multiple adverse circumstances and events in a child's life, the impacts of which can be profound and exponential, and diminish a child's sense of safety, stability and wellbeing’ (p.1). A dose-response relationship has been identified with health risk behaviours and social functioning when adults have been exposed to four or more Adverse Childhood Experiences during childhood (Bellis et al., 2016; McGavock & Spratt, 2016). This dose-response relationship can be seen in **Table I**. Given this, the Embrace model prioritises therapeutic interventions to reduce the dose-response relationship as outlined in Table 1. The Embrace Education team has a common goal to reduce the dosage of adversity on children and young people and increase their relational capacity.

Table I: Dose-response relationship between experiences of four or more ACEs and negative health/social outcomes in adulthood

ACE Score	Health Risk Behaviour	Social Functioning	Likelihood
4+	Injecting illicit drugs	Substance misuse	X 10.3
4 +	Teenage pregnancy	Underage sex	X 6
4 +	Sexually transmitted disease	Unprotected sexual intercourse	X 2.5
4 +	Committed violence against another person in past 12 months	Community violence	X 15
4 +	Incarcerated during lifetime	Criminal behaviour	X 20
4 +	Suffer depression	Withdrawn, employment affected	X 4.6
4+	attempted suicide	Suicidal ideation/ attempts	X 12.2

Source: Emerging Minds (2020)

2.2 Principles underpinning trauma-informed practice in schools.

‘Every relationship has the power to confirm or challenge what has happened before’ (Bomber, 2007). All children can be supported or compromised further through the actions of others.

It is widely accepted that the research into the neurobiology of trauma suggests that understates of chronic physiological stress, the most complex and last to develop functions within the brain, are switched off. The most effective response to children and young people experiencing extreme social, emotional, and behavioural difficulties needs to incorporate a school space with established routines, access to facilitative and flexible staff, and structures that share an ambition to support children and young people. This will reset their baseline internal stress and arousal levels to facilitate bringing their cortex back online.

Within the context of our ethical responsibilities of reducing the dosage of adversity on children, we need to find ways to travel with the child with developmental trauma, despite their distrust of

adults. The attachment aware, trauma-responsive (AATR) movement integrates neuroscience, biology, attachment and trauma theory and is based on the following premise:

- Children’s mental health and wellbeing is a top priority.
- Relationships are always the first priority.
- Children with developmental trauma need attuned and responsive adults to experience ‘felt safety’ and can manage their nervous systems.
- The social engagement system within a child’s brain needs to be accessed to experience internal control and reduce the perceived threat.
- A child’s functioning and connection occur in the context of relationships.
- Children with ACEs are likely to have compromised executive functioning, including poor impulse control and an inability to focus, and this needs to be responded to empathetically.
- The neuro-sequential model for supporting children who have experienced ACEs includes **Regulate, Relate, Reason Repair** (The art of attunement).
- All adults are stress and shame regulators for children.
- Challenging behaviour is viewed as a regulatory need.

2.3 Attachment-aware and trauma-responsive practice (AATR)

Across the globe, governments are becoming increasingly aware of the importance of mental health provision for children and young people, with education as a top priority (Bomber, 2020). Informed by Attachment Theory (Bowlby, 1969) and Interpersonal Neurobiology (Siegel, 1999), the integration of neuroscience, pedagogy and psychology and the practices of attunement, regulation and attachment must be in place in the classroom before learning and cognition occurring.

