EXPLORING ATTITUDES RELATED TO TRAUMA-INFORMED CARE AMONG TEACHERS IN RURAL TITLE I ELEMENTARY SCHOOLS: IMPLICATIONS FOR COUNSELORS AND COUNSELOR EDUCATORS

by

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ABSTRACT

AMY LYNN GRYBUSH. Exploring attitudes related to trauma-informed care among teachers in rural Title I elementary schools: Implications for counselors and counselor educators. (Under the direction of DR. PHYLLIS POST)

Counselors working in schools have important roles in effectively addressing childhood adversity. Research over the last two-and-a-half decades has asserted that adverse childhood experiences (ACEs) are a significant public health issue (American Academy of Pediatrics [AAP]; Felitti et al., 1998; Garner & Shonkoff, 2012). Incorporating trauma-informed care into schools has the potential to maximize student-teacher relationships and create systemic change by encouraging a common language for understanding trauma. Counselors working in schools can provide trauma-informed professional development to teachers that helps them create an environment of safety and foster strong relationships with their students. The purpose of this study was to examine how personal trauma histories, school-level professional development training, and professional quality of life (compassion satisfaction, burnout, and secondary traumatic stress) were related to attitudes toward trauma-informed care among elementary school teachers working in rural Title I schools in the southeastern United States. A hierarchical regression was utilized to examine the impact of teachers' (N=147) personal history of trauma, school-level professional development training, and professional quality of life with regard to their attitudes related to trauma-informed care. Results indicated that school-level professional development and burnout were significantly negatively correlated with attitudes related to trauma-informed care, and compassion satisfaction was significantly positively correlated with attitudes related to trauma-informed care. Additionally, the hierarchical regression indicated that school-level professional development training was

significantly inversely related to attitudes related to trauma-informed care and accounted for 16.9% of the variance. Burnout was also significantly inversely related to attitudes related to trauma-informed care and accounted for an additional 8.7% of the variance, with professional development, compassion satisfaction, and burnout accounting for 25.6% of the total variance. Implications for counselors working in schools, counselor educators, teachers, teacher preparation programs, and advocacy for systemic change through research and legislation are discussed.

Keywords: Trauma-informed schools, ACEs, professional development, compassion satisfaction, burnout

DEDICATION

"Think lightly of yourself and deeply of the world." Miyamoto Musashi

The list of people who have supported me and believed in me is, thankfully, too long for me to name them all. I am forever changed by the commitment of time, energy, and love from so many. I would like to thank my parents, Michael and Cathy Grybush, for their unending love and support, without which I would not have been able to pursue this dream. Your gentle guidance and friendship have been pillars in my life, and I am beyond grateful. I would like to thank my husband, Lee Martin, for his unending patience, love, and support through this crazy ride. Since the day we met, you have believed in me *and* my dreams. Thank you for knowing how important this was to me and supporting me through it all – from changing plans because I was busy writing or eating take-out too many times (because I was busy writing). I still choose you, and I love you. To Beth Kennedy, one of the finest counselors I know - thank you for walking with me through the darkness and back into the light. I am eternally grateful. To Mardi and Eddie Charnitz, whose guidance and love through miles and years have given me an unwavering belief that I am loved, worthy, and capable. To Dr. Phyllis Post, a true mentor, an incomparable educator, and a wonderful role model and friend. Your professional and personal support through every step of this journey has been unwavering. You are one of the most generous and inspiring people I know. I am so very grateful for the opportunity to work with you, and I hope to do so for many years to come. To my dissertation committee, thank you for the critical feedback, encouragement, and support. To the professors in the Counseling Department at the University of North Carolina at Charlotte and my cohort, thank you for challenging me to be the best version

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"Witness the American ideal: the Self-Made (Wo)Man. But there is no such person. If we can stand on our own two feet, it is because others have raised us up. If, as adults, we can lay claim to competence and compassion, it only means that other human beings have been willing and enabled to commit their competence and compassion to us -- through infancy, childhood, and adolescence -- ***right up to this very moment***."

~ Urie Bronfenbrenner

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CHAPTER I: INTRODUCTION

Childhood "is the time for children to be in school and at play, to grow strong and confident with the love and encouragement of their family and an extended community of caring adults" (United Nations International Children's Emergency Fund [UNICEF], 2005, para. 1). It is much more than merely the time between birth and adulthood; it should be a treasured time where children can live "free from fear, safe from violence, and protected from abuse and exploitation" (para. 1). Unfortunately, that is not the universal experience. As many as 34 million children aged 0-17, nearly half of all children in the United States, have experienced at least one adverse childhood experience (Bethell, Davis, Gombojav, Stumbo, & Powers, 2017). While not uncommon, these events can have a negative and long-lasting effect on health and well-being during childhood and throughout the lifespan (Anda et al., 2006; De Bellis & Zisk, 2014; Felitti et al., 1998; Substance Abuse and Mental Health Services Administration [SAMHSA], 2014; Shonkoff et al., 2012).

Adverse childhood experiences (ACEs) are traumatic events in children's lives that include physical and emotional abuse and neglect, sexual abuse, and household dysfunction such as divorce, living with an adult experiencing mental illness or substance abuse, witnessing violence within the home, or the incarceration of a family member. Research over the last two decades supports the assertion of the American Academy of Pediatrics (AAP) that ACEs are a significant public health issue (Felitti et al., 1998; Garner & Shonkoff, 2012). While the brain is habitually, continuously processing stressful events and creating new neural circuitry, prolonged or frequent activation of the stress response system can disrupt the normal development of the brain. Toxic stress

results from this prolonged activation of the stress response system and impacts areas of the brain associated with reasoning, learning, and emotion, resulting in more prevalent emotional, cognitive, and behavioral issues (Sciaraffa, Zeanah, & Zeanah, 2017; Shonkoff et al., 2012).

The National Child Traumatic Stress Network (NCTSN; n.d.) states that traumatic or toxic stress may manifest in a variety of ways that affect children's daily lives; they may have

> intense and ongoing emotional upset, depressive symptoms or anxiety, behavioral changes, difficulties with self-regulation, problems relating to others or forming attachments, regression or loss of previously acquired skills, attention and academic difficulties, nightmares, difficulty sleeping and eating, and physical symptoms, such as aches and pains (para. 5).

On average, 45% of children in the United States have experienced at least one ACE, and that percentage is significantly higher in certain states. Markedly, several of the states with the highest child ACEs scores also had the highest poverty rates (Sacks & Murphey, 2018). Additionally, one in ten children has experienced three or more ACEs, and children who live in poverty experience these traumatic events more often than their more socioeconomically privileged counterparts (Steele et al., 2016).

Research indicates that the burden is also felt within the classroom; children who have experienced at least one ACE are at risk for significant language delays and are suspended and expelled more often. Additionally, they are two-and-a-half times more likely to fail a grade level and have lower achievement scores (Wolpow et al., 2016) than children who have experienced no ACEs. Furthermore, there is a cumulative effect;

children who have experienced at least three ACEs are “three times more likely to face academic failure, five times more likely to experience attendance problems, and six times more likely to exhibit behavior problems than children who have experienced no ACEs” (Sciaraffa, Zeanah, & Zeanah, 2017, p. 344).

Given these numbers on the prevalence of ACEs and the impact on children, it stands to reason that those in contact with children, including teachers, are often the ones who must manage the students’ emotional, cognitive, and behavioral issues brought about by these traumatic experiences. Increasingly, teachers are being relied upon “to meet the complex behavioral, cognitive, and relational needs of students struggling in schools” (Brunzell, Stokes, & Waters, 2016, p. 63). Bullough (2019) asserts that a high percentage of individuals become teachers because they “like young people, enjoy their company, desire to meaningfully connect with them, and are willing to invest significantly in their intellectual growth and well-being” (p. 10).

Research indicates that the number one protective factor for children who have experienced ACEs is a positive and supportive relationship with a caring adult (Ludy-Dobson & Perry, 2010; Mortensen & Barnett, 2016; Sciaraffa et al., 2018). In some cases, the relationship with their teacher is the most stable relationship in children’s lives (Brunzell, Stokes, & Waters, 2016; NCTSN, 2014; Perry, 2006). Teachers spend a lot of time with their students and are in an optimal position to create relationships with them that increase their resilience through stable, caring, positive relationships (Bell, Limberg, & Robinson, 2013; Sciaraffa et al., 2018).

However, research also indicates that teachers feel they lack the proper training to effectively address their students’ emotional, cognitive, and behavioral issues. As many

as 89% of teachers agreed that schools need to be involved in addressing students' "mental health needs," yet only 34% of them felt they had the skills necessary to do so (Reinke, Storemont, Herman, Puri, & Goel, 2011, p. 9). Teachers who choose to work in high-poverty schools face additional challenges, such as a lack of resources (Brown, 2017) and low parental involvement, often due to parents' stricter work schedules and a lack of resources available to them (Child Trends, 2013). Training teachers in trauma-informed approaches can reduce the impact of ACEs on the students (Sciaraffa et al., 2018) as well as the additional stress experienced by the teachers (Cavanaugh, 2016).

Trauma-Informed Care

Trauma-informed approaches are methods that: realize the impact of trauma and recognize possible paths for recovery; recognize the signs of trauma; integrate knowledge about trauma into policies, procedures, and practices; and aim to prevent re-traumatization (Cavanaugh, 2016). A trauma-informed framework is one that emphasizes "strong relationships with adults and peers; the ability to self-regulate behaviors, emotions, and attention; success in academic and nonacademic areas; and physical and emotional health and well-being" (Massachusetts Advocates for Children and Harvard Law School, 2013, p. 21). Trauma-informed approaches also benefit students who have not experienced traumatic events, as all students can benefit from feelings of safety and positive connections to school. They are inherently inclusive of all, while recognizing that there are those who are especially vulnerable to the impact of ACEs and trauma (Massachusetts Advocates for Children, 2013).

Recent literature acknowledges the complexities of implementing trauma-informed approaches, provides blueprints for service delivery, and strategies for

sustainability (Chafouleas, Johnson, Overstreet, & Santos, 2016; Morton & Berardi, 2017; Overstreet, & Chafouleas, 2016; Thomas, Crosby, & Vanderhaar, 2019). Additionally, Chafouleas et al. (2016) stated that buy-in of relevant systems and a shared understanding of the targeted problem is necessary and critical to the success of the approach. However, few studies have focused on an essential element within the school-based trauma-informed care approach: the teachers.

Teachers' Attitudes Toward Trauma-Informed Care

Research shows that trauma-informed care approaches can help those affected by trauma to feel safe, recover from trauma, and regain developmental trajectories (SAMHSA, 2014). While creating trauma-informed schools is a system-wide responsibility (Chafouleas et al., 2016; Thomas et al., 2019; Wiest-Stevenson & Lee, 2016), teachers are an integral component of the implementation and sustainability of the program (Wiest-Stevenson & Lee, 2016). At the most fundamental level, it is important to explore teachers' attitudes related to trauma-informed care. The degree to which a system is considered trauma-informed is dependent upon the "day-to-day behavior of its personnel" (Baker et al., 2016, p. 63), and attitudes are considered an important catalyst of behavior change. Research indicates that trauma-informed care training has the potential to increase staff knowledge and create changes in attitudes and behaviors that are more favorable to trauma-informed care implementation, especially in systems that are supportive of the trauma-informed care framework (Baker et al., 2016).

Conversely, as much as favorable attitudes toward trauma-informed care have the potential to promote behavior congruent with trauma-informed approaches, less favorable attitudes also have the potential to impede implementation of trauma-informed care

approaches. Through their daily interactions with students, teachers consistently exemplify trauma-informed care practices within the school. The importance of teachers' attitudes cannot be overstated. In order to gain a more comprehensive understanding of ways in which to train teachers to appropriately respond to students experiencing trauma, it is imperative that we explore teachers' attitudes toward trauma-informed care. Additionally, in order to better predict the likelihood of teachers' trauma-informed behaviors, teachers' attitudes must be measured in relation to personal experiences, such as personal trauma history, professional development training, and professional quality of life.

Teachers' Personal Trauma History

As noted by Blaustein (2013, p. 4), "Trauma is not solely the burden of childhood." Adverse childhood experiences manifest in negative physical and mental health outcomes in adults, as well as children (Anda et al., 2006; De Bellis, 2001; De Bellis & Zisk, 2014; Felitti et al., 1998). In 2006, Anda et al. published the staggering statistic that, retrospectively, 64% of adults report at least one ACE. Research indicates that children *and* adults who have experienced ACEs are limited in their ability to trust and subsequently may have difficulty creating, sustaining, or developing strong relationships (Barile, Edwards, Dhingra, & Thompson, 2014), as well as difficulty in emotional regulation (Rudenstine, Espinosa, McGee, & Routhier, 2019). Given the prevalence of childhood trauma, it stands to reason that teachers have experienced (or are also currently experiencing) their own toxic stress and may experience the deleterious effects as a result of trauma (Blaustein, 2013).

While there are few studies measuring elementary school teachers' personal trauma histories, research into mental health counselors' personal trauma histories indicates that childhood trauma is positively correlated with secondary traumatization (Dagan, Ben-Porat, & Itzhaky, 2016). Additionally, past or present trauma may impact their ability to regulate any emotions that manifest during their work (Dagan, Ben-Porat, & Itzhaky, 2016), can trigger memories of their own personal traumas (SAMHSA, 2014), and can lead to depression and over-identification with their clients (Martin-Cuellar, Atencio, Kelly, & Lardier, 2018).

While teachers are highly trained and skilled professionals, they are very much human. To ignore the possible impact of teachers' own trauma histories implies that the teachers are somehow immune to the detrimental impact of these experiences, a sentiment echoed in secondary trauma research with counselors (Martin-Cuellar et al., 2018). There is a gap in the literature regarding the impact of elementary school teachers' personal trauma histories on their attitudes related to trauma-informed care (Alisic et al., 2012; Borntrager et al., 2012; Fowler, 2015). In order to better understand effective ways to train teachers who work in high-poverty schools in trauma-informed approaches, one must consider teachers' personal trauma histories and how that may impact their attitudes toward trauma-informed care.

Professional Development Training

In addition to their own personal trauma histories, not knowing how to respond to students who have experienced trauma increases the stress experienced by teachers, in part, due to their lack of training (Bixler-Funk, 2019; Chen & Phillips, 2018; Post, Grybush, Elmadani, & Lockhart, 2019). As noted above, as many as 89% of teachers

agreed that schools should be involved in addressing students' emotional, cognitive, and behavioral issues, yet only 34% of them felt they had the skills necessary to do so (Reinke et al., 2011). In one study, as few as 9% of teachers indicated that they had received any form of trauma training. Furthermore, 63% of the teachers reported uncertainty as to when to refer children to mental health care, and 51% reported uncertainty as to where to get more information about traumatic stress (Alisic et al., 2012).

Implementing trauma-informed care approaches in schools requires a commitment to the professional development of the teachers, staff, and administrators to create a culture-shift in the environment of the schools (Craig, 2016; SAMHSA, 2014). A trauma-informed approach is a mindset, one where learning and behaviors are viewed through an understanding of how trauma impacts the developing brain (Phifer & Hull, 2016). "When professional development is provided, school employees are better prepared to utilize a trauma-informed lens to provide appropriate academic and social-emotional supports to interact with and assist students" (Goodwin-Glick, 2017, p. 11).

A review of trauma-informed care literature reveals the "siloed nature" of many trauma-informed care approaches (Thomas et al., 2019, p. 423), meaning often trauma-informed care is conceptualized in isolation, rather than through the lens of collaboration and the collective responsibility of the system. This exposes the unquestionable need for interdisciplinary, community, and professional partnerships (Morton & Berardi, 2017; Reinbergs & Fefer, 2018).

Local professional development training. One such interdisciplinary, community partnership is the Public School Forum of North Carolina (PSFNC). The mission of the

PSFNC is “to provide trusted, nonpartisan, evidence-based research, policy analysis and innovative programs that empower an informed public to demand that education best practice becomes common practice throughout North Carolina” (PSFNC, n.d., para 5). One program initiated by the PSFNC in 2017 is the North Carolina Resilience and Learning Project (NCRLP). This project works across the state to build trauma-informed school climates in high poverty schools where trauma is prevalent in the student population (NCRLP, n.d.). Now in its third year, the NCLRP identified nine Title I elementary schools in the Rowan-Salisbury School System in central North Carolina to receive trauma-sensitive school training through the initiative. Through professional development and ongoing coaching in schools, the goal of the NCRLP is to

> “increase awareness among educators of the impact of Adverse Childhood Experiences (ACEs) on student learning; to improve school climate by creating a trauma-sensitive environment; to improve the approach of educators and school communities to student discipline, particularly for high-need students; and to improve the coordination of services among schools, other school-based actors, and social service providers to mitigate the impact of ACEs on student learning and behavior by building student self-regulation skills and resiliency within inclusive learning environments” (NCLRP, 2018, para. 2).

Trauma-informed professional development trainings, like the NCRLP, have the potential to change dispositions and behaviors toward students who have experienced trauma, as well as “create common language, a shared vision, and an educated, responsive workforce” (Goodwin-Glick, 2017, p. 73). While there is a literature base regarding trauma-informed care professional development among teachers, there is a gap

in the literature regarding the impact of professional development on elementary school teachers' attitudes related to trauma-informed care. In order to better understand effective ways to train teachers who work in high-poverty schools to use trauma-informed approaches, one must consider teachers' professional development training and how such training is related to their attitudes toward trauma-informed care.

Professional Quality of Life

Teachers' professional quality of life can be conceptualized as the degree to which they experience both compassion fatigue and compassion satisfaction (Stamm, 2010). Teachers are tasked with much more than educating the current generation of children; teachers often take on the roles of motivator, manager, counselor, school leader, resource provider, and mentor to fellow teachers (Koenig, Rodger, & Specht, 2018). Today's teachers are working within a system of multiple, and often competing, demands (Reinke et al., 2011). These competing demands, in addition to the teachers' own personal trauma history and lack of training, affect teachers' professional quality of life, making teaching one of the most stressful professions (Greenberg, Brown, & Abenavoli, 2016; Koenig et al., 2018).

Blodgett (2015, para. 5) states that "for educators, unaddressed student trauma is a major contributor to frustration, low job satisfaction, and burnout." As a result of these compounded stressors, teachers' own mental health may be compromised, resulting in distractibility, irritability, and hopelessness (Hydon, Wong, Langley, Stein, & Kataoka, 2015; Post et al, 2019). In a recent study, as many as 30% of K-12 teachers reported "clinically impaired levels of stress" (van der Embse, Ryan, Gibbs, & Mankin, 2019, p. 1329). This increased stress compromises the professional quality of life of teachers,

often resulting in job efficacy cynicism, psychological detachment (Hupe & Stevenson, 2019), lower levels of job satisfaction, increased physical complaints, and higher intentions of leaving the profession (van der Embse, 2019).

Additionally, this increased teacher stress often results in teachers interpreting the students' disruptive behaviors as willful disobedience, laziness, or disrespect (Morton & Berardi, 2017). Not only do teachers lack training in responding to students experiencing toxic stress, but many also lack the necessary self-awareness to help them recognize and manage their own emotional exhaustion, burnout, or secondary stress (Anderson, Blitz, & Saastamoinen, 2015).

Compassion fatigue. Compassion fatigue (CF), also called emotional exhaustion, can be experienced as a loss of meaning or hope, and can lead to reduced empathy, irritability and difficulty concentrating (Portnoy, 2011). Compassion fatigue is comprised of two components: burnout and secondary traumatic stress. Burnout (BO) can be experienced as physical, emotional, and mental exhaustion that is a result of long-term involvement in emotionally demanding situations. Burnout can be also accompanied by feelings of disillusionment and negativity (Sharp Donahoo, Siegrist, & Garrett-Wright, 2018). Secondary traumatic stress (STS), defined as the "traumatic stress that professionals vicariously experience from close involvement with a traumatized client" (Hupe & Stevenson, 2019, p. 4), includes symptoms such as: being afraid, having difficulty sleeping, having images of the upsetting event leap into your mind, or avoiding things that remind you of the event (Stamm, 2005).

Literature regarding STS indicates individual differences, such as poor personal coping strategies and greater risk in females, as well as those with trauma histories,

contribute to an individual's risk for STS (Beck, 2011; Blodgett & Dorado, 2016; Sabin-Farrell & Turpin, 2003). Research exploring mental health counselors' personal trauma histories indicates that they are at a higher risk of BO and STS (Chaverri, Praetorius, & Ruiz, 2018; Martin-Cuellar, Atencio, Kelly, & Lardier, 2018; Trippany, White Kress, & Wilcoxon, 2004).

Compassion satisfaction. Conversely, compassion satisfaction (CS) can be understood as the pleasure or positive emotions one feels in relation to the care they provide to their clients (Stamm et al., 2005). Compassion satisfaction is typically higher among teachers than the general population of helpers, including social workers and counselors (Stamm, 2010). Research indicates that counselors with their own trauma histories report lower levels of CS, which may also be true for teachers with trauma histories. However, research also indicates that counselors employ several protective factors to increase CS. These include gaining specialized training in trauma work and increasing personal empathy (Martin-Cuellar, Atencio, Kelly, & Lardier, 2018).

Teachers who have experienced their own adversities could also benefit from increased knowledge of trauma and empathy. In addition, teachers may use these situations as opportunities to better understand their students experiencing adversity. "Teachers, whether consciously or not, send signals of their own experiences and are able to connect with students facing similar struggles" (Goodson, 2019, p. 7). Goodson states that it is through reflection and further training that teachers are able to see the scope of what their students may be experiencing and to change their perspective regarding what is causing behavioral issues.

Research examining trauma-informed care with regard to teachers has primarily focused on their perspectives on the system-wide implementation of trauma-informed care approaches, the evaluation of the "goodness of fit" within an organization, or on the abilities, knowledge, or skills of the teacher related to trauma-informed care (Alisic, 2012; McIntyre, Baker, & Overstreet, 2019; Stulmaker, 2013). Many studies have explored the effectiveness of collaborative trauma-informed care approaches, the impact on both the children and the teachers, and the long-term sustainability of the approach (Alisic, 2012; Alvarez, 2017; McIntyre et al., 2019; Thomas et al., 2019). However, few studies have focused on the teachers' attitudes related to trauma-informed care, and no study has explored elementary school teachers' personal trauma histories, professional development training, and professional quality of life in relation to their attitudes toward to trauma-informed care.

Need for the study

School counseling programs are "collaborative efforts benefiting students, parents, teachers, administrators and the overall community" (ASCA, 2019, para. 1). School counselors have the knowledge, skills, and attitudes necessary to plan, organize, implement, and evaluate comprehensive, developmental, results-based school counseling programs that align with the American School Counselor Association (ASCA) National Model (2012). They can create partnerships with teachers in the management of students' emotional and behavioral issues using trauma-informed care approaches (Massachusetts Advocates for Children and Harvard Law School, 2009; Massachusetts Advocates for Children and Harvard Law School, 2013; Reinbergs & Fefer, 2018). Furthermore, school

counselors are uniquely positioned to create systemic change in schools, effectively meeting the needs of both students and teachers.

The need for the incorporation of trauma-informed care approaches is well-documented, yet the research into the attitudes of an essential component of the equation, the teacher, is lacking. This study provides important and necessary information to school counselors and mental health counselors working in schools to provide leadership in collaborative trauma-informed care approaches that are part of a broader comprehensive school counseling program (ASCA National Model, 2012; CACREP, 2016).

Furthermore, the results of this study provide counselor educators a more comprehensive understanding of the ways in which to train counselors-in-training that informs the implementation of collaborative school-wide trauma-informed care approaches. A more comprehensive understanding of the experiences that impact teachers' attitudes toward trauma-informed care will help counselor educators increase school counselors' awareness of the factors that can impede or facilitate implementation of trauma-informed approaches. The results of this study provide important and necessary information to counselor education programs when developing curriculum for school counselors as well as school-based mental health counselors. Research indicates that additional widespread training and increased professional development is needed regarding the impact of trauma on emotion, cognition, and behavior. Counselors working in schools should receive specific training in trauma-informed care approaches that can be implemented school-wide through collaborative efforts (Gubi, 2019; Reinbergs & Fefer, 2018).

Many studies have explored numerous collaborative trauma-informed care approaches, as well as the impact on both the children and the teachers (Thomas et al., 2019). Few studies have explored the teachers' attitudes toward trauma-informed care (Alisic, 2012; Alvarez, 2017; Reinbergs & Fefer, 2018). No study has explored elementary school teachers' personal trauma histories, professional development training, as well as professional quality of life in relation to their attitudes toward to trauma-informed care.

Purpose

The purpose of this study was to examine how personal trauma histories, professional development training, and professional quality of life are related to attitudes toward trauma-informed care among elementary school teachers working in rural Title I schools in the Southeastern United States.

Research questions

The overarching research question was: How do personal trauma history, professional development training, and professional quality of life relate to attitudes related to trauma-informed care among teachers working in rural Title I elementary schools? The variables were entered into the regression equation individually in the hierarchical order as they were experienced. First, personal trauma history scores were entered into the regression equation, as these experiences happened during childhood and can impact attitudes related to trauma-informed care. Second, professional development training was entered into the regression equation, as the training has been ongoing for over two years and can impact attitudes related to trauma-informed care. Third, teachers' professional quality of life (to include the scales of compassion satisfaction, burnout, and

secondary traumatic stress) was entered into the regression equation as it is a measure of their current levels of stress and can impact attitudes related to trauma-informed care.

1) How does personal trauma history relate to attitudes related to trauma-informed care?
2) After controlling for teachers' personal trauma history, how does professional development training relate to attitudes related to trauma-informed care?
3) After controlling for teachers' personal trauma history and professional development training, how does professional quality of life relate to attitudes related to trauma-informed care?

Operational Definitions

Attitudes Related to Trauma-Informed Care

The Attitudes Related to Trauma-Informed Care scale (ARTIC; Baker, Brown, Wilcox, Overstreet, & Arora, 2016) measures favorable or less-favorable attitudes toward trauma-informed care. For the purpose of this study, ARTIC were measured by the participants' total score on the ARTIC-10 Scale.

Teachers

For the purpose of this study, teachers were defined as teacher-licensed educators in the Rowan-Salisbury school system who have worked with 5 or more students at a time. This may include teaching assistants, specials teachers, and other staff that meet the criteria. Participants will indicate by self-report on the demographic form a dichotomous "yes" or "no" to this criteria.

Schools

For the purpose of this study, the setting of high poverty schools was defined as Title I elementary schools where 95-100% of the students qualify free or reduced lunch in a rural county in the Southeastern United States. “Title I, Part A (Title I) of the Elementary and Secondary Education Act, as amended by the Every Student Succeeds Act (ESSA), provides financial assistance to local schools with high numbers or high percentages of children from low-income families” (United States Department of Education, 2018, para.1). The schools in this school system are considered “rural,” are classified as “fringe” (Office of Management and Budget, 2000), and are defined as being located in territory that is less than or equal to five miles from an urbanized area, as well as rural territory that is less than or equal to two-and-a-half miles from an urban cluster (National Center for Educational Statistics, 2006). All schools included in this study meet the above criteria. Six of the schools were identified as high-poverty elementary schools where trauma is prevalent in the student population by the Public School Forum of North Carolina (n.d.) and have participated in the N.C. Resilience and Learning Project in the current school year, the past school year, or both. The remaining 12 schools were either not identified as high-poverty elementary schools where trauma is prevalent in the student population by the Public School Forum of North Carolina (n.d.) or chose not to participate in the N.C. Resilience and Learning Project.

Adverse Childhood Experiences

Adverse Childhood Experiences (ACEs; Felitti et al., 1998) are traumatic events in children’s lives that include physical and emotional abuse and neglect, sexual abuse, and household dysfunction such as divorce, living with an adult experiencing mental illness or substance abuse, witnessing violence within the home, or the incarceration of a

family member. For the purpose of this study, ACEs were measured by the participants' total score on the 10-item ACEs questionnaire (Felitti et al., 1998).

Professional Development Training

The North Carolina Resilience and Learning Project (NCRLP), part of the Public School Forum of North Carolina (PSFNC), works with high-poverty schools where trauma is prevalent in the student population. This program works with identified schools providing professional development and ongoing coaching that aims to teach and support socioemotional or coping skills among students, as well as build a positive school climate with supportive relationships (Public School Forum of North Carolina, n.d.). This initiative is a trauma-informed program aimed at improving academic, behavioral, and socio-emotional outcomes for students. For the purposes of this study, teachers' participation was determined by the self-reported school of employment.

Professional Quality of Life

The Professional Quality of Life Scale (ProQOL-5; Stamm, 2010) measures compassion satisfaction, burnout, and secondary traumatic stress on three separate subscales. Compassion satisfaction is defined as the pleasure derived from doing the job well and contributing to the well-being of others. Burnout, one element of compassion fatigue, is defined as the negative effects of caring for others. This scale measures hopelessness and frustration related to this type of work. Secondary traumatic stress, the second component of compassion fatigue, is defined as the negative effects caused by exposure to others' traumatic events. This scale measures negative feelings driven by fear and work-related trauma. While CS and CF are competing aspects of individuals' professional quality of life, they can be experienced simultaneously (Stamm, 2010). For

the purposes of this study, teachers' professional quality of life was measured by the participants' total scores on each of the three subscales (compassion satisfaction, burnout, and secondary traumatic stress) on the ProQOL-5.

Assumptions

The assumptions made in this study were:

- Participants would complete all surveys and scales voluntarily.
- Participants would able to read and write in English.
- Participants would answer all surveys and scales honestly.
- The sample was representative of the population.

Delimitations

The factors the researcher can control in this study were:

- A purposive, convenience, homogenous population sample was identified from one county in North Carolina, and all 19 schools are Title I schools.
- Of the 19 schools, six were participants in the North Carolina Resilience and Learning Project, which is part of the Public School Forum of NC and the remaining 12 were not participants in the project.
- Teachers were defined as general education teachers and any other licensed educators who has worked with 5 students at a time from seven Title I elementary schools in a rural county in the Southeast US during the 2019-2020 school year.
- Data was collected in-person at the teachers' schools for one school, and via Qualtrics online survey for the remaining eighteen schools.

Limitations

The following limitations, those factors outside the researcher's control, are true of this study:

- The study's purposive sample limited the ability of the researcher to generalize results to teachers living in other regions that are dissimilar to the rural county in North Carolina in population profile or size.
- Social desirability bias was a limitation. It is the tendency of participants to answer survey questions in a manner that they believe could be viewed favorably by others (Maccoby & Maccoby, 1954).
- Because the research design was correlational, no causal inferences can be made.

Threats to Internal Validity

Internal validity in quantitative research indicates that the changes observed in the dependent variable can be attributed to the effect of the independent variable(s) and not to some other extraneous variables. If the researcher can control for the extraneous variable or variables, then the results can be said to be due to the treatment, supporting the evidence of internally validity (Mertens, 2015). Threats to internal validity in this study included instrumentation and social desirability. This study only utilized instruments that have been adequately evaluated in previous studies and have been deemed reliable and valid. In regard to social desirability, the researcher anticipated that by assuring anonymity to participants, they would be more likely to provide accurate and truthful answers.

Threats to External Validity

External validity in quantitative research indicates that the results of a study can be generalized to the population (Mertens, 2015). In this study, general education teachers and any other teacher-licensed educators who has worked with 5 or more students at a time were investigated. However, the results are generalizable only to other teachers and staff in schools similar in poverty levels and population to those chosen for the study and in similar rural locations.

Summary

Children often experience traumatic events and children who live in poverty experience traumatic events at a higher rate than more privileged children (Steele et al., 2016). These adverse experiences change the actual structure and function of the brain, making behavioral issues more prevalent (De Bellis & Zisk, 2014). Teachers work with students' whose emotional and behavioral issues are the result of these traumatic experiences.

Many teachers express that they have received little or no training on how to manage these issues (Reinke et al., 2011). Trauma-informed care approaches have been shown to be effective in reducing children's emotional and behavioral issues in the classroom, making the classroom environment more conducive to learning and reducing the long-term impact of the traumatic events (Helker & Ray, 2009; Morrison & Bratton, 2011; Sepulveda, Garza, & Morrison, 2011).

Many studies have explored the effectiveness of collaborative trauma-informed care approaches and the impact on both the children and the teachers, yet few studies have researched the teachers' perspectives and attitudes on trauma and trauma-informed

care, and no study has explored the teachers' attitudes regarding trauma-informed care with regard to their personal trauma history, professional development training, and professional quality of life. This research addresses this gap in the literature as well as informs the preparation of school counselors as to the ways in which trauma-informed initiatives can be implemented in their schools in order to best attend to children who have experienced trauma.

Organization of the Study

This dissertation includes five chapters. The first chapter proposed an argument for the study. It also gave operational definitions of the variables used in the study, background information on the significance of the dependent variable (Attitudes Related to Trauma-Informed Care), and an overview of the independent variables; teachers' personal trauma histories, professional development training, and professional quality of life. Research questions, assumptions, limitations, and delimitations were also included in this chapter. The second chapter is a review of the literature. This chapter also outlines the current evidence-based research on collaborative trauma-informed care approaches. This includes further information on the variables and the impact they may have on the attitudes related to trauma-informed care of teachers working in rural high-poverty schools. The third chapter outlines the methodology used in the study. This includes the participants, procedures, data collection procedures, and data analysis that was used. The fourth chapter provides a review of the results of the study including information about results for each dependent variable (professional development training, teachers' adverse childhood experiences, and teachers' professional quality of life) based on the research

questions. Finally, chapter five includes a discussion about results obtained, limitations of the study, implications of the findings, and recommendations for future research.

CHAPTER II: REVIEW OF THE LITERATURE

The purpose of this study is to examine how personal trauma history, professional development training, and professional quality of life are related to attitudes related to trauma-informed care among teachers working in Title I elementary schools in a rural county in the Southeastern United States. The purpose of this chapter is to provide a comprehensive review of the pertinent literature in order to demonstrate the need for this research study.

There are six main sections in the following chapter. The first section examines contextual systems model, the theoretical background supporting this study, and will provide justification of the use of this theory. Section two describes the history and definitions of trauma and resilience and offer an overview of trauma-informed care. The dependent variable, attitudes related to trauma-informed care, is also explored in this section, followed by the role of the teacher within the trauma-informed approach. The independent variable sections, three, four, and five, explores empirical and conceptual literature related to the independent variables: (a) personal adverse childhood experiences, (b) professional development training, and (c) professional quality of life. The final section presents a summary of the chapter and conclusions drawn from the review of the literature.

Theoretical Framework

Contextual Systems Model

The present study is guided by the contextual systems model (CSM; Pianta & Walsh, 1996) which conceptualizes human development as framed by culture and history. This model is grounded in and heavily influenced by developmental systems

theory (Ford & Lerner, 1992) and provides a framework by which to view the many factors that are relevant to early schooling. This theoretical framework holds that multiple layers of systems directly and indirectly impact child development (Bronfenbrenner, 1986; Pianta & Walsh, 1996). Pianta and Walsh postulated that previous theories of child development take too narrow an approach regarding factors that impact early schooling, and therefore, are inadequate and reductionist. The contextual systems model (CSM) provides a "roadmap with which to locate and name factors related to how children do in school and shows…the interactions and patterns of interactions that we seek to explain" (p. 63).

This model has been identified as the most appropriate theoretical framework for this study as it specifically aims to understand children within context and the associated "life hazards" (Pianta & Walsh, 1996, p. 6) of those children deemed "at-risk." The primary goal of CSM is to look beyond (or perhaps, within) what the schools themselves "look like," and to think relationally; "More important than how schools look is *how educators look at the children who enter the schools each day and how educators see their roles in those children's lives*" ([emphasis added]; p. 1).

This model provides a more comprehensive understanding of bi-directional and multidirectional relationships between and among systems. Systems are intangible abstractions that operate at many different levels. Each component of a system is also a system within itself; for example, brains are systems, children are systems, families are systems, classrooms are systems, etc. These systems are interrelated and have subordinate and superordinate relations to one another (Pianta & Walsh, 1996). Inherent in these relations within a system is the purpose of regulating the subordinate system. The

systems in Figure 2 can be thought of as "context for development" (p. 68), and each environment impacts the subordinate and superordinate relationship.

For ease of understanding the model and conceptualizing the relationships among systems that influence childhood development, Figure 2 depicts the child/family system and the school/schooling system as two distinct systems. However, the analysis in this study conceptualizes these separate systems as "subsystems" of the larger macro system. This larger macro system is noted by the loop at the bottom of Figure 2 and refers to the "organized set of interrelated components, each of which serves as a function in relation to the activity of the whole system" (Pianta & Walsh, 1996, p. 65). Essentially, the macro system encompasses the dynamic relationship between and among the varied components and varying levels of the system within which children are embedded.

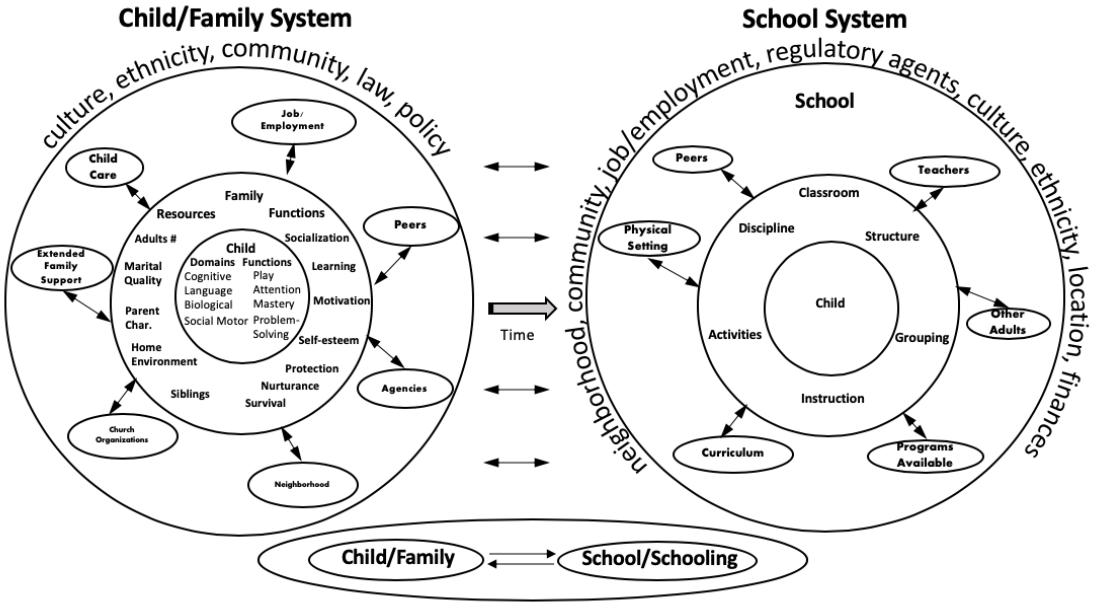


Figure 2: The Contextual Systems Model (Pianta & Walsh, 1996, p. 64).

In the child/family subsystem, the child is positioned within the family, with both the child and the family being in relation to a number of other contexts that influence development, such as child-care, employment, neighborhoods, faith communities, extended family, and other resources. These contexts are in turn embedded within superordinate contexts, or systems, such as culture, ethnicity, community, and policy. All of these contexts influence child development and impact the relationship between child/family and school/schooling.

In the school/schooling system, the child is positioned within the classroom, with both the child and the classroom being in relation to a number of other contexts that also influence development, such as peers, teachers, other adults, curriculum, and resources. These contexts are in turn embedded within superordinate contexts, such as culture, ethnicity, neighborhood, community, regulation, and finances (Pianta & Walsh, 1996). Again, all of these contexts influence child development and impact the relationship between school/schooling and child/family.

Relationships are central to this model, and they can be positive, negative, or anything on the continuum in-between. Conceptualizing systems through relationships to and with one another allows for accommodation of the intricacies of the system as well as the impact of the aspect of time. Just as relationships develop over time, this model allows for the consideration of the impact of multiple influences (including time), contexts, and differing levels of systems, all of which contribute to the development of children (Pianta & Walsh, 1996).

Through this framework, a conceptualization of the relationship between children and teachers, individually as well as a class and school as a whole, requires the

consideration of the teacher as an acting force on the children and the classroom environment. Conceptualizing teachers as systems in and of themselves, their own context becomes an important aspect of how they have been acted upon by their own systems. Exploring teachers' attitudes toward trauma-informed approaches can provide a more comprehensive understanding of unique strengths and barriers of implementing trauma-informed approaches in rural Title I elementary school settings.

Trauma-Informed Care

Trauma

In order to fully understand trauma-informed care, an understanding of trauma and how it impacts healthy development is essential. Trauma has been defined as the result of an event (or events) that individuals perceive as harmful or life-threatening and has long-term, detrimental effects on the individuals (Lawson, 2017). The word trauma originates from the Greek word, "trōma" which translates to "wound" (Wilkin & Hillcock, 2014, p. 185) and was initially conceptualized by Sigmund Freud. Freud initially diagnosed women seeking his treatment with "hysteria," although he also discovered that many of the women under his treatment had suffered sexual abuse as children. However, Freud chose to ignore the predominant narrative of childhood abuse and alleged that their hysteria was a manifestation of their personal sexual fantasies (Wilkin & Hillcock, 2014).

The subject of trauma arose again following World Wars I and II. Soldiers returning from these wars were diagnosed with "shell shock" (Wilkin & Hillcock, 2014, p. 185). Up until this time, the symptoms the veterans exhibited had only been observed in women and were diagnosed as hysteria. Although the observation of these symptoms

broadened the scope of the affliction, a connection to the combat experiences of these men was not made. Rather, the symptoms exhibited by the veterans were attributed to character deficits, such as “cowardice” (p. 186). Psychological trauma, specifically that attributable to war, was not recognized until the mid-1970’s, and the diagnosis of post-traumatic stress disorder (PTSD) was added to the DSM-III in 1980 (Wilkin & Hillcock, 2014). The addition of PTSD as a diagnosis within the DSM-III (American Psychiatric Association, 1980) was recognized as progress, however, criteria framing trauma as “outside the range of usual human experience” (Wilkin & Hillcock, 2014, p. 186.) was denounced as inaccurate and insensitive to vulnerable and marginalized populations.

As stated by van der Kolk (1989), “Traumatization occurs when both internal and external resources are inadequate to cope with external threat” (p.393). Bloom (1999) pointed out that the traumatic experience itself is not necessarily damaging, it is the unique reaction of the individual’s body and mind that can be traumatic. Trauma impacts the entire individual – one’s thoughts and behaviors, how one learns and remembers things, even how one feels about someone else or themselves – are all impacted by trauma.

The fight or flight response, also called the body’s stress response, is part of the complex evolution of our species. This response allows us to assess and respond to threats to safety and well-being and react accordingly (Bloom, 1999). When individuals perceive a threat or potential danger, two major stress responses are activated: the autonomic nervous system (ANS) and the hypothalamic pituitary axis (HPA; De Bellis & Zisk, 2014; Leitch, 2017; Sciaraffa et al., 2018).

The ANS releases epinephrine and norepinephrine in order to allow the body to respond to the threat quickly: the heart rate quickens; blood flow is increased to the heart and the brain; blood flow is reduced to the skin and the gut; and glucose is released for extra energy. The HPA prompts the release of cortisol, the "stress" hormone, which impacts areas of the brain responsible for memory, attention, and managing thoughts and emotions. Additionally, the immune system and metabolism are impacted by the release of cortisol. Prolonged increased levels of cortisol, synonymous with long-term stressors, can result in impairments to cognition (to include learning, memory, and attention) as well as cardiovascular and other regulatory physiological systems (Leitch, 2017; Sciaraffa et al., 2018). Stressors that are prolonged, chronic, or too strong can be overwhelming to the brain and can result in toxic or traumatic stress (Shonkoff et al., 2012).

More recent research suggests that an exploration of trauma is incomplete unless it includes awareness of community trauma, historical trauma, and intergenerational trauma. This inclusion helps move from a medical model of conceptualization to a more comprehensive understanding of trauma. Incorporating feminist and radical theory into the conceptualization of trauma, McKenzie-Mohr, (2004) suggested that, "the lens of trauma must be broadened to include knowledge that emphasizes strengths and resilience; the experiences of groups and communities; experiences across diverse cultures and social contexts; inclusion of previously marginalized voices; and connections between trauma and oppression" (p. 47). This expansion of the trauma lens recognizes that the research informing the dominant construction of the original thoughts on trauma is rooted

in Western concepts and fails to recognize the racist and oppressive forces that may minimize the voices of culturally diverse populations (McKenzie-Mohr, 2004).

Through this broadened lens of trauma, the context of individuals become an important factor to consider when examining trauma and exploring ways to combat its effects. Those experiencing trauma are not doing so in a vacuum; the environment, or "system," in which they develop impacts the ways in which individuals respond. To fully address the detrimental effects of trauma systems must be "informed" of the symptoms, effects, and long-term impact of trauma and of ways to respond to individuals that can restore original developmental trajectories.

Resilience

Regardless of individuals' vulnerability, they have strengths. Omission of strengths-based and resilience aspects when conceptualizing trauma is to leave out half of the story (Brunzell, Stokes, & Waters, 2016; Leitch, 2017). Resilience became a topic of research in the early 1970's in an effort to examine the impact of trauma on individuals' behavior and development. Up until that point, theories on human adaptation were largely based on ideas from Darwin's theory of natural selection, Freud's theory of personality, and focused on the detrimental consequences of trauma (Masten, 2018).

Theorists cautioned that resilience should be viewed as a "complex, dynamic biopsychosocial/spiritual process dependent on life context" (Greene, Galambos, & Lee, 2004, p. 78). Resilience can be conceptualized as "any trajectory that eventually leads to levels of functioning that are comparable to or even better than at the outset" (Kalisch, Müller, & Tüscher, 2015, p. 5). However, there are both internal and external individual factors that are related to resilience. These include "internal factors such as temperament

and attitude, and external elements such as neighborhood or community well-being. Moreover, resilience was considered a multisystemic phenomenon that can occur across the life span" (Greene, Galambos, & Lee, 2004, p. 78).

Researchers began exploring the characteristics of those who exhibited resilience in the face of adversity to understand the processes that promoted positive adaptation. This shift of focus from pathology to a strengths-based perspective is not complete, however, as much research has focused on resilience to dysfunction-specific disorders (Kalisch, Müller, & Tüscher, 2015). Turning the focus to "general resilience mechanisms" (p. 3) allows researchers to examine protective factors in any situation where the stress response is stimulated, such as situations of toxic stress. A resiliency lens provides a framework for focusing on the positive, promotive, or protective factors that work in opposition to the risk factors associated with adverse experiences (Zimmerman, 2013). More recent models within the framework of resiliency focus on contextual resilience factors in addition to individual resilience factors that reflect a more comprehensive conceptualization of resilience (Zimmerman, 2013).