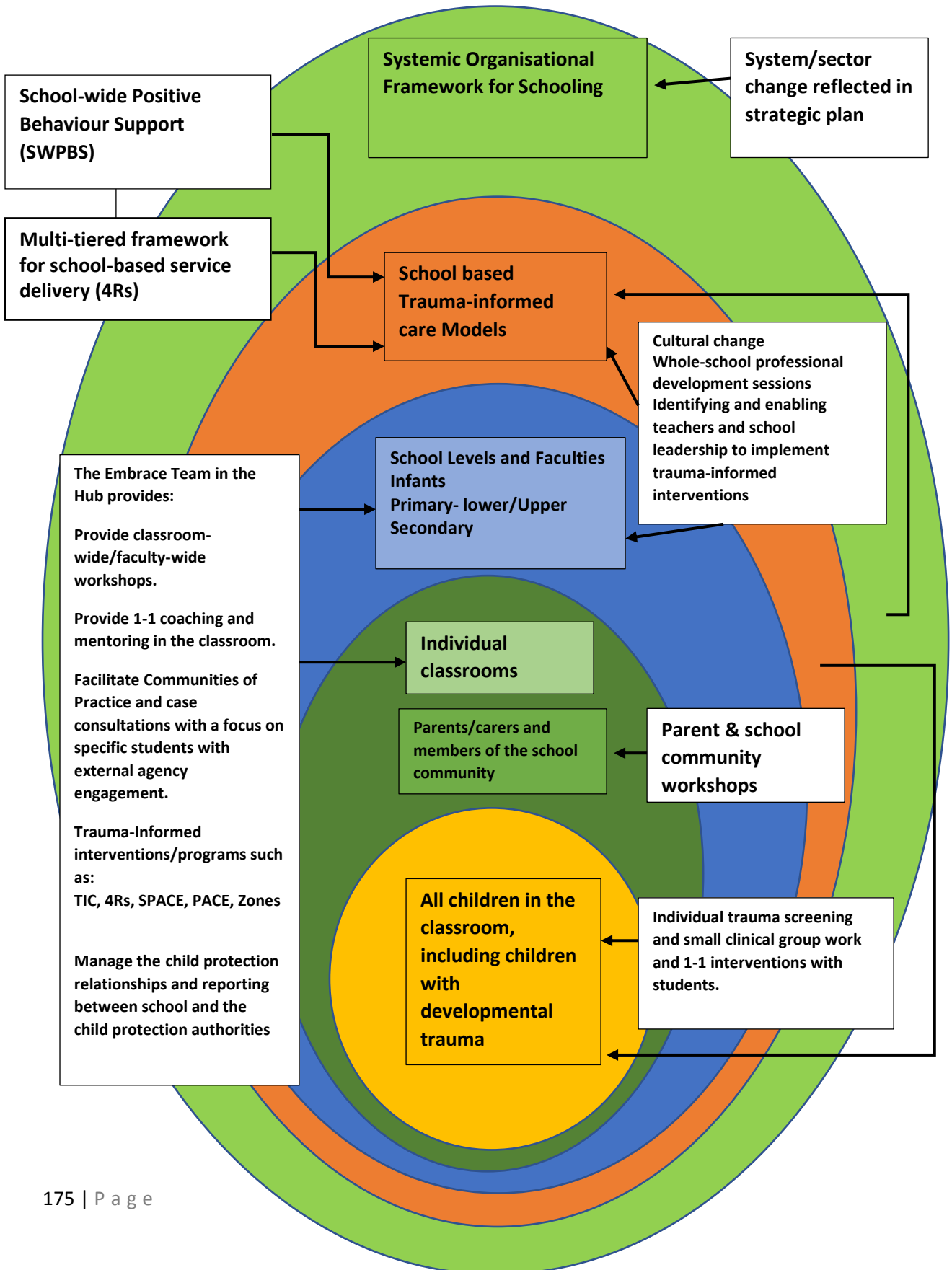
‘Educational neuroscience offers a framework for exploring brain development, dampening down the stress response, and implementing strategies that engage and build brain architecture from the bottom up’. (Desautels & McKnight, 2019, p.25)

Several trauma-informed interventions and approaches are therapeutic and are driven by the importance of being relational. Approaches used by the Embrace Education team include models such as PACE (Playfulness, Acceptance, Curiosity, Empathy), SPACE (Staged, Predictable, Adaptive, Connected, Enabled), 4Rs (Relate, Regulate, Repair, Reason) Therapeutic Crisis Intervention (TCI for Schools, Zones (Zones of Regulation) among others. See Figure 2.