While it is imperative to address the needs of those who have been traumatized, fully supporting these individuals includes recognizing individuals' strengths which can empower them to make their own decisions and realize their potential (Cavanaugh, 2016). Research has indicated that positive, consistent, supportive relationships are instrumental in helping children cope with trauma and are the number one protective factor for children who have experienced adverse childhood experiences (ACEs; Ludy-Dobson & Perry, 2010; Sciaraffa, Zeanah, & Zeanah, 2018). Research also indicates that

what happens to individuals is often less important than how individuals and those around them respond to the event(s) (Ungar & Perry, 2012; Woodbridge et al., 2016).

These results indicated that focusing on strengths and providing support through caring relationships are critical to changing the trajectory following exposure to toxic stress or trauma. Trauma-informed approaches that strengthen relationships can effectively buffer the impact of trauma, thereby increasing children's resilience. Research has indicated that professional development training has the potential to increase staff knowledge and create changes in attitudes and behaviors that are more favorable to trauma-informed care implementation, especially in systems that are supportive of the trauma-informed care framework (Baker et al., 2016).

Both through a trauma and a resilience lens, we are able to conceptualize how individuals respond to adverse and traumatic experiences. A trauma lens allows us to see how past experiences have affected individuals and how they are impacting them in the present, whereas a resilience lens focuses on how individual characteristics or contextual circumstances may increase the ability to thrive following adverse experiences. However, neither of these philosophies consider the whole context of individuals or the systems within which they develop.

Controversy

The definition and understanding of trauma, and of trauma-informed care itself, has come under scrutiny for several reasons. First, as Knight (2015) has pointed out, trauma-informed care is not the same as trauma-centered care. Trauma-centered care utilizes trauma-centered interventions, such as Eye-Movement Desensitization and Reprocessing (Shapiro, 2018), where the latent trauma is the main focus. Conversely,

trauma-informed care is based on the understanding that the traumatic experiences inform current behaviors and thoughts but believe that re-immersion into the traumatic experience itself can cause re-traumatization and further distress. Second, Knight (2015) posited that many individuals who have experienced trauma have a vague or repressed memory of the trauma itself. Revisiting the traumatic event in an effort to recall details may lead to inaccurate memories of events and, as critics point out, creation of events. Through a trauma-informed approach, a clinician avoids the interpretation of clients' memories by maintaining a position of neutrality. Critics find this approach to be minimizing or avoiding the significance of the individuals' trauma.

Finally, Weathers and Keane (2007) explored the contention that diagnoses, such as PTSD, rely on the measurement and definition of trauma itself. How one reliably and validly measures trauma may impact the clients' diagnosis, sense of self, or worldview. At the center of the debate was "Criterion A" of the PTSD diagnosis within the Diagnostic and Statistical Manual of Mental Disorders (DSM- III; American Psychiatric Association, 1980) and the ambiguity of the language used to define "trauma." As the profession currently utilizes the DSM-5 (American Psychiatric Association, 2013) and the criterion has been revised and broadened, this debate has subsided somewhat. However, the controversy remains regarding a widely accepted understanding that what is considered traumatic to one person may not be considered traumatic to another (Weathers & Keane, 2007).

Historical background of Trauma-Informed Care

Trauma-informed care has its roots in the medical profession and has been considered the gold-standard in care when working with trauma victims since the early

2000's (Smitson, 2013). Trauma-informed care is best explained by the four R's: *Realize* the widespread experience and impact of trauma, *recognize* the symptoms of trauma, *respond* in ways that actively integrate knowledge of trauma, and avoid *re-traumatization* of the individual (Cavanaugh, 2016; Lawson, 2017). There are four main principles to trauma-informed care: "normalizing and validating clients' feelings and experiences; assisting them in understanding the past and its emotional impact; empowering survivors to better manage their current lives; and helping them understand current challenges in light of the past victimization" (Knight, 2015, p.28).

Many hospital administrators, pediatricians, and nurses have agreed that adopting trauma-informed approaches is essential to patients' health and well-being and requires not only a paradigm shift, but a change to many of our social systems (Novick, 2017; SAMHSA, 2014). As trauma-informed care has continued to evolve, developmentally appropriate ways to support the healthy development of children have been incorporated. Bartlett, Wilson, Anderson Moore, and Redd (2016) describe ways that children's healthy development is supported by trauma-informed care approaches.

First, trauma-informed approaches help caregivers (parents, teachers, systems) recognize and respond to the unique needs of children who have or are experiencing trauma. While children react to traumatic events differently, some sort of distress is virtually universal. Trauma-informed approaches encourage caregivers to respond in ways that support children's emotional regulation, help them cope with triggers, and maintain consistent routines.

Second, trauma-informed care approaches strengthen "child-serving systems" (Bartlett et al., 2016, para. 5) by encouraging a common language for understanding

trauma. Changing the narrative from, *what's wrong with you?* to *what happened to you?* (Bloom, 1994, p. 476) changes the focus from a deficit-based perspective to a strengths-based perspective, allowing the caregivers to meet the children's unique needs.

Third, trauma-informed approaches support the needs of the caregivers who may also have experienced trauma. Parents, teachers, or service providers who have been exposed to their own traumas may suffer from severe stress as a result of working with those who are exposed to trauma. Trauma-informed approaches attend to the unique needs of those within the *system*, including those providing the care, through identification of reactions as well as healthy coping mechanisms (Bartlett et al., 2016).

Lastly, policymakers are gradually recognizing the significance of implementing trauma-informed approaches "across systems of care" (Bartlett et al., 2016, para. 8). Amendments to federal law (The Child and Family Services Improvement and Innovation Act, 2011, P.L. 112-34) mandate that states provide trauma-informed care for children in foster care. Additionally, other policies have mandated trauma-informed approaches for the Department of Family and Protective Services (Texas, 81(R) SB 141, 2009), the juvenile justice system (Texas, S.B. No. 1356, 2013), healthcare, and mental healthcare (Vermont, H.762, 2014).

An important clarification of trauma-informed care is that simply working with a vulnerable population does not mean that everyone has a trauma history. Clinicians working through the lens of trauma-informed care do not assume that clients are survivors or have been impacted by trauma. Instead, clinicians consider the possibility that clients may or may not have a history of trauma. Being sensitive to this possibility, as well as the possible barriers to help-seeking behaviors and disclosure of events, allows

clinicians to conceptualize the presenting issues through the context of trauma (Knight, 2015).

Role of Teachers in Trauma-Informed Care

Teachers are influential in the lives of children and spend a large amount of time with their students (Stulmaker, 2013). They are in optimal positions to fulfill an important relationship role with their students, as well as identify changes in behaviors and symptoms of trauma. Teachers can also foster children's resilience from traumatic events by providing coping strategies, routine, and structure in times of instability (Alisic, 2012; Ludy-Dobson & Perry, 2010; Mortensen & Barnett, 2016; Sciaraffa et al., 2018). In instances of neglect or abuse within the home, the relationships with teachers may be the one stable relationship that children experience, and the importance of that role cannot be understated. Many teachers who work in high-poverty schools lack the training to appropriately respond to children with trauma histories (Alisic, 2012; Post et al., 2019).

Increasingly, teachers are being relied upon "to meet the complex behavioral, cognitive, and relational needs of students struggling in schools" (Brunzell, Stokes, & Waters, 2016, p. 63). Although most teachers are proficient in communication, most teachers do not receive training on specific communication skills to address the socioemotional needs of students (Chen & Phillips, 2018). This lack of training is not only extremely stressful for teachers (Chen & Phillips, 2018), but without adequate training, teachers are more likely to respond in ways that can perpetuate students' disruptive behaviors, rather than reduce them (Helker & Ray, 2009; Morton & Berardi, 2017; Stulmaker, 2013).

Incorporating trauma-informed approaches in schools is crucial to both meet the needs of children who face exposure (Jensen, 2009; Stulmaker, 2013) and to reduce the stress of the teachers who are caring for these children (Cavanaugh, 2016). Given the prevalence of ACEs, it is logical to reason that teachers have experienced (or are also currently experiencing) their own toxic stress and may experience the deleterious effects as a result of trauma (Blaustein, 2013). In addition, the increased stress on teachers due to a lack of training can inadvertently result in teacher behaviors that prolong children's emotional and behavioral issues.

A large percentage of teachers, as many as 89%, believe that schools should be involved in addressing students' emotional, cognitive, and behavioral issues, yet only 34% of them felt they had the skills necessary to do so (Reinke et al., 2011). In one study, as few as 9% of teachers indicated that they had received any form of trauma training. Furthermore, 63% of the teachers reported uncertainty as to when to refer children to mental health care, and 51% reported uncertainty as to where to get more information about traumatic stress (Alisic, Bus, Dulack, Pennings, & Splinter, 2012).

Attitudes Related to Trauma-Informed Care

Due to the psychological and physiological impact of trauma, trauma-informed care approaches are implemented in many systems that work with people who may have experienced trauma. Trauma-informed approaches have the capacity to help those affected by trauma to restore "developmental trajectories" and increase resilience (Baker et al., 2015, p. 1). Yet several barriers existed in trauma-informed care research and practice, including an ambiguous definition of trauma-informed care and a lack of

psychometrically sound instruments to measure and evaluate trauma-informed care (Baker, Brown, Wilcox, Overstreet, & Arora, 2016).

The degree to which a system or organization can be considered "trauma-informed" is largely dependent upon the consistent behavior of the personnel within the organization (Baker et al., 2015). As attitudes are considered an important catalyst of behavior change, it is important to measure staff attitudes in relation to trauma-informed care as a motivating factor for behavior change. Attitudes that are more favorable to trauma-informed care implementation, especially in systems that are supportive of the trauma-informed care framework, have the potential to promote behavior congruent with trauma-informed approaches (Baker et al., 2016). Conversely, as much as favorable attitudes toward trauma-informed care have the potential to promote behavior congruent with trauma-informed approaches, less favorable attitudes also have the potential to impede implementation of trauma-informed care approaches (Baker et al., 2016).

Much of the research regarding trauma-informed care in helping professions has focused on implementation of trauma-informed care approaches, evaluation of the "goodness of fit" within an organization, or on the abilities, knowledge, or skills related to trauma-informed care (Alisic, 2012; McIntyre et al., 2019; Stulmaker, 2013). As research indicates that attitudes impact behavior, attention has recently focused on the measurement of attitudes related to trauma-informed care (ARTIC; Baker et al., 2015); however, there are few research studies utilizing this measure as the outcome variable, and the few studies that have measured ARTIC are within the counseling or social work disciplines.

Berkhout (2018) explored the ARTIC among direct-care staff at youth residential facilities. Results indicated that, although not statistically significant, the direct-care staff with higher levels of personal trauma had overall less favorable attitudes toward trauma-informed care. Additionally, direct-care staff who indicated lower perceptions of workplace support, mandatory supervision, and higher rates of workplace stress, had less favorable attitudes toward trauma-informed care.

In contrast, Jordan-Cox (2018) explored ARTIC among substance-use disorder clinicians at addictions treatment agencies. Results indicated that although there was no relationship between personal trauma history and ARTIC, the prevalence of personal trauma was higher among substance use disorder clinicians than the general public. The contradiction in the findings of these two studies indicate a need to further explore the impact of personal trauma histories on ARTIC among teachers.

Another study explored the impact of a one-day trauma-informed training on the ARTIC of professionals from psychiatric hospitals in Japan (Niimura, Nakanishi, Okumura, Kawano, & Nishida, 2019). The majority of participants were female registered nurses with an average of nearly eight years' experience. Results indicated that the brief, one-day training had a significant effect on attitudes more favorable to trauma-informed care. In addition, at a three-month follow-up, more than half the participants indicated that they had implemented trauma-informed care into their practice. This research indicates the need to further explore the impact of professional development training on ARTIC among teachers.

Attitudes Related to Trauma-Informed Care among Teachers

Trauma-informed care has recently been implemented in schools, and research suggests that as a result, there is a decrease in suspensions, expulsions, and written referrals, which correlates with an increase in trauma-related practices (Baker et al., 2015). Additionally, teachers indicated feeling supported through trauma-informed approaches, which can lead to the long-term sustainability of the initiative (Reinbergs & Feifer, 2018).

There are scant empirical articles measuring attitudes related to trauma-informed care among teachers. Research examining trauma-informed care among teachers has focused on the implementation of trauma-informed care initiatives and evaluation of teachers' temperament, knowledge, or skills regarding trauma-informed care (Alisic, 2012; McIntyre et al., 2019; Stulmaker, 2013). When teachers' attitudes toward trauma-informed care have been measured, it has often been in the context of the teaching and inclusion of students with special needs or learning disabilities (Alisic, 2012; Monsen, Ewing, & Kwoka, 2014; Sadin, 2018), the teachers' perceptions of the students or the students' parents (Anderson et al., 2015; Blitz, Anderson, & Saastamoinen, 2016), or the teachers' perceptions of the acceptability of the trauma-informed approach (McIntyre et al., 2019). However, there are two studies that focus specifically on teachers, and one exploring all elementary school staffs' (including teachers) attitudes more or less favorable to trauma-informed care using the attitudes related to trauma-informed scale (Baker et al, 2015).

Wendel (2018) conducted a mixed methods study among urban high school teachers who were participating in a multi-tiered, trauma-informed mental health care intervention to assess the impact of the professional development training on teachers'

ARTIC. Additionally, Wendel assessed the predictive value of teacher demographics and self-efficacy on their ARTIC score. Regardless of attitudes, all teachers cited students' family and home environment as critical to student outcomes.

Teachers with a more favorable attitude toward trauma-informed care stressed the importance of cultivating an environment of physical, emotional, and intellectual safety for the students. Moreover, teachers with a more favorable attitude toward trauma-informed care attributed students' challenging behaviors to contextual aspects of the students' lives, including mental health, environment, and trauma than teachers with a less favorable attitude toward trauma-informed care (Wendel, 2018).

In another mixed-methods study, Waggoner (2018) explored the relationship between trauma-informed training, years of experience teaching, personal trauma history, and attitudes related to trauma-informed care among K-12 general education teachers in an urban school system. Results indicated that the largest predictor of more favorable attitudes toward trauma-informed care was a personal trauma history. Additionally, results revealed that those who had participated in trauma-informed professional development training had more favorable attitudes toward trauma-informed care. The variable of years of experience teaching did not reveal any statistically significant results regarding the teachers' ARTIC.

Using a regression analysis, Grybush and Post (in progress) examined rural, Title I elementary teachers and other school staff professional quality of life (compassion satisfaction [CS], burnout [BO], and secondary traumatic stress [STS]), belief in a just world (BJW), and teacher attitudes, knowledge, and skills (TAKSS) aligned with child-centered values in relation to attitudes about trauma-informed care (ARTIC). While the

regression revealed that only the attitudes and knowledge scales of the TAKSS were significantly related to ARTIC, correlations revealed that CS and TAKSS - attitudes and knowledge - were positively correlated with ARTIC at the .01 level. Additionally, BO was negatively correlated with ARTIC at the .05 level. The implication of these results is that those with attitudes more aligned with child-centered values, as well as higher compassion satisfaction, have a more favorable attitude toward trauma-informed care and are less likely to experience burnout.

There are only two studies exploring teachers' ARTIC as the outcome variable, both in an urban setting; one with high school teachers and one with K-12 teachers. Additionally, there is one study with all staff in a rural Title I elementary, including teachers. This demonstrates the need for additional exploration of teachers' ARTIC in Title I rural elementary school settings.

Suggestions for future research into trauma-informed approaches in schools included measuring teachers' personal trauma histories (Alisic et al., 2012; Waggoner, 2018; Wendel, 2018), providing ongoing professional development (Alisic et al., 2012; Baker et al., 2015; Waggoner, 2018; Wendel, 2018), providing supervision or consultation for teachers (Lepore, 2017), and exploring teachers' CS and compassion fatigue (CF), which includes BO and STS (Blitz et al., 2016; Lepore, 2017). As attitudes are considered an important catalyst for behavior change, exploring the ARTIC among Title I elementary school teachers in rural settings is an important aspect of predicting trauma-informed behaviors (Brown, Baker, & Wilcox, 2012).

As the literature indicates, teachers' own trauma histories, trauma-informed professional development training, and their professional quality of life can impact

ARTIC and will inform the effective implementation of trauma-informed approaches in schools. The importance of teachers' attitudes cannot be overstated. In order to gain a more comprehensive understanding of ways in which to train teachers to appropriately and effectively respond to students experiencing trauma, it is imperative that we explore teachers' attitudes toward trauma-informed care. Additionally, in order to better predict the likelihood of teachers' trauma-informed behaviors, teachers' attitudes must be measured in relation to personal experiences, such as personal trauma history, professional development training, and professional quality of life.

Adverse Childhood Experiences

The adverse childhood experiences (ACEs) study was a seminal research study that explored the prevalence and impact of childhood trauma on adult health outcomes (Felitti et al., 1998). In a large (n=17,000) study designed to retrospectively explore individuals' childhood adversity, researchers found that stressors during childhood increase the likelihood of long-term negative physical and mental health outcomes (Anda et al., 2006; De Bellis & Zisk, 2014; Felitti et al., 1998; Substance Abuse and Mental Health Services Administration [SAMHSA], 2014; Shonkoff et al., 2012).

Adverse childhood experiences, traumatic events in children's lives, include physical and emotional abuse and neglect, sexual abuse, and household dysfunction such as divorce, living with an adult experiencing mental illness or substance abuse, witnessing violence within the home, or the incarceration of a family member (Felitti et al., 1998). Researchers concluded that there was a "strong dose-response relationship" (p. 250) between the number of ACEs experienced and negative physical and mental health

outcomes. Simply, this means that as ACEs scores increase, so does the likelihood of experiencing health or social problems (Sciaraffa, Zeanah, & Zeanah, 2017).

Childhood adversities are measured on a scale of zero to 10, with 10 being full exposure. Individuals with an ACEs score of four are twice as likely to be smokers and seven times more likely to be alcoholics. Additionally, those with an ACEs score of four have a 1200 percent increased risk of suicide (Center for Disease Control; CDC, 2019). Individuals with an ACEs score of six or more have a risk of their lifespan being shortened by approximately 20 years (Felitti et al., 1998).

The health and social problems that have been linked to ACEs include chronic disease such as cancer and heart disease, mental illnesses, and violence or being the victim of violence (Felitti et al, 1998). The core link between ACEs and health risk behaviors such as smoking, overeating, alcohol or drug abuse, or risky sexual behaviors appears to be the conscious or unconscious use of these behaviors as a coping device when individuals experience the stress of abuse or other forms of family disfunction. The conceptual framework for the ACE study (Felitti et al., 1998) is illustrated in Figure 3.

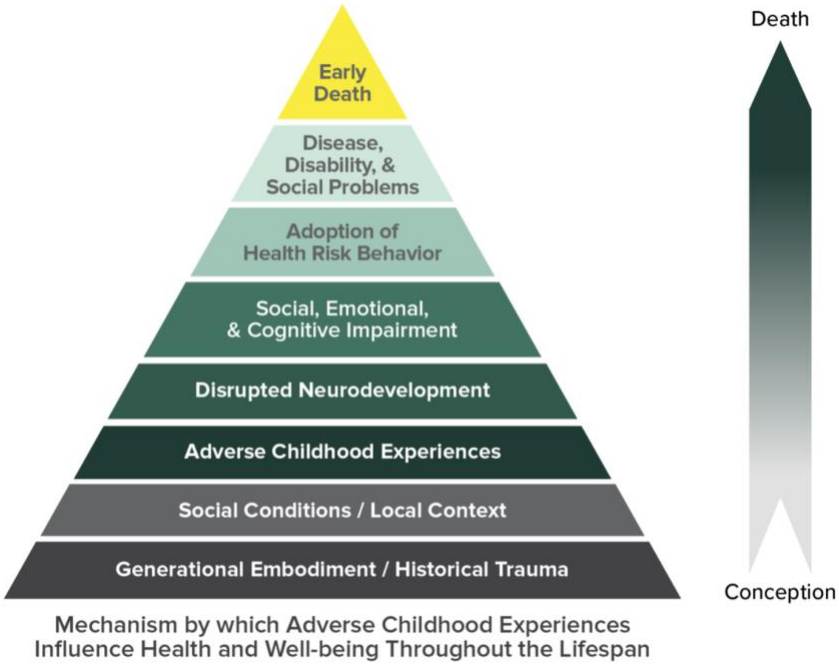


Figure 3: ACE Pyramid represents the conceptual framework for the ACE Study (National Center for Injury Prevention and Control, Division of Violence Prevention; Center for Disease Control, 2019).

Clearly, research over the last two decades supports the assertion of the American Academy of Pediatrics (Garner & Shonkoff, 2012) that ACEs are a significant public health issue (De Bellis & Zisk, 2014; Felitti et al., 1998; Shonkoff et al., 2012; Sciaraffa, Zeanah, & Zeanah, 2017). Felitti et al. (1998) suggested primary, secondary, and tertiary prevention strategies. These strategies included preventing the initial occurrence of ACEs, preventing the use of health risk behaviors as coping mechanisms to ACEs during childhood and adolescence, and helping change the health risk behaviors among adults whose current health problems may be the consequence of ACEs. The ACEs study (Felitti et al., 1998) was groundbreaking research in regard to understanding the impact of childhood trauma on adult health outcomes and led to a broad literature base regarding the effects of ACEs.

A limitation of the original study was that the sample was of predominantly white (75%), high school graduates (93%) with private health insurance (100%; Felitti, et al., 1998). Recognizing that minorities and low-income populations may experience ACEs at a higher rate than other populations, more recent research has focused on marginalized groups as well as the impact of ACEs *during* childhood. Additional variables, such as socioeconomic status, minority status, and access to health care further complicate ACEs and increase an individual's risk for negative adult health outcomes (Mersky, Topitzes, & Reynolds, 2013).

The subsequent research regarding adverse experiences during childhood revealed that children are affected by these experiences in social, emotional, and cognitive ways (Blodgett & Zorrah, 2012). The developing brain is naturally, continually assessing incoming stimuli, building new neural circuitry, and creating a framework for future reference. However, while stimuli and stressors are an important and routine aspect of heathy development, stressors that are prolonged, chronic, or too strong can be overwhelming to the brain and can result in toxic or traumatic stress (Shonkoff et al., 2012).

Researchers have classified stressors into three categories: positive, tolerable, and toxic. Positive stressors are those that are short-lived and moderate, usually resulting in increased growth and development within individuals. An example of positive stress is the challenge of learning or developing new skills. Tolerable stressors are those that are stronger than positive stressors and run the risk of long-term negative outcomes. An example of tolerable stress is a frightening car accident or hospitalization. Toxic stressors are those that are chronic or uncontrollable and result in a prolonged activation of

individuals' stress response system. An example of toxic stress is living in poverty with a caregiver who is experiencing depression or drug use, involved in an abusive relationship, and is emotionally abusive or neglectful as a caregiver. This toxic stress alters organization of children's brains and can result in increased physical, emotional, and behavioral issues (Sciaraffa et al., 2017).

Each year in the United States, almost 61% of children experience or witness some form of violence, often multiple times, and as many as 15% experience six or more incidences (Finkelhor, Turner, Shattuck, & Hamby, 2013). Approximately 45% of children in the United States have experienced at least one ACE, and that percentage is significantly higher in certain states. Significantly, the states with the highest child ACEs scores also had the highest poverty rates (Sacks & Murphey, 2018). Children who live in poverty are often exposed to abuse, loss, and violence (Wade, Shea, Rubin, & Wood 2014). One in ten children has experienced three or more ACEs, and children who live in poverty experience these traumatic events more often than their more socioeconomically privileged counterparts (Steele et al., 2016). The results of decades of research require us to consider socioeconomic status an additional risk factor for children experiencing ACEs. For this reason, this study will focus on teachers working in rural Title I elementary schools.

For context, the county within which the school system of focus resides reports 61% of children are eligible for free or reduced lunch (North Carolina state average of 57%), and 27% of children live in poverty (state average of 23%), of which 49% are Black and 36% are Hispanic (County Health Rankings and Roadmaps, 2019). Additionally, 22 to 48% of children in the school district in grades PK-5 (elementary

school grades) are non-white, and household income for the school district is 8.25% lower than the median for North Carolina (US Census Bureau, 2018).

While there is a wide, broad literature base regarding the impact of ACEs on development, both in adulthood and childhood, the varying instruments used to measure lifetime trauma create complications for comparison. The original ACEs questionnaire has been modified and translated numerous times for numerous populations and expanded as additional variables have become salient. For ease of comparison, this study will utilize the original ACEs questionnaire developed and validated by the original and subsequent studies (Anda et al., 2006; Dube et al., 2001; Felitti et al., 1998). While differing versions of the ACEs questionnaire have been utilized to retrospectively measure childhood trauma, there are meager studies exploring the impact of personal trauma histories on those providing care to others. The following literature explores the impact of personal ACEs on clinicians or teachers working with clients who may have experienced trauma.

Exploring practitioners' personal trauma histories using the ACEs questionnaire (Felitti et al., 1998) and the impact on their willingness to address their own and their clients' trauma histories, Strait and Bolman (2016) conducted a quantitative study with nine disciplines of student medical practitioners (n=967). Of the 967 students who took part in a trauma-informed curriculum created for this study, 267 submitted responses to a pre-curricular survey, and 422 submitted responses to the post-curricular survey. There was a total of 169 students who completed both the pre-and post-curricular survey. Results measuring pre- and post-curricular responses indicated that those more familiar with the lifelong, detrimental impact of trauma were more likely to address their own

trauma history and responded more favorably to questions regarding the likelihood of incorporating trauma-informed care into their practice. Researchers also explored the responses of those who had completed only the post-curricular survey and found that "merely assessing one's own ACEs score increases the understanding of and familiarity with ACEs and trauma-informed care" (para 22).

In a mixed-methods study, Lepore (2017) examined how early childhood teacher attachment and trauma histories may contribute to their stress in teacher-parent relationships, and how reflective supervision may impact this stress. There were 37 participants in the quantitative portion of the study and 20 participants in the qualitative portion of the study. Findings indicated that teachers who received reflective supervision for over two years (M = 4.09 years) had decreased frustration with parents over the course of the school year as opposed to teachers who received reflective supervision for only one year had increased frustration with parents over the school year. Additionally, results indicated that teachers experienced between zero and seven ACEs, with over half of the teachers reporting one or more ACEs (M = 1.81). Additionally, teachers reporting a higher number of ACEs also reported borderline or clinical levels of stress. The data suggested that those teachers with higher ACEs scores report more frustration with parents, mention their personal history more often, and relate these experiences with students and families more often than those with lower ACEs scores.

Adverse Childhood Experiences and Attitudes Related to Trauma-Informed Care

The long-term physiological and psychological impact of ACEs has been heavily researched. What has not been sufficiently researched are the attitudes related to trauma-informed care of those providing the care that qualifies as trauma-informed, teachers

among them. However, there is a small literature base regarding the impact of ACEs on ARTIC, and the findings are discussed below.

Through quantitative methods, Berkhout (2018) explored how the personal trauma histories of residential treatment direct care staff (n=21) affected their overall attitude toward and ability to deliver trauma-informed care. Results indicated that although direct care staff had higher levels of personal trauma than the general population, there was no significant relationship overall between their ACEs and attitudes aligned with trauma-informed care. However, in exploring specific childhood adversities, results indicated that those who experienced physical neglect, physical abuse, and racial or ethnic discrimination held less favorable attitudes toward trauma-informed care. Additionally, although the attitudes of staff were more favorable after receiving training in trauma-informed approaches, their responses to clients were not changed.

In a quantitative study, Jordan-Cox (2018) explored the relationship between trauma-informed professional development training, years of teaching experience, personal history of trauma, and attitudes related to trauma-informed care among clinicians working in substance use disorder agencies (n=134). The average clinician's ACEs score was 3.45 and 48.1% of participants reported an ACEs score of four or more, compared to the original ACEs study, where researches found only 12.5% of participants reported four or more ACEs (Felitti et al., 1998). Jordan-Cox found the most common ACEs experienced by substance-use clinicians were emotional abuse and household drug or alcohol use (50%). Additionally, Jordan-Cox (2018) found that although there was no significant relationship between clinicians' ACEs score and their attitudes toward trauma-informed care, those who have experienced four or more childhood traumas were likely

to have an equally positive outlook on their workplace as those who have experienced fewer or no ACEs.

Wendel (2018) assessed attitudes related to trauma-informed care among teachers in three urban high schools. Although the ACEs questionnaire was not utilized as a measure, qualitative data revealed that teachers recognized that their own personal trauma histories impact the way they view their students. Among the teachers with more favorable attitudes toward trauma-informed care, they cited their own personal well-being as impactful to their relationship with students. Additionally, they cited self-disclosure as a strategy if they felt that the student may benefit from hearing that the teacher had also experienced adversity. Among those teachers with less favorable attitudes toward trauma-informed care, they cited student well-being as more impactful to the relationship than their own.

In another mixed-methods study, Waggoner (2018) assessed K-12 general and special education teachers' attitudes toward trauma-informed care. Although the ACEs questionnaire was not utilized, teachers responded with a dichotomous "yes " or "no" to the question, "Do you have a personal history of trauma?" (p. 68) and were given the following definition of trauma, "Trauma is

> 'an event, series of events, or set of circumstances, that is experienced by an individual as physically or emotionally harmful or life threatening and that has lasting adverse effects on the individual's functioning and mental, physical, social, emotional, or spiritual well- being' (SAMHSA, 2014, p.7)" (p. 68).

Results indicated that the most influential factor of teachers feeling capable of meeting "the demands of working with students impacted by trauma was having a personal

history of trauma" (p. iii). Findings indicated that in conjunction with trauma-informed training, having a personal history of trauma created more trauma-informed perspectives among participants, including a focus on empathy rather than on control.

The contradictory findings of these studies suggest that personal trauma histories should be further explored to assess the impact of ACEs on teachers' attitudes related to trauma-informed care. Moreover, there are no studies that explore the impact of personal trauma-histories on the attitudes related to trauma-informed care among elementary school teachers working in rural Title I elementary schools.

Professional Development

While the causes of childhood trauma are outside the school systems' control, they are not outside the school systems' scope of influence. As Pianta and Walsh (1996) posit through the Conceptual Systems Model (CSM), the "system" within which the child is embedded has influence among and between the larger macro system of the child (environments such as school and home). With the collective recognition of the widespread prevalence and impact of childhood trauma, it is imperative that teachers receive training regarding ways in which to respond to students who may have experienced trauma. Creating successful trauma-sensitive schools requires consensus within the school and school system of the importance of supporting students who may have experienced trauma (Chafouleas, Johnson, Overstreet, Santos, 2016). This consensus can be achieved by "establishing content knowledge about core features of trauma and trauma-informed care" (p. 146) through professional development training to ensure that school personnel recognize the impact of trauma and the need to address it, as well as develop skills that can create a responsive environment.

Professional development (PD) training is not only a requirement for teachers, it is an "important aspect of effective educator practice" (North Carolina Department of Public Instruction [NCDPI], 2019, para 2). Trauma-sensitive PD among clinicians has been shown to build knowledge and promote attitudes and practices that are favorable to trauma-informed approaches (Brown, Baker, & Wilcox, 2011). While there is a growing body of literature regarding the impact of trauma-informed PD, there remains no agreed-upon framework for conducting or assessing the PD, making comparison more difficult (Chafouleas et al., 2016; Thomas et al., 2019). McGruder (2019) stated that there is a dire need for research into trauma-informed approaches in school settings, including the impact on teachers and students. Additionally, McGruder emphasized the importance of educating teachers and school staff on how meeting the needs of students can impact their own well-being, such as compassion fatigue, burnout, and secondary traumatic stress.

Educators for Excellence, a teacher-led organization aimed at giving voice to teachers regarding policies that impact their students and careers, conducted a national survey of America's educators (n=1,367) on a wide variety of educational issues. This groundbreaking survey, Voices from the Classroom (Educators for Excellence, 2018), found that teachers endorsed alternatives to punitive discipline (40%), social-emotional learning (36%), and trauma-informed teaching (19%) as one of their top three priorities for professional development training. Given the widespread occurrence of childhood trauma, it is imperative that we educate our educators on the impact of trauma and ways in which to address the needs of their students, as well as their own well-being.

Research indicates that when teachers and classroom staff perceptions are explored, 89% of teachers agree that schools should be "involved in addressing the

mental health needs of children" (p. 9), yet only 28% reported having the knowledge and 34% reported having the skills to do so (Reinke et al., 2011). Research has also indicated that there is limited PD for teachers regarding trauma-informed care. Without the awareness of childhood trauma, educators are not as likely to be aware that children's disruptive behaviors are often the result of a trauma history. Wright (2014) stated that failing to respond in empathic ways to students with a history of trauma can be confusing and shaming to children, possibly reinforcing to the students that even the schools are not an emotionally protective place. Wright (2014) stated that "through reframing our perceptions of traumatized children, it is possible to recognize them as individuals who are *fighting to live*, as opposed to *failing to thrive.*" (p. 91; emphasis added).

Alisic (2011) found that teachers are not only uncertain about how to assist children impacted by trauma and toxic stress but are also uncertain regarding their role in assisting these children. While teachers are not expected to become therapists (Alisic, Bus, Dulack, Pennings, & Splinter, 2012; Pobuk, 2019; van der Kolk, 2003), there is a need to educate them in how trauma impacts children and to provide them with the knowledge and skills to assist their students.

Alisic et al. (2012) explored Dutch elementary school teachers' (n=765) experiences in supporting children who had experienced trauma. Authors found that teachers did not feel competent in addressing the needs of children impacted by trauma; 63% did not know when children needed mental health care, and 51% did not they feel they knew where to find information regarding toxic stress. Moreover, Alisic et al. (2012) found that only 9% of teachers had any form of trauma training, a further barrier to addressing the needs of children impacted by trauma. While this research was conducted

among teachers in the Netherlands, it speaks to the general lack of training provided to elementary school teachers.

In a mixed-methods study, Pobuk (2019) explored the role of PD training in preparing elementary school teachers to recognize, respond to, and support children who have experienced trauma. Eighteen teachers responded to the quantitative surveys and 133 pieces of data were used for qualitative data. Quantitative results indicated that the PD training raised teacher awareness of the impact of childhood trauma on learning and development and positively influenced their instructional strategies; however, following training, 16% reported that they needed additional PD training, and 38% reported they understood the trauma-informed strategies, but needed additional coaching and direction.

In a quantitative study, Haas (2018) examined the impact of trauma-informed PD on public school staff's beliefs, school practices, and classroom practices. In two groups, 33 staff and teachers (10 general education teachers and seven special education teachers PK-8th grade, four teacher aides, four consultants, three social workers, two counselors, and one administrator) volunteered or were chosen by district leadership to participate. Although the results did not reveal significant change in participants' perceptions of school-wide or classroom practices, their positive change in beliefs toward trauma-informed practices indicate a readiness to address childhood trauma within the classrooms.

Working from a system-change perspective and utilizing participatory action research, Blitz and Mulcahy (2017) examined teachers' stress levels, their perceptions of student behaviors, and their perceived self-efficacy in responding to these behaviors following PD regarding the neurophysiological and behavioral impact of childhood

trauma. Teachers in this study worked in an economically disadvantaged high school and 99% had been teaching for more than three years. Results indicated that the overall stress level for teachers trended toward "high," and that although they perceived their students as engaged in learning, student disruptive behaviors were significant. In addition to the quantitative results, researchers asked teachers and other school personnel (counselors, support staff, and administration) to form focus groups (n=37) following the PD to develop a deeper understanding of key issues in the school. Researchers found that teachers felt compassion and concern for their students yet felt their current resources and classroom management strategies were insufficient to respond to the range of students' needs. Additionally, teachers felt more successful addressing students' internalizing behaviors than externalizing behaviors. In general, teachers reported confidence in managing their students behavioral and socio-emotional needs, yet their stress levels may reveal that this comes at a significant cost to the teachers. Results also indicated that school personal valued a trauma-informed approach that is inclusive of culturally different groups.

Anderson et al. (2015) explored the impact of a school-university collaborative PD intervention among elementary school classroom staff. The school within which the PD occurred was described as having high levels of poverty, poor living conditions, and family stressors, all of which they felt contributed to the students' academic and behavioral difficulties. The trauma-informed PD was created by the authors after a needs assessment of the classroom staff. Results revealed that 94% of participants agreed that students' disruptive behaviors could be linked to toxic stress and 69% agreed or strongly agreed that an adult's stern tone could trigger a high stress response in certain students,

potentially escalating, rather than deescalating the situation. The majority of participants (80%) also agreed that the trauma-informed information provided in the workshops would be useful to them in their classrooms, and 71% planned to share the information with others.

Focus groups revealed six themes, three concerning learning and school climate, and three concerning the professional needs of the classroom staff. The themes regarding the needs of the classrooms staff included: (1) classroom staff do not receive adequate training or support to effectively work with student who have experienced trauma or toxic stress, (2) classroom staff do not feel empowered within the school, and (3) classroom staff valued PD regarding the impact of trauma and classroom-based trauma-informed approaches. The results of the study indicated that classroom staff developed a new and better understanding of children's behaviors as well as their own. Additionally, the classroom staff was "eager for professional development" (p. 129), regarding both the impact of increased stress on their students as well as on themselves (Anderson et al., 2015).

Professional Development and Attitudes Related to Trauma-Informed Care

Gubi et al. (2019) conducted a pilot study of 82 school psychology trainers, trainees, and practitioners to examine the experiences, education and training, confidence and competence, desired roles, and barriers to trauma-informed practices in schools. Result indicated that 75% of respondents rated their overall education and training in trauma and trauma-informed care as none (17.1%) to minimal (58.5%). Additionally, 80.5% of respondents indicated their education in trauma-related service delivery was none (31.7%) to minimal (48.8%). Moreover, 79.3% of respondents rated their

confidence in working with children who have experienced trauma as none (22%) to minimal (57.3%), and 61% rated their confidence in their knowledge of the impact of trauma on development, learning, and behavior as none (12.2%) to minimal (48.8%).

The ARTIC (Baker, 2016) was used as a means to measure perceived barriers to providing trauma-informed care in the school setting. The personal support subscale average was 3.5 (range 1.0 to 6.4), and the system-wide support scale average was 3.28 (1.0 to 6.0), indicating a neutral attitude toward trauma-informed care. In addition to the ARTIC scale, participants had the opportunity to answer an open-ended question, "What would you need to provide trauma-informed care in your setting?" (p. 191), with the most common term (cited 53 times) being "training" (Gubi et al., 2019).

In mixed-methods study, Waggoner (2018) evaluated the attitudes related to trauma-informed care among general and special education teachers in an urban school district. Fifty-two teachers participated in the quantitative phase of the study, and 11 teachers participated in the qualitative phase of the study. Compared to teachers who had not participated in a trauma-informed PD training, teachers who had participated reported a significantly greater understanding of the impact of ACEs on student behavior and were able to better recognize the signs of trauma and respond to students in a trauma-informed manner. In addition to reporting a personal history of trauma, teachers who had participated in the trauma-informed PD training had a more favorable attitude toward trauma-informed care than those who did not report a trauma history or participate in the PD training.

In a mixed-methods study, Wendel (2018) explored attitudes related to trauma-informed care among teachers in three urban high schools. The purpose of this mixed-

methods study was (1) to explore to what extent age, gender, years of teaching experience, and perceived professional self-efficacy predicted attitudes related to trauma-informed care, (2) to explore if attitudes related to trauma-informed care differed across the three high schools in different phases of a trauma-informed PD intervention, and (3) to explore if attitudes related to trauma-informed care differed across different program tiers in the trauma-informed PD multi-tiered intervention.

While none of the covariates revealed statistically significant results in the quantitative phase of the study (n=233), qualitative results (n=11) exposed a more complete understanding of the beliefs, attitudes, and behaviors that teachers perceive as trauma-informed. Six of the participants from the quantitative phase of the study who had the most favorable attitudes toward trauma-informed care, and five of the participants from the quantitative phase that had the least favorable attitudes were recruited for the qualitative phase of the study.

Teachers with more favorable attitudes related to trauma-informed care were able to depersonalize students' challenging behaviors and attribute them to contextual factors that were outside the control of the students (developmental, psychological, socio-emotional) than teachers with less favorable attitudes toward trauma-informed care. Additionally, Wendel (2018) found that teachers with more favorable attitudes toward trauma-informed care cited the use of strengths-based approaches to address students' challenging behaviors compared to the teachers with less favorable attitudes toward trauma-informed care. These finding support the idea that increasing teachers' understanding of the factors that influence children's disruptive behaviors (contextual factors) could increase attitudes favorable toward trauma-informed care.

Goodwin-Glick (2017) examined the impact of trauma-informed PD training on school personnel's knowledge, dispositions, and behaviors toward traumatized students among K-12 school employees (n=552). While the author was unable to utilize the ARTIC scale as it was not developed at the time of the study undertaking, they do mention that they would recommend using the ARTIC scale for future studies. To assess school personnel's dispositions, the author developed a survey, Trauma-Informed Care Dispositions Survey, based on existing instruments with seven subscales measuring the following: knowledge, empathetic concern, perspective-taking, interpersonal relationships, sense of respect and trust, student-centeredness, and behavior. Both classified (bus drivers, secretaries, classroom aides, lunch and recess monitors, custodians, and food-service employees) and certified school personnel (administrators, teachers, counselors, psychologists, and speech therapists) attended PD trainings. The results indicated that the PD training had significant impact on the dispositions and empathetic responsiveness of all elementary school personnel.

Post, Grybush, Flowers, and Elmadani (2020) compared two grouping conditions (time [pre and post] and school [experimental and control]) on the impact of a sixteen-week child-centered, trauma-informed intervention on teachers' professional quality of life (compassion satisfaction, burnout, and secondary traumatic stress), beliefs about social justice, perceptions about children that are aligned with child-centered values (attitudes, knowledge, and skills), ARTIC, and ability to demonstrate child-centered relationship skills in the classroom among teachers in a Title I rural elementary school. Results indicated that attitudes more favorable to trauma-informed care decreased in both the control and experimental groups; however, the decrease in the control group school

was significantly greater than the decrease in the intervention school. These results suggested that the intervention was necessary to reduce the decline in attitudes more favorable towards trauma-informed care among the experimental group, supporting the need for trauma-informed care professional development training.

The findings of these studies suggested that to better understand the ways in which to train teachers in trauma-informed approaches, PD training should be further explored with regard to teachers' attitudes related to trauma-informed care. Teachers and classroom staff overwhelmingly reported the need for trauma-informed training. Moreover, there are no studies that explore the impact of personal trauma histories and PD trainings on the attitudes related to trauma-informed care among teachers working in rural Title I elementary schools.

Professional Quality of Life

Professional quality of life can be understood as the quality one feels in regard to their work as a helper. According to the American Psychological Association (APA; 2018), helping professions are defined as "occupations that provide health and education services to individuals and groups." Traditionally, helping professions included health care professionals, social service workers, counselors, police officers, attorneys, clergy, and firefighters. However, more recent research has considered that other professions, such as teachers and school personnel, are also "helpers," and are impacted by attending to individuals who have experienced trauma (Borntrager et al., 2012).

As previously mentioned in the beginning of this chapter, the trauma-informed approach is one that attends to the needs of everyone within the system. This also includes the caregivers, in this case, the teachers. Therefore, the identification of and

attention to the stress response of the teachers falls within the model of the trauma-informed approach. Just as the teachers become trained in the identification of the stress response of the children, they also must be made aware of their own stress responses and how meeting the needs of others impacts their own well-being (McGruder, 2019). Witnessing and attending to the trauma response of others can itself be stressful (Figley, 1995), prompting the need to explore the impact on teachers' well-being.

The most recent model for conceptualizing compassion satisfaction (CS) and compassion fatigue (CF) is the Professional Quality of Life Model (ProQOL; Stamm, 2010). Stamm contends that the concept of professional quality of life is complex; it is associated with work environment, individual characteristics, and exposure to primary or secondary traumatic experiences in the work setting. The model describes factors that contribute to the development of CS or CF, including the work environment (i.e., supportive or non-supportive), the people being helped (i.e., chronic crisis), and personal characteristics of the helpers (i.e., age, trauma history, education). While CS and CF are competing aspects of individuals' professional quality of life, Stamm (2010) posited that they can be experienced simultaneously. Recognizing that there are possible negative and positive consequences of working with individuals who have experienced trauma, examining the range of experiences of the helpers, both satisfaction and fatigue, can provide a better understanding of how to support helpers in order to maintain their well-being.

Compassion Satisfaction

Compassion satisfaction is conceptualized as the positive aspects of helping others (Stamm, 2010) and is a protective mechanism to the emotional exhaustion of

caring for others (Collins & Long, 2003). Developers of the ProQOL-5 measure define CS as the "the pleasure you derive from being able to do your work well" (Stamm, 2010, p. 17). Examples of CS include feeling positively about your ability to contribute to society and feeling engaged in the work being done.

Compassion Fatigue

It has been long-since recognized that helping professionals are potentially traumatized as a result of working with those with a trauma history (Berger, Abu-Raiya, & Benatov, 2016; Figley; 1982; Knight, 2010; Pearlman, 1995; Radney & Figley, 2007; Stamm, 2010). Early research conceptualized CF as "identical to secondary traumatic stress disorder" (STSD) and "equivalent" to post-traumatic stress disorder (PTSD; Figley, 1995, p. xv). While much of the early research regarding the "cost of caring" (Figley, 1982) focused on traditional helping professions, Kees and Lashwood (1996) were some of the first to recognize that teachers are also impacted by their work with traumatized individuals. However, empirical research regarding CF experienced by school personnel was not conducted until 2012 (Borntrager et al., 2012).

Since Figley's original concept of CF in 1982, researchers have examined the negative symptoms associated with helping the traumatized among many helping professions. As theories of CF evolved, additional concepts emerged from this body of research: secondary traumatic stress (STS; Stamm, 1995) and vicarious trauma (VT; Pearlman, 1995). While a full explanation of the proposed differences among these concepts is outside the scope of this study, it is important to note that while researchers recognize that a nuanced difference among these terms may exist, no specific delineation has been recorded (Stamm, 2010). However, much of the research uses the terms CF,

STS, and VT interchangeably (Schepers, 2017), making comparison difficult. Figley (1995), and subsequently, Figley and Stamm (1996), described CF as the "natural consequent behaviors and emotions resulting from knowing about a traumatizing event experienced by a significant other –the stress resulting from helping, or wanting to help, a traumatized or suffering person" (p.7). Compassion fatigue can be broken down into two aspects, burnout (BO) and secondary traumatic stress (STS).

Burnout. The first aspect of CF is BO, which is associated with feelings of hopelessness or helplessness, and difficulty doing the job proficiently. Feelings associated with BO include exhaustion, frustration, anger, and depression, and usually have a slow or gradual onset. These feelings are often accompanied by the feeling that individuals' efforts make no difference and can be compounded by a high workload or a perceived non-supportive workplace (Stamm, 2010).