All members of the Embrace team are attachment aware and trauma responsive. The team is a sub-component of a wider stakeholder team that incorporates school staff and child and adolescent agencies working with a family. The collaborative care team focuses on the specific clinical goals that have been developed for the child/youth and their family and focus on progressing these goals across all areas of the family’s ecology, including the school setting. The key focus areas include the safety, well-being, and mental health of children. Typically, this team will consist of the Mental Health Practice Lead, Allied health professionals such as Occupational Therapist and Speech & Language Therapist, and a Child & Family Consultant. The collaborative therapy team will meet weekly to review the current clinical targets.

The formation of collaborative care teams benefits the child and family in that they can increase the efficacy of the therapeutic process by ensuring consistency of approach. The Embrace team provides opportunities for all team members to provide direct knowledge regarding the child and family’s social ecology while engaging with the outworkings of the child’s relational trauma and interrupting the toxic cycles that have been normalised.

Figure 2: The Embrace Framework and the impact across the systems.



Interventions focus on:

Increasing knowledge awareness of attachment and relational practice

Connection to peers, community and culture for staff and students

Enabling staff to engage with learning about childhood trauma

Strengthening support networks, including school community

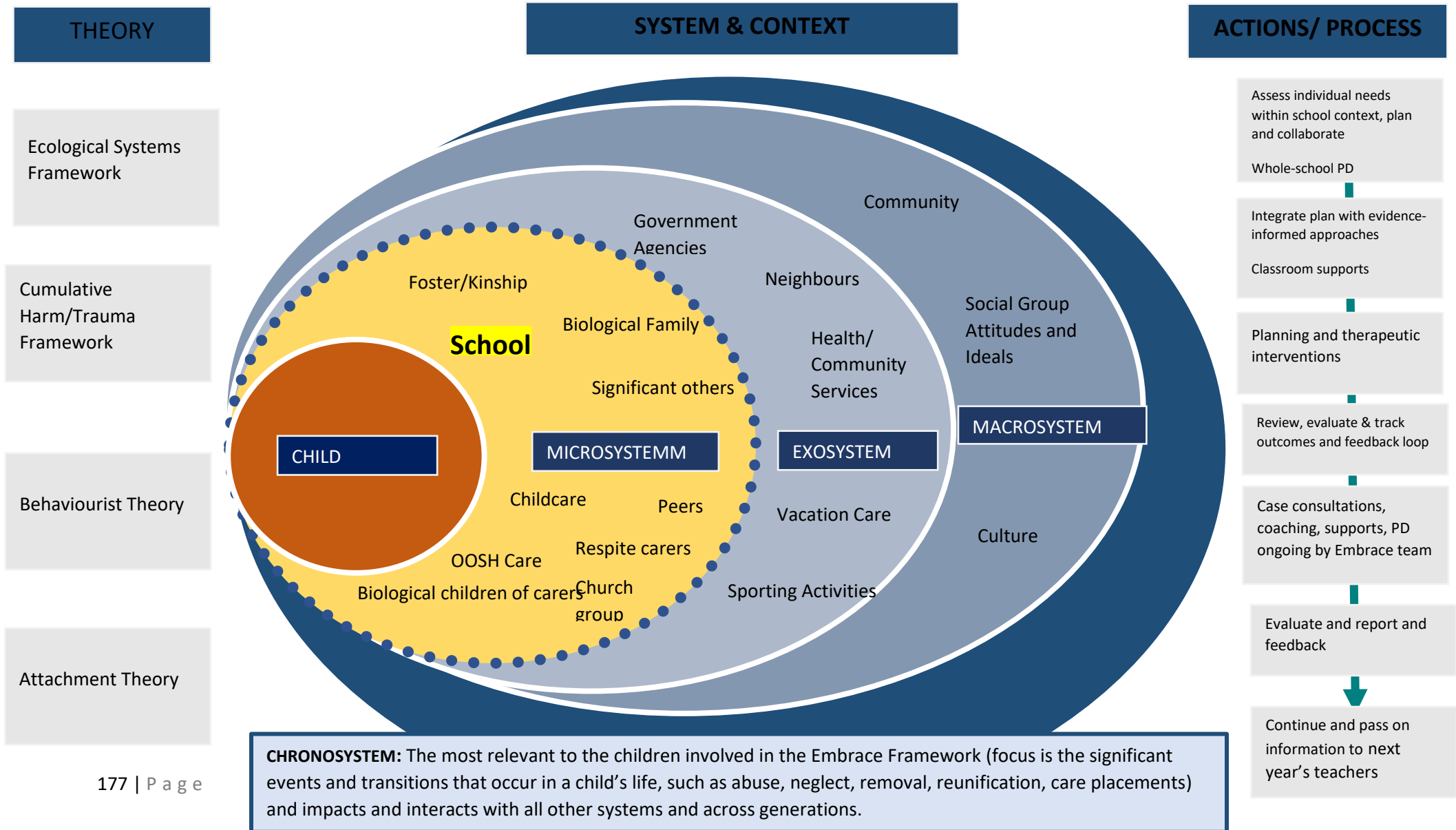
Promoting the healing, recovery, and wellbeing of the child and family