Secondary Traumatic Stress. The second aspect of CF is STS, which is characterized by "being preoccupied with thoughts of people one has helped" (Stamm, 2010, p. 21). Feelings associated with STS are fear, exhaustion, and being overwhelmed. These feelings are often accompanied by sleep disturbances, intrusive images, and avoidance of things that may trigger memories of the trauma. Secondary traumatic stress is usually rapid in onset and associated with a particular event (Stamm, 2010).

It is important to note that certain professions, such as mental health professionals, are usually trained to manage both primary and secondary traumatic stress and are usually working within an organization that is aware of these consequences. School personnel, including teachers, are likely not trained to recognize the symptoms,

much less manage, primary or secondary trauma (Bontrager et al., 2012; Berger, Abu-Raiya, & Benatov, 2016).

Professional Quality of Life and Teachers

Borntrager et al. (2012) conducted the first quantitative examination of STS among public school personnel utilizing the ProQOL-IV (Stamm, 2005). While researchers made no specific hypothesis regarding the frequency or range of STS symptoms, they cited previous literature among mental health and social workers that suggested that personal trauma history and low peer support (among other variables) would predict higher levels of STS among the school personnel. Results indicated that of the 300 participants, 76.4% reported a personal history of trauma. Authors found no significant correlation between personal trauma history and STS, which aligned with subsequent research findings among those who assist individuals with intellectual and developmental disabilities (Keesler, 2016) and is contrary to findings among clinicians and child-welfare workers (Caringi & Hardiman, 2011; Chaverri, Praetorius, & Ruiz, 2018; Robinson, 2006).

However, participants reported a high level of emotional connectedness with their peers, which authors state may increase resilience and mediate the impact of personal trauma history. Participants reported only a slightly above average score on the BO subscale, yet an above average on STS scale, suggesting a high degree of STS in this sample. The levels of STS found in this population were equivalent to levels commonly found in mental health clinicians (Borntrager et al., 2012). Furthermore, participants reported higher scores on the CS subscale than the norm, suggesting that the sample found satisfaction in their jobs by feeling that they were helping their students.

Lepore (2017), in a mixed-methods dissertation, examined how teachers' early childhood attachment and trauma histories may contribute to their stress in teacher-parent relationships and how reflective supervision may impact this stress. There were 37 participants in the quantitative portion of the dissertation and 20 participants in the qualitative portion. In addition to the quantitative results mentioned earlier in this chapter indicating that teachers reporting a higher number of ACEs also reported borderline or clinical levels of stress, this study found that the teachers reported high CS and low to average BO and STS.

The qualitative results indicated that teachers found satisfaction in the relationships they had with families, the background information about the children that offered context regarding children's family system, and the sense of usefulness they felt when supporting families experiencing challenges. With regard to BO and STS, qualitative results indicated that although teachers reported low to average levels of both BO and STS, they still experienced and named challenges encountered when working with parents. Teachers reported possible sources of BO that included challenges in communication, challenges in working with parents facing adversity, and feeling devalued or resentful. Possible sources of STS included the emotional consequences of working with families facing adversity, personalization of the relationships, and their outlook toward families facing adversity. The author noted that teachers with no formal training regarding the pervasiveness or impact of traumatic stress on children and families are likely to be at a higher risk for developing STS (Lepore, 2017).

In a quantitative dissertation study of 184 public school educators in Nova Scotia and West Virginia, Robinson (2006) explored both direct and indirect traumatic

experiences in relation to CS, CF, and BO utilizing a previous version of the ProQOL (CSF-R III). Results indicated that 26% of participants scored in the upper quartile for risk of burnout, and 33% scored in the upper quartile for risk of compassion fatigue. Correlations revealed that BO and CF were significantly related to current traumatization status reported from a history of both direct and indirect traumatic experiences.

In a mixed-methods dissertation study in New England, Santa (2016) examined the professional quality of life of educators including STS and BO, yet excluding CS, in an underperforming urban school district. Utilizing the ProQOL and open-ended questions, the researcher explored the experiences that educators felt contributed as well as mitigated the occurrence of BO and STS. Of the 58 participants, 38% scored below the mean, 60% scored at the mean, and 2% scored above the mean for risk of STS. Additionally, 2% scored below the mean, 86% scored at the mean, and 12% scored above the mean for risk of BO. Qualitative results indicated that educators perceived students' trauma history, violence, and physical or verbal assault as producing STS. Themes that emerged regarding educators' perceptions of supportive measures that help mitigate STS were support of family and friends, physical exercise, accessing a therapist, clergy, or doctor, and support of peers at work. The researcher posits that educational leaders should allocate time and professional development to assist teachers in creating positive supports for the mitigation of STS and BO.

Berger, Abu-Raiya, and Benatov (2016), evaluated the impact of a school-based professional development training provided to elementary school teachers working in New Zealand following the Christchurch earthquake in 2011, the second-deadliest natural disaster recorded in New Zealand. Most participants were exposed to the earthquake and

most reported their personal lives had been directly affected by the natural disaster. Two different professional development curricula were provided to two teacher groups, one serving as the intervention group (Extending and Enhancing Resiliency Amongst Students Experiencing Stress [ERASE-Stress]), and one serving as the control group (Managing Emergencies and Traumatic Incidents [METI]). Unlike traditional ERASE-Stress trainings with a primary focus on "train(ing) the trainer" (Berger et al., 2016, p. 238), researchers devoted a significant portion of the training to the teachers' experiences, encouraging the teachers to process their own experiences and practice coping skills before delivering the training to their students. Utilizing the ProQOL (Stamm, 2010) and other instruments, researchers assessed teachers' posttraumatic stress, secondary traumatic stress, and professional self-efficacy, as well as resilience and coping aspects at three times: pre- and post-intervention, as well as at an 8-month follow-up. Results indicated that compared to the control group, the intervention group reported reduced posttraumatic stress and secondary traumatic stress, improved perceived level of self-efficacy, and "honed some of their positive coping strategies and reduced utilization of some maladaptive coping methods" (Berger, Abu-Raiya, & Benatov, 2016, p. 236). Participants also reported a significant improvement in their professional quality of life, changes that were maintained over the 8-month period.

Sharp Donahoo et al. (2018) examined the impact of prayer and mindfulness on CF and stress in special education teachers and professional staff employed in a rural school district. Researchers utilized the ProQOL-5 and the Perceived Stress Scale (PSS) as pre-test for baseline measures and post-test after attending one 3-hour presentation focused on stress, CS, mindfulness, prayer, and social support. Results indicated

significant improvement on the PSS among the group with the highest post-test reported levels of mindfulness. In a comparison of the groups with the highest levels and lowest levels of reported use of mindfulness and prayer, there was significant improvement pre- to post-test. Surprisingly, BO increased from pre-test to post-test, however researchers hypothesize that confounding variables explain the anomaly.

Professional Quality of Life and Attitudes Related to Trauma-Informed Care

An exhaustive search of the literature revealed only one published manuscript and one unpublished master's thesis exploring ProQOL (Stamm, 2010) and ARTIC (Baker et al., 2015). One other article in progress examines the impact of the ProQOL and ARTIC (Grybush & Post, in progress). However, this search also revealed one poster session utilizing these measures (Goldenthal et al., 2017) and websites that recommend using these measures when implementing trauma-informed practices within organizations or assessing the impact on teachers (National Council for Behavioral Health [NCBH], 2019; Richardson & Rosenberg, 2018; SAMHSA, 2014).

Baker et al. (2018), in a mixed-methods study, explored the impact of professional development training on Canadian residential youth services staff attitudes favorable to trauma-informed care (utilizing the Trauma-Informed Care Belief Measure [Brown, et al., 2012]) and vicarious traumatization (utilizing the ProQOL). Measures were completed pre- and post-test, as well as at a 5.5 month follow-up. Quantitative results indicated that the professional development training improved attitudes favorable to trauma-informed care, yet staff reported increased vicarious trauma following training. Qualitative results indicated that the participants' increased report of vicarious trauma may have been a result of their increased awareness of the symptoms due to the training.

In her master's thesis, Petrovic (2018) examined the prevalence of STS and BO among K-12th grade charter schoolteachers (n=181) utilizing archival data from the 2015-2016 school year. Additionally, the researcher examined the possible moderating effect of BO, STS, and years in role on trauma-informed care self-efficacy through regression analysis. Notably, Petrovic used only the 7-item trauma-informed self-efficacy subscale of the ARTIC-35 as well as two subscales from the ProQOL-5; 10 items measuring STS and 10 items measuring BO. Results indicated that the majority of teachers within the sample did not experience elevated symptoms of STS or BO. Additionally, results revealed that although teachers' trauma-informed self-efficacy decreased over time, neither BO, STS, nor years in role moderated the change.

Using a regression analysis, Grybush and Post (in progress) examined rural, Title I elementary teachers and other school staffs' professional quality of life (compassion satisfaction [CS], burnout [BO], and secondary traumatic stress [STS]), belief in a just world (BJW), and teacher attitudes, knowledge, and skills (TAKSS) aligned with child-centered values in relation to attitudes about trauma-informed care (ARTIC). Results indicated that CS and the attitudes and knowledges scales of the TAKSS were positively correlated with ARTIC at the .01 level. Additionally, BO was negatively correlated with ARTIC and significant at the .05 level. The implication of these results is that those with attitudes more aligned with child-centered values, as well as higher compassion satisfaction, have a more favorable attitude toward trauma-informed care and are less likely to experience burnout.

Summary

Much of the existing literature examining CS and CF in school personnel is focused on teacher retention and student outcomes (Borntrager et al., 2012). There are no published articles examining rural Title I elementary school teachers' professional quality of life with regard to their attitudes related to trauma-informed care. The dearth of research examining attitudes related to trauma-informed care with regard to teachers' professional quality of life is evidence that this is an under-researched area - one that we cannot afford to ignore. Teachers are in an optimal position to relate to children in ways that can mitigate the impact of ACEs and trauma; however, without adequate knowledge of teachers' CS, BO, and STS with regard to their attitudes related to trauma-informed care we are at a decided disadvantage in implementing and supporting teachers in trauma-informed approaches.

Summary

Teachers' personal trauma history, professional development training, and professional quality of life can potentially impact or influence their attitudes related to trauma-informed care. Individuals, including teachers, who have experienced their own childhood traumas are shaped by these events (Carvalho, et al., 2018; Mersky, Topitzes, & Reynolds, 2013; Sciaraffa, Zeanah, & Zeanah, 2017). Teachers who work in schools characterized by high poverty are exposed to the high prevalence of trauma in their students' lives, possibly triggering their own personal traumas. Participation in trauma-informed professional development as a teacher may alleviate or exacerbate teachers' level of stress and also impact attitudes regarding trauma-informed care. Teachers' attitudes regarding trauma-informed care can also be impacted by their professional quality of life (CS, BO, and STS) and may be impacted by their own trauma history. As

no other research has explored the relationship among these variables, this study adds to the literature regarding factors related to attitudes about trauma-informed care that may impact the implementation of such programs within rural Title I schools.

CHAPTER III: METHODOLOGY

Introduction

The purpose of this study was to examine how teachers' (a) personal trauma histories, (b) professional development, and (c) professional quality of life are related to attitudes related to trauma-informed care among teachers working rural Title I elementary schools. In this chapter, the methodology for the study is described and is divided into six sections. The first section provides a description of the participants and setting, the second section provides a description of data collection procedures, the third section provides detail on the instrumentation, the fourth section describes the research design and the research question, the fifth section will provide an overview of the data analysis procedure, and the final section summarizes the chapter.

Description of Participants

Participants in this study included a purposive homogenous population sample of teacher-licensed educators working at 19 Title I elementary schools in a rural county in the southeast United States. Six of the schools had participated in school-level trauma-informed professional development training and 12 had not. Inclusion criteria was that the participant is a teacher-licensed educator who has worked with 5 or more students at a time at any of the nineteen selected schools. Exclusion criteria was anyone who is not a teacher-licensed educator and has not worked with 5 or more students at a time at any of the nineteen selected schools. The power analysis conducted indicated that a minimum sample size of 144 participants was needed to produce medium effect size for the data analysis used.

Description of the Setting

"Title I, Part A (Title I) of the Elementary and Secondary Education Act provides financial assistance to local educational agencies and schools with high numbers or high percentages of children from low-income families to help ensure that all children meet challenging state academic standards" (U.S. Department of Education, 2018, p. 1). The setting of high poverty schools is defined as Title I elementary schools where 95-100% of the students qualify for free or reduced lunch in a rural county in the Southeastern United States. "Title I, Part A (Title I) of the Elementary and Secondary Education Act, as amended by the Every Student Succeeds Act (ESSA), provides financial assistance to local schools with high numbers or high percentages of children from low-income families." (United States Department of Education, 2018, para.1).

The schools in this school system are considered "rural," are classified as "fringe" (Office of Management and Budget, 2000), and are defined as being located in territory that is less than or equal to 5 miles from an urbanized area, as well as rural territory that is less than or equal to 2.5 miles from an urban cluster (National Center for Educational Statistics, 2006). All schools included in this study meet the above criteria. There were nine schools in the school district that had previously been identified by the North Carolina Resilience and Learning Project as high-poverty elementary schools where trauma is prevalent in the student population (n.d.). However, only six of the nine schools identified actually participated in the voluntary Resilience and Learning Project and had received training in either the current school year, the past school year, or both (Lockhart, personal communication, May 4, 2020). The remaining 12 schools were not participating in the N.C. Resilience and Learning Project professional development training.

Data Collection Procedures

Permission was sought and approved by the Institutional Review Board (IRB) of the University of North Carolina at Charlotte. Participation in this study was voluntary and participants in the study were assured that their responses would remain anonymous and confidential. The researcher provided resources for those that may have felt discomfort or distress due to the sensitive nature of the ACEs questionnaire (See Appendix A). This study was conducted during the spring semester of 2020, during which time the global society experienced the COVID-19 pandemic. As schools shut down to maintain social distancing guidelines set forth by the state government, data collection methods had to be modified. Prior to schools closing and in-person at the school where they work, all teacher-licensed educators at one school who worked with 5 or more students at a time were read and given informed consent information which fully explains the risks and benefits of participating in the study (See Appendices B and C).

For the remaining 18 schools, IRB permission was sought and approved for the modification to the data collection procedures. A Qualtrics survey link was prepared by the researcher, sent to the Director of Student Services within the school system, and was forwarded to the Executive Director of Elementary Education of the school system. Upon approval, the Executive Director forwarded the survey link to all principals within the school district with the exception of the school where data collection was done in-person. The principals then forwarded the survey link to their teachers. All other procedures were the same for data collection whether in-person or via the online survey link.

Teachers were asked to complete assessments regarding their demographic information, personal adverse childhood experiences, professional quality of life,

and attitudes related to trauma-informed care. Demographic information also included teachers' school for the purposes of determining participation in the NCRLP professional development training. There was no personal identifying data collected. The researcher input survey responses into a Microsoft Excel spreadsheet for participants at one school and imported the responses from Qualtrics for the remaining participants. All hard copies of surveys were stored in a double-locked file cabinet. All digital data was stored in the digital selective sync Dropbox drive of the primary researcher, in compliance with university Level 2 data storage guidelines.

Instrumentation

Demographic Questionnaire

A self-report demographic instrument was utilized to include participants' race, whether the participant is a teacher-licensed educator who has worked with 5 or more students at a time, number of years teaching, grade(s) they teach this year, gender, school, and age. Due to an omission on the online demographic survey, teachers who completed the survey online were not asked number of years teaching, and therefore the data regarding that demographic was incomplete and not included in this study. Teachers' participation in the professional development was determined by the self-reported school of employment (see Appendix D).

Attitudes Related to Trauma-Informed Care (ARTIC)

The Attitudes Related to Trauma-Informed Care (ARTIC) scale (Baker, Brown, Wilcox, Overstreet, & Arora, 2016) has two setting-specific categories: one for human services settings and one for educational institutions (Traumatic Stress Institute, 2015). The ARTIC-10 is a 10-item abbreviated scale reflecting the five subscales representing

attitudes favorable to trauma-informed care in one summary score. The ARTIC-10 takes 2–3 min to complete. The items were written to represent a trauma-informed attitude and were then paired with a less-favorable attitude on a seven-point Likert scale indicating opposites. For example, for one question, a favorable attitude is "Being very upset is normal for many of the students I serve", whereas the opposite, unfavorable attitude is, "It reflects badly on me if my students are very upset". This allows for a response on a bipolar spectrum and is designed to reduce socially desirable responses. After reverse scoring the indicated items, composite scores are calculated for means. Higher scores are more favorable across all items. For the purposes of this study, attitudes related to trauma-informed care was measured by the participants' total score on the ARTIC-10.

Alpha scale reliability for ARTIC-10 using Cronbach's alpha was high ($\alpha = .82$). Scores on the ARTIC-10 demonstrated strong internal consistency and test– retest reliability over 6 months. The ARTIC-10 also demonstrated good temporal consistency, with correlations of .82 at ≤120 days, .73 at 121–150 days, and .65 at 151–180 days. Validity was analyzed using Pearson's product moment correlations. ARTIC-10 composite scores were strongly related to personal familiarity with TIC ($r = .30–.38$) and most staff-level indicators of TIC implementation ($r = .30–.58$) (Baker et al., 2016). Due to the relative newness of this scale, norming groups are still being established (See Appendix E).

Adverse Childhood Experiences (ACEs) Questionnaire

The seminal work on Adverse Childhood Experiences (ACEs; Felitti et al., 1998) produced a 10-item, self-report questionnaire retrospectively taking inventory of potentially traumatic events in an individual's life before the age of eighteen that include:

1) physical abuse, 2) physical neglect, 3) emotional abuse, 4) emotional neglect, 5) sexual abuse, and household dysfunction such as, 6) divorce, 7) living with an adult experiencing mental illness, 8) living with an adult experiencing substance abuse, 9) witnessing violence within the home, and 10) incarceration of a family member. The ACEs questionnaire takes 2-3 minutes to complete. Participants' ACE score is the cumulative number of "yes" responses regarding each of the 10 experiences. For the purposes of this study, participants were asked to count the number of ACEs categories they experienced and record it on a separate form. In this way, individuals' identification of which individual ACEs they experienced was not requested or recorded. There is a possible minimum score of zero and a possible maximum total score of 10.

The Cohen's kappa coefficient measuring test-retest reliability are as follows: emotional abuse and neglect = .66, physical abuse and neglect= .55, sexual abuse = .69, witnessing substance abuse = .75, mental illness = .51, mother treated violently = .71, incarcerated household member = .46, and parental separation or divorce = .86 (Dube, Williamson, Thompson, Felitti, & Anda, 2004). Four or more ACEs was generally observed as the threshold for high ACE exposure, marking significantly increased likelihood of negative adult health outcomes (Dong, Anda, Dube, Giles, & Felitti, 2003; Dube et al., 2003) (See Appendix F).

Professional Development

The North Carolina Resilience and Learning Project (NCLRP), part of the Public School Forum of North Carolina (PSFNC), works with high-poverty schools where trauma is prevalent in the student population. This program works with identified schools providing professional development and ongoing coaching that aims to teach and support

socioemotional or coping skills among students, as well as build a positive school climate with supportive relationships (Public School Forum of North Carolina, n.d.). This initiative is a trauma-informed program aimed at improving academic, behavioral, and socio-emotional outcomes for students.

The program focuses on the unique needs of each school. “We begin with training and professional development with all school staff and create Resilience teams made up of teachers and administrators to meet regularly throughout the school year with our staff coach.” (DeKonty, 2018, para. 6). These Resilience teams identify goals for the year, and along with the Resilience and Learning Program Coordinator, Christy Lockhart, meet twice monthly to continue to tailor the initiative to the specific needs of each school. Examples of identified goals include parent engagement, self-compassion, equity, and culture initiatives, with the overarching goal of finding innovative ways to support the needs of the whole school (Lockhart, personal communication, January 8, 2020).

Professional Quality of Life

The Professional Quality of Life Scale (ProQOL-5; Stamm, 2010) measures compassion satisfaction, burnout, and secondary traumatic stress as three separate subscales. Compassion satisfaction is defined as the pleasure derived from doing the job well and contributing to the well-being of others. Burnout, an element of compassion fatigue, is defined as the negative effects of caring for others. This scale measures hopelessness and frustration related to this type of work. Secondary traumatic stress, the second component of compassion fatigue, is defined as the negative effects caused by exposure to others’ traumatic events. This scale measures negative feelings driven by fear and work-related trauma. The ProQOL-5 takes 4-5 minutes to complete. After reverse

scoring the indicated items, composite scores are calculated for each subscale and converted to t-scores. For the purposes of this study, professional quality of life was measured by the participants' t-scores on each of the three ProQOL-5 subscales: compassion satisfaction, burnout, and secondary traumatic stress.

Alpha scale reliability for the ProQOL-5 are as follows: compassion satisfaction = .88, burnout = .75, and secondary traumatic Stress = .81. Construct validity testing verifies that the three subscales measure different constructs. Norming groups were any helping profession, including teachers (Stamm, 2010) (See Appendix G).

Research Design

This study used a non-experimental correlational research design to examine how teachers' (a) personal trauma histories, (b) professional development, and (c) professional quality of life are related to the attitudes related to trauma-informed care among teachers working in rural Title I elementary schools. A hierarchical linear regression was used. Teachers' ACEs were entered into the model first, followed by professional development, and finally, ProQOL-5. Post-hoc analyses of demographic information were also examined.

Research Question

The overarching research question was: How do teachers' personal trauma history, professional development training, and professional quality of life relate to attitudes related to trauma-informed care among teachers working in rural Title I elementary schools? The variables were entered into the regression equation individually in a hierarchical order as they are experienced. First, personal trauma history scores were entered into the regression equation, as these experiences happened during childhood and

can impact attitudes related to trauma-informed care. Second, professional development training was entered into the regression equation, as the training has been ongoing for over two years and can impact attitudes related to trauma-informed care. Third, teachers' professional quality of life (to include the scales of compassion satisfaction, burnout, and secondary traumatic stress) was entered into the regression equation as it is a measure of their current levels of stress and can impact attitudes related to trauma-informed care. The specific research questions were:

1. How does personal trauma history relate to attitudes related to trauma-informed care?
2. After controlling for teachers' personal trauma history, how does professional development training relate to attitudes related to trauma-informed care?
3. After controlling for teachers' personal trauma history and professional development training, how does professional quality of life (compassion satisfaction, burnout, and secondary traumatic stress) relate to attitudes related to trauma-informed care?

Data Analysis

Screening Data

Prior to running the regression analysis, data was screened. The purpose of the screening is to locate problems within the data, such as incomplete entries, outliers, accuracy, normality, homoscedasticity, and collinearity. A total number of participants is reported, as were any outliers or missing data.

Descriptive Statistics

The researcher utilized descriptive statistics to describe the participants in the study. Descriptors included information about participants' race, gender, school, and age. Further descriptive analyses were presented as the results of the means, standard deviations, and measures of central tendency of the variables in the study. Correlation coefficients were estimated among all predictor and outcome variables.

Hierarchical Regression

As this study used more than one independent variable and required an order for the input of variables, the appropriate type of analysis was a hierarchical regression analysis. Regressions are often used for prediction (Pedhazur, 1997), and a hierarchical regression analysis was been selected for this study to determine how each independent variable predicts attitudes related to trauma-informed care. A hierarchical regression analysis determined the amount of variance accounted for by each independent variable: teachers' ACEs; professional development training; and professional quality of life (compassion satisfaction, burnout, and secondary traumatic stress) when input in this specific order that is dictated by the theoretical framework. Effect sizes were determined according to Cohen (1992).

Summary

This chapter has described the methodology, including participants, setting, data collection procedures, and instrumentation. Additionally, the research design, research questions, and data analysis have been described in order to explain the process by which the independent variables were examined for their predictive relationship to the

dependent variable, attitudes related to trauma-informed care among teachers working in rural Title I elementary schools.

CHAPTER IV: RESULTS

The purpose of this study was to examine how personal trauma histories, professional development training, and professional quality of life are related to attitudes toward trauma-informed care among elementary school teachers working in rural Title I schools in the Southeastern United States. The variables were entered into the regression equation individually in the hierarchical order as they were experienced. First, personal trauma history scores were entered into the regression equation, as these experiences happened during childhood and can impact attitudes related to trauma-informed care. Second, professional development training was entered into the regression equation, as the training has been ongoing for over two years and can impact attitudes related to trauma-informed care. Third, teachers' professional quality of life (to include the scales of compassion satisfaction, burnout, and secondary traumatic stress) was entered into the regression equation as it is a measure of their current levels of stress and can impact attitudes related to trauma-informed care.

The research questions were: (1) How does personal trauma history relate to attitudes related to trauma-informed care? (2) After controlling for teachers' personal trauma history, how does professional development training relate to attitudes related to trauma-informed care? (3) After controlling for teachers' personal trauma history and professional development training, how does professional quality of life (compassion satisfaction, burnout, and secondary traumatic stress) relate to attitudes related to trauma-informed care? The Statistical Package for the Social Sciences (SPSS) was used to analyze the data.

The following sections of this chapter present the results of this study based on the research questions described above. The first section presents information regarding instrument reliability. The second section of the chapter describes the participants in the study. The third section presents the correlations. The fourth section describes the results of statistical analyses used to examine the research questions. This chapter concludes with a summary of the findings.

Reliability of Instruments

In Table 1, number of items, means, standard deviations, and the alpha coefficients for the ARTIC and the subscales of the ProQOL-5 are shown. Cronbach's alpha internal consistency measures were used to estimate the reliability of the attitudes related to trauma-informed care scale (ARTIC) and the subscales of the professional quality of life (ProQOL-5) that included compassion satisfaction (CS), burnout (BO), and secondary traumatic stress (STS).

Table 1: *Cronbach's alpha, number of items, means, and standard deviations*

Instrument	Coefficient α	*Items*	M	SD
ARTIC	.767	*10*	5.07	.87
CS	.918	*10*	54.07	.56
BO	.830	*10*	52.42	.56
STS	.828	*10*	52.37	.58

Cronbach's Alpha for the for the ARTIC was .77 and the subscales of the ProQOL ranged from .83 to .92, indicating these assessments all had adequate internal consistency. The ARTIC scale consists of 10 items on a 7-point Likert-type scale. Higher

scores indicate attitudes more favorable to trauma-informed care. Participants scores on the ARTIC scale ranged from 2.60 to 6.60. The Professional Quality of Life Scale consists of 30 items on a 5-point Likert-type scale. This scale consists of three 10-item subscales and measures CS, BO, and STS. Higher scores indicate higher CS, BO, and STS. Participants' scores ranged from: 52.60 to 55.00 on the CS scale; 51.30 to 53.90 on the BO scale; and 51.30 to 54.20 on the STS scale.

Description of the Participants

Participants for this study were Title I elementary school teachers in a rural county in the Southeastern United States. As this study was conducted during the spring semester of 2020, during which time the global society experienced the COVID-19 pandemic, data collection methods had to be modified. As schools shut down to maintain social distancing guidelines set forth by the state government, data collection procedures were modified, approved by the IRB, and moved to an online platform. As a result, participants were recruited both in-person as well as via email survey.

Total of 25 participants completed the survey in-person, with only one declining. A total of 182 participants attempted to complete the online survey; however, five did not agree to consent, three completed only the demographic section, and only 122 of the remaining 174 met the inclusion criteria. The inclusion criteria included: (a) those who were teacher-licensed educators and (b) those who work with five or more children at a time. A total of 147 (in-person [n=25]; via email survey [n=122)]), participants provided complete responses and were included in the study.

To determine if there were differences between data collected in-person and data collected online, data were analyzed via independent t-test. Results indicated that there

were no significant differences in the responses between the two groups, with the exception of attitudes related to trauma-informed care (ARTIC). With regard to ARTIC, there was a significant difference in the results based on in-person data collection (M=3.82, SD=.504) and online data collection (M=5.33, SD=.694) conditions; $t(145)$= -10.27, p=.000. Results of the t-tests are presented in Table 2.

Table 2: *Independent t-tests of variables of interest*

Variable	N	Mean	SD	*t*	df	*p-value*
ARTIC				-10.27	145	.000**
In-person	25	3.82	.504			
Online	122	5.33	.694			
ACEs				.158	144	.874
In-person	25	3.62	2.91			
Online	122	3.53	2.54			
CS				-.472	145	.638
In-person	25	54.02	.504			
Online	122	54.08	.570			
BO				-.063	145	.950
In-person	25	52.42	.600			
Online	122	52.42	.554			
STS				-.890	144	.375
In-person	25	52.28	.682			
Online	121	52.39	.561			

Note. ** Indicates significant correlation at $p < .001$ level (2-tailed).

Demographic data was collected to describe the population. Frequencies and percentages of the demographic variables are provided in Table 3. Demographic data indicated that of the 147 participants, 143 provided their age, with a range of ages from 22 years old to 62 years old (M=39.87, SD = 9.36). As shown in Table 3, the majority of participants identified as White (85.7%; n=126) females (93.2%; n=137).

Table 3: *Numbers and percentages of Ethnicity and Gender variables*

Variable	Frequency	Percent
Ethnic Identity		
White	126	85.7%
African American	15	10.2%
Latinx	4	2.7%
Other	1	.7%
Native Hawaiian/Pacific Islander	1	.7%
Gender		
Female	137	93.2%
Male	10	6.8%

Of the schools who received the survey, there was at least one representative from 17 of the 19 schools (89.4%), with the most participants from the school where data was collected in-person (17%). Based on the school of employment, a total of 51 (34.7%) of the participants received school-level professional development (PD) training, whereas 96 (65.3%) did not. Frequencies and percentages are reported in Table 4.

Table 4: *Numbers and percentages of school representation and professional development (PD) variables*

Variable	Inclusion in PD	Frequency	Percent
School			
School 1		13	8.8%
School 2		6	4.1%
School 3		6	4.1%
School 4		5	3.4%
School 5		12	8.2%
School 6	X	13	8.8%
School 7	X	4	2.7%
School 8 (collected in-person)	X	25	17%
School 9		10	6.8%
School 10	X	7	4.8%
School 11		13	8.8%
School 12		11	7.5%
School 13		8	5.4%
School 14		0	0%
School 15	X	1	.7%
School 16		3	2.0%
School 17		0	0%
School 18		9	6.1%
School 19	X	1	.7%

With regard to Adverse Childhood Experiences (ACEs), of the 147 participants, 146 responded to this question. The responses ranged from zero to 10 ACEs with a mean number of ACEs being 3.55 (*SD*=2.60). Forty-six participants (31.5%) reported four or more ACEs, which is the threshold for significant negative mental and physical health outcomes for adults (Dong, Anda, Dube, Giles, & Felitti, 2003; Dube et al., 2003).

Screening Data

The data were screened for accuracy, outliers, missing values, normality of distribution, linearity, and homoscedasticity of residuals, and multicollinearity prior to running the analysis using The Statistical Package for the Social Sciences (SPSS). Incomplete data sets, ones where only the demographic was complete, were removed before analysis. Missing data was determined to be missing completely at random and were replaced by the mean. Outliers were examined, and although one outlier was considered to have high influence, it was also determined to have low leverage, and was therefore deemed acceptable. Kurtosis and skewness generally did not indicate major departures for normality. Additionally, to test for homoscedasticity of residuals, a visual inspection frequency distribution suggested that the distribution of the variables was approximately normally distributed. Multicollinearity was assessed by examining the variable tolerance and Variation Inflation Factors (VIF). Variation Inflation Factors (VIF) ranged from 1.01 to 3.27. Tolerance scores were above .3 and VIF scores were below 5, indicating that there were no violations of the multicollinearity assumption.

Pearson Correlations

The Statistical Package for the Social Sciences was used to analyze the data. A Pearson coefficient was conducted to examine the correlations of the predictor variables (ACEs, PD, compassion satisfaction [CS], burnout [BO], and secondary traumatic stress [STS]) and the outcome variable (ARTIC), and results are shown in Table 5.

Table 5: *Pearson correlation matrix between predictor and outcome variables*

Variable	ARTIC	ACEs	PD	CS	BO	STS
ARTIC		.036	-.406**	.270**	-.299**	-.126
ACEs			.105	.021	.020	.083
PD				-.137*	.058	.036
CS					-.739**	-.479**
BO						.691**
STS						

Note. * Indicates significant correlation at $p < .05$ level (1-tailed).
** Indicates significant correlation at $p < .001$ level (1-tailed).

There were three statistically significant correlations among the predictor variables (adverse childhood experiences, professional development, compassion satisfaction, burnout, and secondary traumatic stress) and the outcome variable (attitudes related to trauma-informed care). Professional development training was significantly negatively correlated with the ARTIC scores (r=-.406, $p < .001$), as was BO (r=-.299, p<.001). Compassion satisfaction was positively correlated with ARTIC (r=.270 p<.001). Among the predictor variables, CS was negatively correlated with PD (r=-.137, $p < .05$), BO and STS were negatively correlated with CS ([BO] r = -.739, p <.001; [STS] r=-.479, p<.001), and STS was positively correlated with BO (r=.691, p< 001).

Hierarchical Multiple Regression Analyses

A three-step hierarchical linear regression analysis was conducted to examine how adverse childhood experiences, professional development, compassion satisfaction, burnout, and secondary traumatic stress are related to ARTIC. In the first step of the analysis, the predictor variable, ACEs, was entered. In step two, the second predictor variable, PD, was entered. For the third step, the final predictor variables, CS, BO, and STS were entered. The results of the hierarchical regression are reported in Table 6.

Table 6: *Three-step hierarchical multiple regression analyses measuring the relationship between predictor and outcome variables*

Variable	B	SE	β	sr^2	R^2	ΔR^2	*p*-value
Step 1					.001	.001	
ACEs	.012	.028	.036	.036			.667
Step 2					.171	.169**	
ACEs	.027	.026	.079	.079			.303
PD	-.758	.141	.-414	-.412			.000**
Step 3					.258	.087**	
ACEs	.024	.025	.073	.072			.326
PD	-.724	.136	-.396	-.389			.000**
CS	.015	.172	.009	.006			.933
BO	-.580	.208	-.368	-.203			.006*
STS	.210	.152	.141	.101			.169

Note: * Indicates significance at $p < .05$ level.
** Indicates significance at $p < .001$ level.

Results of step one of the analysis revealed a model that was not statistically significant ($F(1,143) = .186$, $p=.667$). The variance accounted for *(R^2)* in the first step equaled .001 (adjusted $R^2=-.006$). The R^2 value suggests that ACEs did not account for any of the variance in participants' attitudes toward trauma-informed care. In step two, when PD was added to the analysis, the results revealed a model that was statistically significant ($F(1,142) = 29.02$, $p=.000$). The variance accounted for *(R^2)* equaled .171 (adjusted $R^2=.159$). The change in variance accounted for (R^2 change, ΔR^2) was equal to .169, which was statistically significant. These results indicate that the addition of PD accounted for 16.9% of the variance in participants' attitudes toward trauma-informed care.

In step three, when the predictor variables CS, BO, and STS were added to the analysis, the results revealed a model that was also statistically significant $F(3,139) = 5.44$, $p = .001$. The variance accounted for *(R^2)* equaled .258 (adjusted $R^2=.231$), with a change in variance accounted for (R^2 change, ΔR^2) equaling .087 which is statistically different from zero. However, only PD and BO showed statistical significance ($p < .05$) in the final model: ACEs ($p=.326$); PD ($p=.000$); CS ($p=.933$); BO ($p= 006$); STS ($p=.169$). It is important to note that the high correlation between CS and BO resulted in only BO showing statistical significance in the final step. The final model revealed that with ACEs and PD held constant, the addition of the remaining predictor variables improved R^2 and all variables accounted for nearly 26% of the variance in participants' attitudes toward trauma-informed care.

Summary

The purpose of this study was to examine how personal trauma histories, professional development training, and professional quality of life are related to attitudes toward trauma-informed care among elementary school teachers working in rural Title I schools in the Southeastern United States. An analysis of the demographics revealed that the majority of the 147 participants were white, female, with a mean age of near 40 years old. Just over a third of the participants (34.7%; n=51) had received school-level professional development training, and the mean number of ACEs reported was 3.55.

A three-step hierarchical multiple regression was utilized to analyze the data. The results of the first step indicated that ACEs (personal trauma history) accounted for none of the variance in teachers' attitudes toward trauma-informed care. The results of the second step indicated that when controlling for ACEs, professional development training accounted for 16.9% of the variance in participants' attitudes toward trauma-informed care, which was statistically significant. On the third step of the regression, after controlling for ACEs and PD, the addition of CS, BO, and STS improved the R_2 model that accounted for an additional 8.7% of the variance, with BO being statistically significant. These results indicate that after controlling for personal trauma history, a significant inverse relationship between the predictor variables of professional development training and burnout, and the outcome variable, attitudes related to trauma-informed care, exists.

CHAPTER V: DISCUSSION

The purpose of this study was to examine how personal trauma histories, professional development training, and professional quality of life are related to attitudes related to trauma-informed care among teachers working in rural Title I elementary schools in the southeastern United States. This chapter will provide an overview of the study, discussion and conclusions, contributions of the study, limitations of the study, implications of the findings, recommendations for future research, and concluding remarks.

Overview of the Study

Research over the last two-and-a-half decades has asserted that adverse childhood experiences (ACEs) are a significant public health issue (American Academy of Pediatrics [AAP]; Felitti et al., 1998; Garner & Shonkoff, 2012). The toxic stress that results from these adversities impacts areas of the brain associated with reasoning, learning, and emotion, and often results in emotional, cognitive, and behavioral issues in those who have experienced them (Sciaraffa, Zeanah, & Zeanah, 2017; Shonkoff et al., 2012). Nearly half of all children living in the United States have experienced one adverse childhood experience ([ACEs]; Bethell, Davis, Gombojav, Stumbo, & Powers, 2017), and one in ten children has experienced three or more ACEs. Notably, children who live in poverty experience these traumatic events more often than their more socioeconomically privileged counterparts (Steele et al., 2016).

Incorporating trauma-informed care into schools has the potential to create feelings of safety and positive connections and strengthen child-serving systems (Bartlett et al., 2016). A trauma-informed framework is one that emphasizes “strong relationships

with adults and peers; the ability to self-regulate behaviors, emotions, and attention; and physical and emotional health and well-being" (Massachusetts Advocates for Children and Harvard Law School, 2013, p. 21). Teachers spend a lot of time with their students and are uniquely positioned to respond to students in trauma-informed ways that increase students' resilience through stable, caring, positive relationships (Bell, Limberg, & Robinson, 2013; Sciaraffa et al., 2018).

While there is a growing body of research regarding trauma-informed care in schools, there is little focus on the "instrument" of such care, the teachers. Given the literature that established the deleterious effects of ACEs, both in childhood and adulthood, it stands to reason that teachers' lives have also been impacted by these experiences. There have been no studies that examine the impact of teachers' own personal trauma history, professional development training, and professional quality of life on their attitudes related to trauma-informed care. This study was designed to address this gap in the literature and to increase understanding of the characteristics that impact teachers' attitudes toward trauma-informed care to better understand how to support them in implementing trauma-informed approaches. The findings of this study will be useful to counselors working in schools, school counselors, and counselor educators. There are also implications for teacher preparation programs as well as state and federal policy regarding the implementation and assessment of trauma-informed approaches in schools.

Discussion and Conclusions

The discussion section of the study highlights demographic findings and conclusions regarding the findings. All the results are discussed in relation to previous literature and research.

Demographic Data

Examination of the demographic data indicated a lack of diversity in the participants who responded to the survey, where the vast majority, 85.1%, identified as white and 10.1% identified as Black or African American. This data is consistent with the most recent national data for the 2011-2012 school year, where 82% of all elementary and middle school teachers in the US identified as white (U.S. Department of Education, 2016). However, the sample's ethnic identity data is somewhat striking given the rapidly changing demographics of the Unites States. According to U.S. Census projections made in 2018, 2020 marks the year that fewer than half of children in the United States under the age of 18 will be White (Vespa, Medina, & Armstrong, 2018). It is important to note that the participants of this study work in a school system where the students identify as 58% White and 19% Black, leaving a sharp divide between the demographics of the teachers and the students that they teach.

The participants in this study identified as predominantly female (93.2%). The sample population gender breakdown is higher than that of the national average, where 79.2% of elementary and middle school teachers identify as female, and 20.8% identify as male (U.S. Census Bureau, 2018). The participants' ages ranged from 22 years old to 62 years old, with a mean of 39.96, consistent with national data indicating the average age of elementary and middle school teachers is 42.7 years old (U.S. Census Bureau, 2018).

Of the schools whose teachers received the survey, there was at least one representative from 17 of the 19 schools (89.4%), with the most participants from the one school where data was collected in-person (17%). Because of the required change to data

collection protocol due to COVID-19, an independent t-test was conducted to assess the difference between participants' responses from in-person data collection and online data collection. Results indicated that there was no significant difference in the responses between the two groups on any of the variables except attitudes related to trauma-informed care (ARTIC).

With regard to ARTIC, there was a significant difference in the results between in-person data collection and online data collection conditions, with in-person reporting lower scores on the attitudes towards trauma-informed care scale than those collected online. While norming scores are still being established on the relatively new ARTIC scale (Baker et al., 2016), results indicated that the in-person scores on the ARTIC (M=3.82) were closer to the mean score on the assessment (M=4) than those collected online (M=5.33). Overall, the participants' mean scores on the ARTIC were also higher than the mean (M=5.07). One explanation for the difference in the participants' responses may be that all of the in-person data collected was from one school. The nested (multi-level) aspect of the data could impact the results when all of the in-person data was collected from one school. Additionally, school environment or climate could influence the attitudes of all of the participants from one location. And finally, the in-person data was collected in early spring before the full extent of the pandemic was realized, and the online data was collected during the weeks after schools were closed due to COVID-19. The finding that participants scored higher on attitudes related to trauma-informed care in online data collection could be attributed to increased identification with the experiences of their students, and the "shared" nature of the situation.

With regard to ACEs data, the number of participants in this study who reported four or more ACEs (31.5%) was six times that of the original study (Felitti et al., 1998). This finding is consistent with previous literature that found that ACEs are experienced in the general population (Merrick, Ford, Ports, & Guinn, 2018), as well as in teacher populations (Grybush & Post, in-progress; Lepore, 2017), at a higher rate than found originally. One explanation for this finding is that the original study was conducted in collaboration with Kaiser Permanente, and the population studied was majority over 60 years old (46%), White (75%), high school graduate (93%) individuals with private health insurance (100%; Felitti et al., 1998). Original results should be viewed keeping those demographics in mind. While ACEs was not found to be statistically significant in this study, the results highlight the prevalence of ACEs, and the importance of further assessing the impact of childhood trauma on teachers' attitudes related to trauma-informed care.

The ProQOL (Stamm, 2010), consisting of three subscales (compassion satisfaction, burnout, and secondary traumatic stress), converts raw scores to *t*-scores with a mean of 50 and a standard deviation of 10. Results of this study indicated that participants reported higher than average scores on CS, with a mean score of 54.06. This finding indicates that teachers in this sample experienced a higher amount of pleasure in their work than the norm. This finding is consistent with prior research stating that teachers find satisfaction in being able to contribute through their work (Borntrager, 2012; Grybush & Post, in-progress; Lepore, 2017). Results also revealed that participants reported scores higher than average on burnout, with a mean score of 52.43 and scores higher than average on secondary traumatic stress, with a mean score of 52.37. These

findings are consistent with prior research stating that teachers often experience higher levels of burnout as a result of their job (Santa, 2016), and the findings are consistent with a large body of research that indicates that burnout and secondary traumatic stress are often experienced together (Stamm, 2010). These results highlight the importance of identifying and attending to teachers' compassion satisfaction and burnout, as they both are related to attitudes related to trauma-informed care and teachers' overall well-being.

Pearson's Correlations

Significant correlations were found between the predictor variables, professional development training, compassion satisfaction, and burnout, and the outcome variable, attitudes related to trauma-informed care. These results indicated that those who participated in professional development training reported lower scores on attitudes related to trauma-informed care, and those who reported higher scores on burnout reported lower scores on attitudes related to trauma-informed care. Additionally, those who reported higher scores on compassion satisfaction also reported higher scores on attitudes related to trauma-informed care.

While there have been mixed findings regarding the relationship between professional development and attitudes related to trauma-informed care, the results indicating an inverse relationship between burnout and attitudes related to trauma-informed care and a positive relationship between compassion satisfaction and attitudes related to trauma-informed care support the results of previous research. For example, Grybush and Post (in-progress) found that teachers in rural Title I elementary schools who reported higher compassion satisfaction also reported a more favorable attitude toward trauma-informed care and were less likely to experience burnout. The significant

inverse relationship between compassion satisfaction and compassion fatigue (burnout and secondary traumatic stress) found in this study is also consistent with past research (Grybush & Post, in-progress; Lepore, 2017; Stamm, 2010), such that higher scores on compassion satisfaction were related to lower scores in burnout and secondary traumatic stress.

Multiple Regression

This study found that nearly 26% of the variance in attitudes about trauma informed care was accounted for by the predictor variables. The results of this study indicated that two of the five independent variables, professional development training and burnout, contributed significantly to the prediction of participants' attitudes toward trauma-informed care. It is important to note that in the third and final step of the regression, the high correlation between compassion satisfaction and burnout resulted in only burnout showing statistical significance. Professional development training was the strongest predictor, contributing to 16.9% of the variance, with professional quality of life contributing to 8.7% of the variance.

This study confirms past findings and adds to the small, but growing body of knowledge regarding teachers' attitudes related to trauma-informed care. The participants in this study reported higher than average scores on the ARTIC, indicating attitudes that are more favorable to trauma-informed care than the mean. The results of this study also indicated that professional development training and burnout were inversely related to attitudes related to trauma-informed care which is consistent with past research (Anderson et al., 2015; Borntrager, 2012; Grybush & Post, in-progress; Wendel, 2018).

Contributions of the Study

While research has begun to examine trauma-informed care in schools, no studies have explored teachers' personal trauma history, professional development training, and professional quality of life in relation to their attitudes related to trauma-informed care. Importantly, while the results should be viewed light of the co-occurring school shutdown due to COVID-19, the results help establish norms for the relatively new ARTIC scale (Baker et al., 2016). Establishing norms for sample populations allows researchers to compare groups and accurately interpret results.

This study contributes overall to the body of literature regarding trauma-informed approaches in schools as well as the meager research pertaining to the personal characteristics of elementary school teachers that influence attitudes related to trauma-informed care. In examining a sample of rural Title I elementary school teachers, this research provides valuable information on characteristics and attitudes of teachers in an understudied and often overlooked rural setting. Furthermore, this study focuses on a population that serves students from low-income families, and as research indicated, childhood adversity is experienced more often by children living in poverty than those living in more socioeconomically privileged situations. Additionally, this study contributes to the large body of research regarding adverse childhood experiences, providing further evidence that overall, ACEs are experienced by teachers in this sample at a higher rate than that of the original study.