Increasing safety for staff and students

Opportunities to grow and thrive for staff and students

Influencing systems through staff becoming trauma aware

APPENDIX 1: Frameworks of practice, systems & contexts and actions of the Embrace Framework



APPENDIX 2: PROGRAM LOGIC

The situation

The Queensland Government’s Child Protection legislation reforms acknowledge that 60% of children in care on long-term orders are not receiving the right level of care to meet their complex needs. Case plan goals are unmet, the system struggles to maintain placement stability and permanency, and these children are disengaging from the education system in significant numbers. Children and young people who are suspended and excluded from schools are twice as likely to be in the care of the state, four times as likely to have grown up in poverty, seven times as likely to have a special education need and ten times as likely to suffer from diagnosed mental health problems.

Client group

The Embrace Framework works with children and young people, many of whom are of Aboriginal and Torres Strait Islander descent and well entrenched in the statutory child protection system. These children have experienced significant levels of toxic stress, trauma and adverse childhood experiences resulting in highly complex behaviour and attachment patterns indicative of severe cumulative harm. This program also works with these children’s ecological networks.

Program description

The Embrace Framework works in partnership with Education Departments and Child Protection authorities to provide holistic trauma-informed support to children who have experienced complex developmental trauma. The Embrace team will work in close collaboration to deliver trauma-informed pedagogical interventions to all staff within a schooling context, support children with specific relational trauma-informed by each child’s needs, and focus on increasing their support network’s capacity. This ecological model provides specialist attachment-based coaching and mentoring to teachers and stakeholders, therapeutic care coordination, case consultation, and support cultural shifts within a school community, along with specialised therapy and psychoeducation based on a thorough assessment of the child and their individual needs.

Inputs	Activities	
<ul style="list-style-type: none"> • Specialist trauma-informed Clinical team <ul style="list-style-type: none"> - Mental Health Practice Lead - Child and Family Consultant - Allied Health Practitioners • Placed-based service within a Hub on school grounds • Therapeutic resources/assessments • Business and Quality Support Teams • Quality governance structures • Outcomes reporting mechanisms • Client information management database • Financial reporting systems • Practice procedures and guidelines • Vehicle • IT resources and supports 	<ul style="list-style-type: none"> • Leading mental health and well-being interventions • Therapeutic case coordination • Providing targeted and individualised assessments including functional, psycho-social, and clinical • Classroom-based coaching and mentoring support to teachers • Whole of staff regular PD • Department/Faculty tailored PD • Gathering baseline data and measuring and reporting on change using both qualitative and qualitative means • Developing tailored therapeutic intervention plans to meet the unique needs of the child in 	<ul style="list-style-type: none"> • Providing psychoeducation to teachers, administration, and leadership • Positive behaviour support/ change within the education setting • Outreach home visiting • Facilitating family meetings, case meeting • Case Consultations, the community of practice workshops • Writing comprehensive reports and review documents • Capacity building and strengthening relationships between child/family and school- including child safety. • Advocating for the child’s best interest

	<p>an attachment and trauma-informed framework guided by evidence-based models</p> <ul style="list-style-type: none">• Individual child therapy interventions <p>Providing objective and transparent information about trauma and impacts to all stakeholders from a child's perspective</p>	
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