This study is one of the few studies that empirically examined attitudes related to trauma-informed care among rural Title I elementary school teachers, and it is the only study to-date that has examined personal trauma histories, professional development training, and professional quality of life as predictors attitudes related to trauma-informed

care. The outcomes confirm the relationship between professional development training, professional quality of life, and attitudes related to trauma-informed care.

Implications of the Findings

This study adds to the body of research regarding trauma-informed care in schools. The researcher explored five variables (personal trauma history [ACEs], school-level professional development training, compassion satisfaction, burnout, and secondary traumatic stress) that literature hypothesized were related to attitudes related to trauma-informed care. From the correlation analysis, a relationship between professional development, compassion satisfaction, burnout, and attitudes related to trauma-informed care emerged. Additionally, from the regression analysis, professional development and professional quality of life emerged as significant predictors of attitudes related to trauma-informed care.

Results indicating that professional development was inversely related to attitudes related to trauma-informed care is contrary to previous literature. However, an implication for counselors working in schools is to "adopt a trauma-informed approach to curriculum delivery" (Butler et al., 2017, p. 422), especially given the high prevalence of ACEs reported by the teachers in this sample. A trauma-informed approach recognizes the impact of potential traumatic experiences on all within the system and would apply that knowledge to the delivery of the potentially triggering aspects of trauma-informed care training.

Attending to teachers' professional quality of life can improve student outcomes (Arens & Morin, 2016; Herman et al., 2017). Previous research indicates that teacher burnout negatively impacts students' academic achievement, behavior, and perception of

teacher support. Given the results of this study that indicated that burnout is inversely related to attitudes related to trauma-informed care, counselors working in schools can provide training that helps teachers identify and attend to their experience of burnout, as well as identify protective factors that buffer that experience. Moreover, the results of the correlation analysis in this study indicated that individuals who scored higher on compassion satisfaction also scored higher on attitudes related to trauma-informed care. An implication of this finding is that supporting teachers in trauma-informed initiatives should highlight the importance of professional development that focuses on the protective nature of compassion satisfaction and self-care efforts.

The findings of this research study also have implications for counselor education programs. Counselor education programs should provide counselors-in-training specific training on the neurobiological, social, and emotional impact of childhood trauma, both during childhood as well as in adulthood. Additionally, counselor education programs should consider providing training in trauma-informed system frameworks, familiarizing counselors-in-training with the concepts and principles of trauma-informed care in schools, and how the framework coincides with and reinforces the Multi-Tiered System of Support (MTSS; Sulkowski & Michael, 2014) utilized in many school systems. And finally, counselor education programs should consider providing training that focuses on the impact of compassion satisfaction and burnout on teachers' wellbeing and attitudes related to trauma-informed care. One hundred percent of teachers in this study reported higher than average scores on compassion satisfaction and burnout, and both were a significant predictor of attitudes related to trauma-informed care. Counselors working in

schools need to be familiar with specific interventions that can increase compassion satisfaction and reduce burnout among teachers.

Clearly the implications of this study can be extended beyond the counseling field. The results of this study also have implications for teacher preparation programs. First, in light of the demographic results indicating a sharp divide between the demographics of the teachers and the students that they teach, teacher preparation programs should increase efforts to recruit and retain a more diverse student body of preservice teachers (Marchitello & Trinidad, 2019) potentially improving minority student outcomes (Arens & Morin, 2016; Herman et al., 2017).

Second, results of this study indicate that, like counselor education programs, teacher preparation programs should consider providing training in the neurobiological, social, and emotional impact of childhood trauma, trauma-informed system frameworks, and the impact of compassion satisfaction and burnout on teachers' well-being. By acquainting preservice teachers with trauma-informed principles and the impact of their own experiences on their well-being and attitudes, teachers can be better prepared to participate in and contribute to trauma-informed initiatives within their schools.

The results of this study also have implications for state and federal policy addressing trauma in schools. The state of Virginia and the Virginia Department of Education have taken the national lead on this issue, with teacher licensure and recertification requirements including an emphasis on trauma education (VDOE, 2018, Article 2.1). Additionally, the Trauma-Informed Schools Act of 2019 is a bill introduced to the House of Representatives that requests an amendment to the Elementary and Secondary Education Act of 1965 to provide criteria for use of federal funds to support

trauma-informed practices in schools. The results of this study reinforce the assertion that counselors working in schools and teachers need specific training in trauma-informed approaches. Given that professional development training and burnout were significant predictors of teachers' attitudes toward trauma-informed care, state and federal policy requiring specific trauma-informed care training for counselors working in schools and teachers that includes aspects of burnout is warranted.

Additionally, rural teaching positions are often hard to staff (Public Schools First NC, 2020), which can result in hiring teachers who live outside the school system and the local community, contributing to the gap between the ethnic identity of the teachers and the student population, According to a study completed by the Public School Forum of NC (2020), there is a spending gap of $2523 per student between the highest spending counties and the lowest spending counties in the state. Fewer resources available to the lower-wealth counties make staffing even more difficult. State and federal policy that increases teacher pay in rural areas can help recruit and retain quality candidates.

Limitations of the Study

There are several notable limitations to this study, including the generalizability of the study, social desirability, professional development categorization, the change in data collection procedures, and the increased stress that may have been a result of the pandemic.

With regard to generalizability, the results of this study cannot be generalized to all teachers, such as certified teachers who are not licensed, teachers who work in circumstances where they instruct fewer than five students at a time, or teachers outside rural areas. Additionally, generalizability is limited based on the purposive convenience

sample where only elementary schools in one school system were targeted. Furthermore, there were two schools of the 19 targeted with no participants. This may be an indication that there was a breakdown in the protocol of which the researcher had no control once it left her hands. The teachers at the two schools in question may not have received the email from their principal, so they may not have been aware of the opportunity to participate.

Social desirability is also a limitation of this study. Although data in this study were collected for the most part via the internet which ensured a more private and confidential location for the participants, the data were nonetheless self-reported. As with all self-reported data, participants are at some risk for providing socially desirable answers that reflect upon them more favorably (Callagaro, 2008).

Additionally, inclusion criteria regarding school-level professional development training was a limitation in this study. The inclusion criteria for professional development training was determined by the reported school of employment, resulting in a dichotomous yes or no categorization. There were no specific criteria as to the type, level, or amount of training received by individual schools, resulting in a definition of professional development that was broad, with the degree of participation varying greatly among included schools.

Finally, an unanticipated limitation of this study is that it was conducted during the COVID-19 pandemic. Data collection procedures had to be changed, resulting in two different conditions in data collection (in-person and online). Additionally, the in-person data was collected from only one school. Results indicated that there was a significant difference in the two conditions regarding the outcome variable, attitudes related to

trauma-informed care. This was a limitation in this study in that it calls into the question the nested, or multi-level aspect of the in-person data. Additionally, in a macro sense, global society was affected. This could certainly have played a part in an increased level of stress on all individuals in society. The additional stress for teachers could have also impacted their attitudes related to trauma-informed care as well as their professional quality of life responses.

Recommendations for Future Research

The results of this study indicate a critical need for further research into trauma-informed care in schools with a focus on teachers. Research utilizing mixed-methods or qualitative methods could more deeply explore the predictors of attitudes related to trauma-informed care among teachers. For example, future qualitative research could explore the experiences of teachers after the closing of the schools and their thoughts about the impact on their attitudes related to trauma-informed care.

Additionally, with regard to the ARTIC, while the developers of the ARTIC state the 10-item short form is "an abbreviated scale reflecting the five subscales representing attitudes favorable to TIC in one summary score" (Baker et al., 2016, p. 72), further exploration of ARTIC results indicated the 10 items in the short form loaded on two separate factors. Future research could use the 35- or 45-item ARTIC, each consisting of five subscales, which could yield richer results. For example, subscales on the ARTIC 35 and 45 include: underlying causes of problem behavior/symptoms; staff responses to problem behavior; staff on-the-job behavior; staff feeling of self-efficacy at work; and staff reactions to the work. Utilizing the more in-depth scale could allow for a more

thorough analysis of the variable, possibly using individual subscales as predictors of attitudes about trauma informed care.

Additionally, future research could focus on other teacher characteristics that could impact attitudes toward trauma-informed care, such as years of experience teaching, level of empathy, perceived social support, or school climate, all of which are supported by prior research (Anderson et al., 2015; Thomas et al., 2019; Waggoner, 2018; Wendel, 2018). Additionally, future research that further explores teachers' professional quality of life, with a focus on compassion satisfaction and burnout, would further explain ways to maximize compassion satisfaction and minimize burnout, to assess the impact on attitudes related to trauma-informed care.

Research that further examines the impact of teachers' personal trauma history on behaviors and attitudes is recommended. Over 31% of participants in the current study reported having experienced four or more ACEs, which was five times higher than found in the seminal study (Felitti et al., 1998). While the current study utilized the original ACEs questionnaire developed in the seminal study by Felitti et al. (1998) to facilitate comparison, this questionnaire may not be as sensitive as some of the newer versions of the questionnaire. For example, newer versions of the questionnaire include additional aspects of adversity such as: involvement in the foster care system; bullying; loss of parent or guardian due to death; deportation; medical trauma; exposure to community violence; and discrimination (race, sexual orientation, birthplace, disability, or religion).

Future research that further examines the relationship between professional development and attitudes related to trauma-informed care is recommended. Results of this study indicated that professional development had an inverse relationship with

attitudes related to trauma-informed care. Future research that specifies type, duration, level, and follow-up to professional development is suggested. Furthermore, future research that identifies a common framework for the administration and assessment of professional development would make comparison more beneficial.

Finally, interdisciplinary collaboration among preparation programs and transdisciplinary collaboration that includes non-academic stakeholders could help inform state and federal policy by collaborating on research that examines trauma-informed approaches in schools from a macro-perspective. The North Carolina Resilience and Learning Project has intervened from a micro-perspective, meaning they are working directly with the teachers in the schools to create meaningful relationships and provide one-on-one support to individual schools. However, research examining trauma-informed initiatives from a systemic, macro-perspective could further illuminate opportunities and barriers to trauma-informed implementation within the system. In keeping with the guiding theory behind this study, the Contextual Systems Model, each level of the system must be conceptualized as systems in and of themselves, with their own context an important aspect of how they impact, and are impacted by, their own systems. Research that explores state department of public instruction, state board of education, and local school system administration and leadership with regard to attitudes related to trauma-informed care could assess the readiness of these different levels of the system for trauma-informed initiatives. Both approaches are equally important, and by advancing the issues from both sides, the aspiration would be that they would meet in the middle.

Concluding Remarks

Research on trauma-informed approaches in schools is relatively recent, and research focusing on teachers in relation to trauma-informed care is virtually non-existent. This study sought to address this critical gap in the research through exploring personal trauma history, professional development, and professional quality of life among rural Title I elementary school teachers as predictors of attitudes related to trauma-informed care. The findings indicate that professional development training, compassion satisfaction, and burnout were significantly correlated with and were significant predictors of teachers' attitudes related to trauma-informed care.

Counselors working in schools can provide professional development to teachers and school personnel that trains them to build strong relationships with students by responding empathetically to those who have experienced trauma. The results of this study indicate that counselors working in schools should develop trauma-informed professional development training based on an empirical framework that helps teachers recognize their own stress response, with an emphasis on compassion satisfaction and burnout. In addition, the results of this study demonstrate the importance of counselor preparation and teacher preparation programs offering specific trauma-informed courses or infusing trauma-informed principles into existing coursework. This would prepare counselors working in schools to effectively train teachers in trauma-informed approaches and familiarize pre-service teachers with trauma-informed principles.

Counselors, counselor educators, and teachers have important roles in effectively addressing childhood adversity yet doing so also calls for systemic change. Federal, state, and local policy-makers can benefit from the results of this study by considering trauma-informed delivery, compassion satisfaction, and burnout aspects of trauma-informed

training when drafting, proposing, and enacting policy that addresses childhood trauma. Dr. Robert Block, former President of the American Academy of Pediatrics, refers to childhood adversity as, “The single greatest unaddressed health threat facing our nation today” (Kidango, 2019). Counselors working in schools, counselor educators, teacher educators, and lawmakers can provide the framework, support, and services necessary to help change the trajectory of children facing adversity and experiencing toxic stress.

Finally, the words of President Barack Obama capture the true essence of this study and the ambition of trauma-informed care:

> …Life doesn’t count for much unless you’re willing to do your small part to leave our children – ALL of our children – a better world. Even if it’s difficult. Even if the work seems great. Even if we don’t get very far in our lifetime (para 29)…the greatest gift we can pass on to our children (is) the gift of hope. I’m not talking about an idle hope that’s little more than blind optimism or willful ignorance of the problems we face. I’m talking about hope as that spirit inside us that insists, despite all evidence to the contrary, that something better is waiting for us if we’re willing to work for it and fight for it. (Obama, 2008, para 24)

REFERENCES

Alisic, E. (2012). Teachers' perspectives on providing support to children after trauma: A qualitative study. *School Psychology Quarterly, 27*(1), 51–59. doi:10.1037/a0028590

Alisic, E., Bus, M., Dulack, W., Pennings, L., & Splinter, J. (2012). Teachers' experiences supporting children after traumatic exposure. *Journal of Traumatic Stress*, *25*(1), 98–101. doi:10.1002/jts.20709

Alvarez, A. (2017). Seeing their eyes in the rearview mirror: Identifying and responding to students' challenging experiences. *Equity & Excellence in Education*, *50*(1), 53–67.

American School Counselor Association (2019). Retrieved from https://www.schoolcounselor.org/school-counselors-members/asca-national-model

American School Counselor Association (2012). *The ASCA National Model: A Framework for School Counseling Programs* (3rd Ed). American School Counselor Association: Alexandria, VA.

American Psychiatric Association. (1980). *Diagnostic and statistical manual of mental disorders* (3th ed.). Washington, DC: Author.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.

American Psychological Association (2018). *APA dictionary of psychology*. Retrieved from https://dictionary.apa.org/helping-professions

Anda, R. F., Felitti, V. J., Bremner, J. D., Walker, J. D., Whitfield, C. H., Perry, B. D., ...Giles, W. H. (2006). The enduring effects of abuse and related adverse experiences in childhood: A convergence of evidence from neurobiology and epidemiology. *European Archives of Psychiatry and Clinical Neuroscience, 256*(3), 174-186. doi:10.1007/s00406-005-0624-4

Anderson, E. M., Blitz, L. V., & Saastamoinen, M. (2015). Exploring a school–university model for professional development with classroom staff: Teaching trauma-informed approaches. *The School Community Journal*, *25*(2), 113–134. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2016-00631-006&authtype=shib&site=ehost-live&scope=site

Arens, A. K. & Morin, A. J. S. (2016). Relations between teachers' emotional exhaustion and students' educational outcomes. *Journal of Eductional Psychology, 108*(6), 800-813. doi:10.1037/edu0000105

Baker, C. N., Brown, S. M., Wilcox, P., Verlenden, J. M., Black, C. L., & Grant, B.-J. E. (2018). The implementation and effect of trauma-informed care within residential youth services in rural Canada: A mixed methods case study. *Psychological Trauma: Theory, Research, Practice, and Policy, 10*(6), 666–674. doi:10.1037/tra0000327.supp (Supplemental)

Baker, C. N., Brown, S. M., Wilcox, P. D., Overstreet, S., & Arora, P. (2016). Development and psychometric evaluation of the Attitudes Related to Trauma-Informed Care (ARTIC) Scale. *School Mental Health: A Multidisciplinary Research and Practice Journal*, *8*(1), 61–76. doi:10.1007/s12310-015-9161-0

Barile, J. P., Edwards, V. J., Dhingra, S. S., & Thompson, W. W. (2015). Associations among county-level social determinants of health, child maltreatment, and emotional support on health-related quality of life in adulthood. *Psychology of Violence, 5*(2), 183–191. doi:10.1037/a0038202

Bartlett, J. M., Wilson, A., Anderson Moore, K., & Redd, Z. (2016). 5 ways trauma-informed care supports children's development. Child Trends, April 19. Retrieved from https://www.childtrends.org/child-trends-5/5-ways-trauma-informed-care-supports-childrens-development

Beck, C. T. (2011). Secondary traumatic stress in nurses: A systematic review. *Archives of Psychiatric Nursing, 25*, 1–10. doi:10.1016/j.apnu.2010.05.005

Bell, H., Limberg, D. & Robinson III, E. (2013) Recognizing trauma in the classroom: A practical guide for educators. *Childhood Education, 89*(3), 139-145. doi:10.1080/00094056.2013.792629

Berger, R., Abu-Raiya, H., & Benatov, J. (2016). Reducing primary and secondary traumatic stress symptoms among educators by training them to deliver a resiliency program (ERASE-Stress) following the Christchurch earthquake in New Zealand. *American Journal of Orthopsychiatry, 86*(2), 236–251. doi:10.1037/ort0000153

Berkhout, W. E. (2019). *Déjà Vu: Assessing adverse childhood experiences & attitudes towards trauma-informed care among residential treatment staff*. *Dissertation Abstracts International: Section B: The Sciences and Engineering*. ProQuest Information & Learning. Retrieved from

http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2018-52508-193&authtype=shib&site=ehost-live&scope=site

Bethell, C. D., Davis, M.B., Gombojav, N., Stumbo, S., & Powers, K. (October, 2017). Issue Brief: Adverse childhood experiences among US children. *Child and Adolescent Health Measurement Initiative, Johns Hopkins Bloomberg School of Public Health*. Retrieved from https://www.cahmi.org/wp-content/uploads/2018/05/aces_fact_sheet.pdf

Bixler-Funk, A.-M. (2019). *Preservice teachers' perceptions of preparedness in supporting students who have experienced trauma*. *Dissertation Abstracts International Section A: Humanities and Social Sciences*. ProQuest Information & Learning. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2019-41126-088&authtype=shib&site=ehost-live&scope=site

Blaustein, M. E. (2013). Childhood trauma and a framework for intervention. In E. Rossen & R. Hull (Eds.), *Supporting and educating traumatized students: A guide for school-based professionals.* (pp. 3–21). New York, NY: Oxford University Press.

Blodgett, C., & Zorrah, Q. (2012, January 20). Adverse childhood experiences and public health practice [Webinar]. In *Maternal and Child Health Webinar Series.* Retrieved from http://www.nwcphp.org/training/adverse-childhood-experiences-and-public-health-practice

Blodgett, C. (2015). Forward for *Fostering Resilient Learners* by Kristin Souers and Pete Hall. Retrieved from http://www.ascd.org/publications/books/116014/chapters/Foreword.aspx

Blodgett, C., & Dorado, J. (2016). *A selected review of trauma-informed school practice and alignment with educational practice*. Trauma-Informed School Practices. California Endowment*:* San Francisco, CA.

Bloom, S. L. (1994). *The Sanctuary Model: Developing Generic Inpatient Programs for the Treatment of Psychological Trauma. Handbook of Post-Traumatic Therapy, A Practical Guide to Intervention, Treatment, and Research.* M. B. Williams and J. F. Sommer, Greenwood Publishing: 474-491.

Bloom, S.L. (1999, October). Trauma theory abbreviated. *From the Final Action Plan: A Coordinated Community Response to Family Violence.* P 1-17

Borntrager, C., Caringi, J. C., van den Pol, R., Crosby, L., O'Connell, K., Trautman, A., & McDonald, M. (2012). Secondary traumatic stress in school personnel. *Advances in School Mental Health Promotion*, *5*(1), 38–50. doi:10.1080/1754730X.2012.664862

Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research Perspectives. *Developmental Psychology*, *22*(6), 723-742. doi:10.1037/0012-1649.22.6.723

Brown, L. (2017). *The impact of reflective supervision on early childhood educators of at-risk children: Fostering compassion satisfaction and reducing burnout.* Dissertation Abstracts International: Section B: The Sciences and Engineering. ProQuest Information & Learning. Retrieved from

http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2017-05719-226&authtype=shib&site=ehost-live&scope=site

Brunzell, T., Stokes, H., & Waters, L. (2016) Trauma-informed positive education: Using positive psychology to strengthen vulnerable students. *Contemporary School Psychology, 20*(1), 63–83. doi:10.1007/s40688-015-0070-x

Bullough, R. V. (2019). Empathy, teaching dispositions, social justice and teacher education. *Teachers and Teaching: Theory and Practice, 25*(5). 507-522. doi:10.1080/13540602.2019.1602518

Butler, L., Carello, J., & Maguin, E. (2016). Trauma, stress, and self-care in clinical training: Predictors of burnout, decline in health status, secondary traumatic stress symptoms, and compassion satisfaction. *Psychological Trauma: Theory, Research, Practice, and Policy, 9,* 1-10. doi:10.1037/tra0000187

Callagaro, M. (2008). Social desirability. In Paul J. Lavrakas (Eds.), *Encyclopedia of Survey Research Methods.* Thousand Oaks, CA: SAGE Publications, Inc. doi:10.4135/97814129639

Cavanaugh, B. (2016). Trauma-informed classrooms and schools. *Beyond Behavior*, *25*(2), 41–46. doi:10.1177/107429561602500206

Centers for Disease Control (CDC; 2019). Adverse childhood experiences (ACEs). Retrieved from https://www.cdc.gov/violenceprevention/childabuseandneglect/acestudy/index.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fviolenceprevention%2Facestudy%2Findex.html

Chafouleas, S. M., Johnson, A. H., Overstreet, S., & Santos, N. M. (2016). Toward a blueprint for trauma-informed service delivery in schools. *School Mental Health: A Multidisciplinary Research and Practice Journal, 8*(1), 144–162. doi:10.1007/s12310-015-9166-8

Chaverri, J., Praetorius, R. T., & Ruiz, E. (2018). Counselor happiness: Effects of therapy work with similar trauma. *Social Work in Mental Health, 16*(4), 419–435. doi:10.1080/15332985.2017.1419535

Chen, S., & Phillips, B. (2018). Exploring teacher factors that influence teacher-child relationships in Head Start: A grounded theory. *The Qualitative Report, 23*(1), 80-97. Retrieved from https://nsuworks.nova.edu/tqr/vol23/iss1/6

Cohen, J. (1992). A power primer. *Psychological Bulletin, 112*(1), 155–159. https://doi.org/10.1037/0033-2909.112.1.155

Collins, S. & Long, A. (2003). Working with the psychological effects of trauma: Consequences for mental healthcare workers—A literature review. *Journal of Psychiatric Mental Health Nursing, 10,* 417–424.

Council for Accreditation of Counseling and Related Educational Programs (CACREP; 2016). *CACREP 2016 Standards. Section 5: School Counseling*. Retrieved from https://www.cacrep.org/section-5-entry-level-specialty-areas-school-counseling/

County Health Rankings and Roadmaps (2019). Retrieved from https://www.countyhealthrankings.org/

Craig, S. E. (2016). *Trauma-sensitive schools: Learning communities transforming children's lives, K-5*. New York, NY: Teachers College Press.

Dagan, S. W., Ben-Porat, A., & Itzhaky, H. (2016). Child protection workers dealing with child abuse: The contribution of personal, social and organizational resources to secondary traumatization. *Child Abuse & Neglect, 51,* 203–211. doi:10.1016/j.chiabu.2015.10.008

De Bellis, M. D. (2001). Developmental traumatology: The psychobiological development of maltreated children and its implications for research, treatment, and policy. *Development and Psychopathology*, *13*(3), 539–564. doi:10.1017/S0954579401003078

De Bellis, M. D., & Zisk, A. (2014). The biological effects of childhood trauma. *Child and Adolescent Psychiatric Clinics of North America, 23*(2), 185–222. doi:10.1016/j.chc.2014.01.002

DeKonty, E. (2018). Resilience and learning: The first year on an important journey. *Public School Forum of North Carolina*. Retrieved from https://www.ncforum.org/resilience-learning-the-first-year-on-an-important-journey/

Department of Family Protective Service (Texas; 2008) H.R. 6893, *Fostering Connections to Success and Increasing Adoptions Act*, *C.S.S.B. 1411*. Retrieved from https://capitol.texas.gov/tlodocs/81R/analysis/pdf/SB01411H.pdf

Dube, S. R., Anda, R. F., Felitti, V. J., Chapman, D. P., Williamson, D. F., & Giles, W. H. (2001). Childhood abuse, household dysfunction, and the risk of attempted suicide throughout the life span: Findings from the Adverse Childhood Experiences study. *Journal of the American Medical Association, 286*(24), 3089-3096.

Dube, S. R., Dong, M., Chapman, D. P., Giles, W. H., Anda, R. F., & Felitti, V. J. (2003). Childhood abuse, neglect, and household dysfunction and the risk of illicit drug use: The adverse childhood experiences study. *Pediatrics, 111*(3), 564–572. doi:10.1542/peds.111.3.564

Dube, S. R., Williamson, D. F., Thompson, T., Felitti, V. J., & Anda, R. F. (2004). Assessing the reliability of retrospective reports of adverse childhood experiences among adult HMO members attending a primary care clinic. *Child Abuse & Neglect, 28*(7), 729–737. doi:10.1016/j.chiabu.2003.08.009

Educators for Excellence (2018). 2018 Voices from the classroom: A survey of America's educators. Retrieved from https://e4e.org/news/2018-voices-classroom-survey-americas-educators

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., … Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine, 14*(4), 245–258. doi:10.1016/S0749-3797(98)00017-8

Figley, C. R. (1982). *Traumatization and comfort: Close relationships may be hazardous to your health.* Paper presented at the Keynote address for Families and Close Relationships: Individuals in Social Interaction, Conference at Texas Tech University, Lubbock, TX.

Figley, C.R. (Ed.) (1995). *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized.* New York: Brunner/Mazel.

Figley, C. R., & Stamm, B. H. (1996). Psychometric review of compassion fatigue self-test. In B. H. Stamm (Ed.), *Measurement of Stress, Trauma and Adaptation.* Baltimore: Sidran Press.

Finkelhor, D., Turner, H. A., Shattuck, A., Hamby, S. L. & Sherry, L. (2013). Violence, crime, and abuse exposure in a national sample of children and youth: An update. *JAMA Pediatrics, 167(7)*, 614–621. doi:10.1001/jamapediatrics.2013.42

Ford, D. H., & Lerner, R. M. (1992). *Developmental systems theory: An integrative approach.* Newbury Park, CA: Sage.

Fowler, M. (2015). Dealing with compassion fatigue. *Education Digest*, *81*(3), 30–35. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=trh&AN=110462845&authtype=shib&site=ehost-live&scope=site

Freud, S. (1896). *Further Remarks on the Neuro-Psychoses of Defense*. Standard Edition, Vol. 3. London: Hogarth Press.

Garner, A. S., & Shonkoff, J. P. (2012). Early childhood adversity, toxic stress, and the role of the pediatrician: translating developmental science into lifelong health. Committee on Psychosocial Aspects of Child and Family Health. Committee on Early Childhood, Adoption, and Dependent Care. Section on Developmental and Behavioral Pediatrics. *Pediatrics, 129(1*).

Goodson, Lori (2019). Revealing our superpowers: An autoethnography on childhood abuse and how it shapes educators, *Educational Considerations*, *44*(2). doi:10.4148/0146-9282.2184

Goodwin-Glick, K. L. (2017, January 1). *Impact of Trauma-Informed Care Professional Development on School Personnel Perceptions of Knowledge, Dispositions, and Behaviors toward Traumatized Students*. *ProQuest LLC*. ProQuest LLC. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED576073&authtype=shib&site=ehost-live&scope=site

Greene, R.R., Galambos, C., & Lee, Y. (2004) Resilience Theory*, Journal of Human Behavior in the Social Environment, 8*(4), 75-91. doi:10.1300/J137v08n04_05

Greenberg, M. T., Brown J. L., & Abenavoli, R. M. (2016). *Teacher stress and health effects on teachers, students, and schools.* [Video]. Edna Bennett Pierce Prevention Research Center, Pennsylvania State University.

Grybush, A. L., & Post, P. B. (Manuscript in progress). Trauma-informed care in classrooms: Child-teacher relationship training.

Gubi, A. A. (2019) Trauma-informed knowledge and practices in school psychology: A pilot study and review." *Journal of applied school psychology, 35*(2), 176–199.

Haas, L. (2018, January 1). *Trauma-Informed Practice: The Impact of Professional Development on School Staff*. *ProQuest LLC*. ProQuest LLC. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED585010&authtype=shib&site=ehost-live&scope=site

Helker, W., & Ray, D. (2009). Impact of child teacher relationship training on teachers' and aides' use of relationship-building skills and the effects on student classroom behavior. *International Journal of Play Therapy, 18*(2), 70–83. doi:10.1037/a0014456

Herman, K. C., Hickmon-Rosa, J., & Reinke, W. M. (2018). Empirically derived profiles of teacher stress, burnout, self-efficacy, and coping and associated student outcomes. *Journal of Positive behavior Interventions, 20,*(2), 90-100. doi:10.1177/1098300717732066

Hupe, T. M., & Stevenson, M. C. (2019). Teachers' intentions to report suspected child abuse: The influence of compassion fatigue. *Journal of Child Custody: Research, Issues, and Practices*. doi:10.1080/15379418.2019.1663334

Hydon, S., Wong, M., Langley, A. K., Stein, B. D., & Kataoka, S. H. (2015). Preventing secondary traumatic stress in educators. *Child and Adolescent Psychiatric Clinics of North America, 24,* 319–333. doi:10.1016/j.chc.2014.11.003

Jensen, E. (2009). *Teaching with poverty in mind: What being poor does to kids' brains and what schools can do about it*. Alexandria, VA: Association for Supervision and Curriculum Development.

Jordan-Cox, C. (2018). *Examining trauma and the trauma-informed care environment: The relationship between clinician history of childhood trauma and attitudes about trauma-informed care performance in substance use disorder treatment agencies*. *Dissertation Abstracts International: Section B: The Sciences and Engineering*. ProQuest Information & Learning. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2018-40527-186&authtype=shib&site=ehost-live&scope=site

Kalisch, R., Müller, M. B., & Tüscher, O. (2014). A conceptual framework for the neurobiological study of resilience. *Behavioral and Brain Sciences*, *38*. Retrieved from

https://librarylink.uncc.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2015-59223-001&login.asp&site=ehost-live&scope=site

Kees, N. L., & Lashwood, P. A. (1996). Compassion Fatigue and School Personnel: Remaining Open to the Affective Needs of Students. Educational Horizons, 75(1), 41–44. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ533631&authtype=shib&site=ehost-live&scope=site

Knight, C. (2010). Indirect trauma in the field practicum: secondary traumatic stress, vicarious trauma, and compassion fatigue among social work students and their field instructors. *Journal of Baccalaureate Social Work, 15*(1), 31–52.

Knight, C. (2015). Trauma-informed social work practice: Practice considerations and challenges. *Clinical Social Work Journal, 43*(1), 25–37. doi:10.1007/s10615-014-0481-6

Koenig, A., Rodger, S., & Specht, J. (2018). Educator Burnout and Compassion Fatigue: A Pilot Study. *Canadian Journal of School Psychology*, *33*(4), 259–278. doi:10.1177/0829573516685017

Lawson, G. (2017). The alphabet of trauma-informed treatment. *Counseling Today*, *60*(4), 5. Retrieved from https://librarylink.uncc.edu/login?url=http://search.ebscohost.com.librarylink.uncc.edu/login.aspx?direct=true&db=ehh&AN=126685752&login.asp&site=ehost-live&scope=site

Leitch, L. (2017). Action steps using ACEs and trauma-informed care: a resilience model. *Health and Justice, 5*, 1-10. doi:10.1186/s40352-017-0050-5

Lepore, C. E. (2017). *The prevention of preschool teacher stress: Using mixed methods to examine the impact of reflective supervision*. *Dissertation Abstracts International: Section B: The Sciences and Engineering*. ProQuest Information & Learning. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2017-10863-133&authtype=shib&site=ehost-live&scope=site

Ludy-Dobson, C. R., & Perry, B. D. (2010). The role of healthy relational interactions in buffering the impact of childhood trauma. In E. Gil, E. Gil (Eds.), *Working with children to heal interpersonal trauma: The power of play* (pp. 26-43). New York, NY, US: Guilford Press.

Maccoby, E. E., & Maccoby, N. (1954). The interview: A tool of social science. In G. Lindzey (Ed.), *Handbook of social psychology: Vol. 1. Theory and method* (pp. 449-487). Reading, MA: Addison-Wesley

Marchitello, M. & Trinidad, J. (2019). Preparing teachers for diverse schools: Lessons from minority serving institutions. Bellwether Education Partners. Retreived from https://bellwethereducation.org/sites/default/files/Preparing%20Teachers%20for%20Diverse%20Schools_Bellwether.pdf

Martin-Cuellar, A., Atencio, D. J., Kelly, R. J., & Lardier, D. T. (2018). Mindfulness as a moderator of clinician history of trauma on compassion satisfaction. *Family Journal, 26*(3), 358–368. doi:10.1177/1066480718795123

Massachusetts Advocates for Children and Harvard Law School (2013). Creating and Advocating for Trauma-Sensitive Schools, safe, supportive learning environments that benefit all children. *Helping Traumatized Children Learn, (2).* Retrieved

from https://traumasensitiveschools.org/wp-content/uploads/2013/11/HTCL-Vol-2-Creating-and-Advocating-for-TSS.pdf

Masten, A. S. (2018). Resilience theory and research on children and families: Past, present, and promise. *Journal of Family Theory & Review*. doi:10.1111/jftr.12255

McGruder, K. (2019). Children learn what they live: Addressing early childhood trauma resulting in toxic stress in schools. *Mid-Western Educational Researcher*, *31*(1), 117–137. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=ehh&AN=137862411&authtype=shib&site=ehost-live&scope=site

McIntyre, E. M., Baker, C. N., & Overstreet, S. (2019). Evaluating foundational professional development training for trauma-informed approaches in schools. *Psychological Services*, *16*(1), 95–102. doi:10.1037/ser0000312.supp (Supplemental)

McKenzie-Mohr, S. (2004) Creating space for radical trauma theory in generalist social work education. *Journal of Progressive Human Services, 15*(2), 45-55. doi:10.1300/J059v15n02_03

Merrick, M., Ford, D., Ports, K., & Guinn, A. (2018). Prevalence of adverse childhood experiences from the 2011-2014 behavioral risk factor surveillance system in 23 states. *JAMA Pediatrics,* E1-E7. doi:10.1001/jamapediatrics.2018.2537

Mersky, J.P., Topitzes, J. & Reynolds, A.J. (2013). Impacts of adverse childhood experiences on health, mental health, and substance use in early adulthood: a cohort study of an urban, minority sample in the U.S. *Journal of Child Abuse and Neglect, 37,* 17-25. doi:10.1016/j.chiabu.2013.07.011

Mertens, D.M. (2015). *Research and evaluation in education and psychology.* Thousand Oaks, CA: SAGE.

Monsen, J. J., Ewing, D. L., & Kwoka, M. (2014). Teachers' attitudes towards inclusion, perceived adequacy of support and classroom learning environment. *Learning Environments Research*, *17*(1), 113–126. doi:10.1007/s10984-013-9144-8

Morrison Bennett, M., & Bratton, S. (2011). The effects of child teacher relationship training on the children of focus: A pilot study. *International Journal of Play Therapy, 20*(4), 193–207. doi:10.1037/a0025833

Morton, B. & Berardi, A. A. (2017). Trauma-informed school programming: Applications for mental health professionals and educator partnerships. *Journal of Child and Adolescent Trauma, 11*, 487-493. doi:10.1007/s40653-017-0160-1

Mortensen, J. A., & Barnett, M. A. (2016). The role of childcare in supporting the emotion regulatory needs of maltreated infants and toddlers. *Child and Youth Services Review, 64*, 73–81.

National Center for Educational Statistics (2006). *Rural education in America.* Retrieved from https://nces.ed.gov/surveys/ruraled/definitions.asp

National Child Traumatic Stress Network (n.d.). Retrieved from https://www.nctsn.org/what-is-child-trauma/about-child-trauma

National Child Traumatic Stress Network, Schools Committee. (2017). *Creating, supporting, and sustaining trauma-informed schools: A system framework.* Los Angeles, CA, and Durham, NC: National Center for Child Traumatic Stress.

Niimura, J., Nakanishi, M., Okumura, Y., Kawano, M., & Nishida, A. (2019). Effectiveness of 1- day trauma-informed care training programme on attitudes in

psychiatric hospitals: A pre–post study. *International Journal of Mental Health Nursing, 28*(4), 980–988. doi:10.1111/inm.12603

North Carolina Department of Public Instruction (2019). Retrieved from http://www.dpi.state.nc.us/profdev/

North Carolina Public School Forum (n.d.). Retrieved from https://www.ncforum.org/nc-resilience-and-learning/

North Carolina Resilience and Learning Project (2018). Retrieved from https://www.ncforum.org/wp-content/uploads/2018/10/Resilience-Learning-October-2018-Update.pdf

Novick, D. (2017). Bringing trauma-informed care to children in need can ease toxic stress. *Stat (Dec 6, 2017). Rick Berke, Executive Ed.* Retrieved from https://www.statnews.com/2017/12/06/trauma-children-toxic-stress/

Office of Management and Budget (2000). Retrieved from https://nces.ed.gov/surveys/ruraled/definitions.asp

Overstreet, S., & Chafouleas, S. M. (2016). Trauma-informed schools: Introduction to the special issue. *School Mental Health: A Multidisciplinary Research and Practice Journal, 8*(1), 1–6. doi:10.1007/s12310-016-9184-1

Perry, B. D. (2006). Applying principles of neurodevelopment to clinical work with maltreated and traumatized children: the neurosequential model of therapeutics. In N. Boyd Webb (Ed.), *Working with Traumatized Youth in Child Welfare*. New York: The Guildford Press.

Phifer, L. W., & Hull, R. (2016). Helping students heal: Observations of trauma-informed practices in the schools. *School Mental Health, 8*(1), 201-205. doi:10.1007/s12310-016- 9183-2

Petrovic, L. (2018). *Examining STS, burnout, and self-efficacy among teachers* (Unpublished master's thesis). Tulane University, Lousiana. Retrieved from https://digitallibrary.tulane.edu/islandora/object/tulane%3A83014/datastream/PDF/view

Pianta, R. C, & Walsh, D. J. (1996). *High-risk children in schools: Constructing sustaining relationships.* New York: Routledge.

Pobuk, D. (2019). *Understanding and responding to trauma in an elementary school setting*. *Dissertation Abstracts International Section A: Humanities and Social Sciences*. ProQuest Information & Learning. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2019-46351-182&authtype=shib&site=ehost-live&scope=site

Portnoy, D. (2011). Burnout and compassion fatigue: Watch for the signs. *Health Progress, The Catholic Health Association of the United States*. Retrieved from *https://test.chausa.org/publications/health-progress/article/july-august-2011/burnout-and-compassion-fatigue-watch-for-the-signs*.

Post, P. B., Grybush, A. L., Elmadani, A., & Lockhart, C. E. (2019). Fostering resilience in classrooms through child–teacher relationship training. *International Journal of Play Therapy*. doi:10.1037/pla0000107

Post, P. B., Grybush, A. L., Flowers, C., & Elmadani, A. (2020). Impact of child-teacher relationship training on teacher attitudes and classroom behaviors. *International*

Journal of Play Therapy. Advance online publication. doi:http://dx.doi.org/10.1037/pla0000118

Public Schools First NC (n.d.). *The facts on rural schools in NC.* Retrieved from https://www.publicschoolsfirstnc.org/wp-content/uploads/2020/03/Facts-on-Rural-Schools-3.4.20.pdf

Public School Forum of NC (n.d.). Retrieved from https://www.ncforum.org/

Radney M., & Figley, C. R. (2007). The social psychology of compassion. *Clinical Social Work Journal, 35*, 207–214. doi:10.1007/s10618-007-0087-3

Reinbergs, E., & Fefer, S. A. (2018). Addressing trauma in schools: Multitiered service delivery options for practitioners. *Psychology in Schools, 55*, 250–263. doi:10.1002/pits.22105

Reinke, W. M., Stormont, M., Herman, K. C., Puri, R., & Goel, N. (2011). Supporting children's mental health in schools: Teacher perceptions of needs, roles, and barriers. *School Psychology Quarterly, 26*(1), 1–13. doi:10.1037/a0022714

Robinson, B. C. (2006). *Exploring career satisfaction, burnout, and compassion fatigue as indicators of the quality of career engagement of public school educators. Dissertation Abstracts International: Section B: The Sciences and Engineering. ProQuest Information & Learning.* Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2006-99012-274&authtype=shib&site=ehost-live&scope=site

Rudenstine, S., Espinosa, A., McGee, A. B., & Routhier, E. (2019). Adverse childhood events, adult distress, and the role of emotion regulation. *Traumatology, 25*(2), 124–132. doi:10.1037/trm0000176

Sabin-Farrell, R., & Turpin, G. (2003). Vicarious traumatization: Implications for the mental health of health workers? *Clinical Psychology Review, 23*(3), 449. doi:10.1016/s0272-7358(03)00030-8

Sacks, V. & Murphey, D. (2018, February 12). The prevalence of adverse childhood experiences, nationally, by state, and by race/ethnicity. *Child Trends, Inc.* Retrieved from https://www.childtrends.org/publications/prevalence-adverse-childhood-experiences-nationally-state-race-ethnicity

Santa, J. (2017). *The impact of secondary traumatic stress on urban educators in schools with high at risk student populations*. *Dissertation Abstracts International Section A: Humanities and Social Sciences*. ProQuest Information & Learning. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2016-53069-233&authtype=shib&site=ehost-live&scope=site

Sciaraffa, M. A., Zeanah, P. D., & Zeanah, C. H. (2018). Understanding and promoting resilience in the context of adverse childhood experiences. *Early Childhood Education Journal*, *46*(3), 343-353. doi:10.1007/s10643-017-0869-3

Sepulveda, C., Garza, Y., & Morrison, M. O. (2011). Child teacher relationship training: A phenomenological study. *International Journal of Play Therapy, 20(1),* 12-25. doi:10.1037/a0021938

Shapiro, F. (2018). *Eye movement desensitization and reprocessing (EMDR) therapy: Basic principles, protocols, and procedures*, 3rd ed. New York, NY: Guilford Press.

Sharp Donahoo, L. M., Siegrist, B., & Garrett-Wright, D. (2018). Addressing compassion fatigue and stress of special education teachers and professional staff using

mindfulness and prayer. *Journal of School Nursing, 34*(6), 442–448. doi:10.1177/1059840517725789

Shonkoff, J. P., Garner, A. S., Siegel, B. S., Dobbins, M. I., Earls, M. F., Garner, A. S., … Wood, D. L. (2012). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics, 129*(1), e232–e246. https://doi.org/10.1542/peds.2011-2663

Smitson, W. (2013). Trauma-informed: Cognitive behavioral treatment. *Central Clinic Connections* (Fall 2013. p.1). Retrieved from http://www.centralclinic.org/wp-content/uploads/2013/11/2013-Fall.pdf

Stamm, B. (2005). *The ProQOL manual: Professional quality of life scale: Compassion satisfaction, burnout, and compassion fatigue/secondary trauma scales.* Brooklandville, MD: Sidran Press.

Stamm, B.H. (2010). *The Concise ProQOL Manual*. Pocatello, ID: ProQOL.org.

Steele, H., Bate, J., Steele, M., Dube, S. R., Danskin, K., Knafo, H., … Murphy, A. (2016). Adverse childhood experiences, poverty, and parenting stress. *Canadian Journal of Behavioural Science / Revue Canadienne Des Sciences Du Comportement*, *48*(1), 32–38. doi:10.1037/cbs0000034

Strait, J. & Bolman, T. (2017). Consideration of personal adverse experiences during implantation of trauma-informed care curriculum in graduate health programs. *The Permanente Journal, 21.* 16-061. doi:10.7812/TPP/16-061

Stulmaker, H. (2013). Counseling-based teacher interventions: Defining, exploring, and differentiating. *International Journal of Play Therapy*, *22*(1), 2–12. doi:10.1037/a0030195

Substance Abuse and Mental Health Services Administration, (2014). *SAMHSA's Concept of Trauma and Guidance for a Trauma-Informed Approach*. Rockville, MD: Substance Abuse and Mental Health Services Administration.

Sulkowski, M. L., & Michael, K. (2014). Meeting the mental health needs of homeless students in schools: A Multi-Tiered System of Support framework. *Children and Youth Services Review, 44,* 145-151.

Thomas, M. S., Crosby, S., & Vanderhaar, J. (2019). Trauma-informed practices in schools across two decades: An interdisciplinary review of research. *Review of Research in Education, 43*(1), 422–452. doi:10.3102/0091732X18821123

Trippany, R. L., White Kress, V. E., & Wilcoxen, S. A. (2004). Preventing vicarious trauma: What counselors should know when working with trauma survivors. *Journal of Counseling & Development*, 82(1), 31–37. doi:10.1002/j.1556-6678.2004.tb00283.x

Ungar, M., & Perry, B. D. (2012). Violence, trauma, and resilience. In R. Alaggia & C. Vine (Eds.), *Cruel but not unusual: violence in Canadian families* (2nd ed; pp 119-144). Waterloo, ON: Wilfrid Laurier University Press.

United Nations International Children's Emergency Fund (UNICEF; 2005). Retrieved from https://www.unicef.org/sowc05/english/childhooddefined.html

United States Census Bureau (2018). American Community Survey 1-year estimates. Retrieved from http://censusreporter.org/profiles/97000US3704050-rowan-salisbury-schools-nc/

United States Census Bureau (2018). Retrieved from https://statisticalatlas.com/school-district/North-Carolina/Rowan-Salisbury-Schools/Household-Income

United States Department of Education (2018). *Improving basic programs operated by local educational Agencies (Title I, Part A).* Retrieved from https://www2.ed.gov/programs/titleiparta/index.html

United States Department of Education (2012). National Center for Education Statistics, Schools and Staffing Survey (SASS), *"Public School Teacher Data File,"*.

United States Department of Education (2016). Office of Planning, Evaluation and Policy Development, Policy and Program Studies Service. *The State of Racial Diversity in the Educator Workforce*, Washington, D.C.

van der Embse, N., Ryan, S. V., Gibbs, T., & Mankin, A. (2019). Teacher stress interventions: A systematic review. *Psychology in the Schools, 56*(8), 1328–1343. https://doi.org/10.1002/pits.22279

van der Kolk, B. A. (1989). The compulsion to repeat the trauma: Re-enactment, revictimization, and masochism. *Psychiatric Clinics of North America*, *12*(2), 389–411. Retrieved from https://librarylink.uncc.edu/login?url=http://search.ebscohost.com.librarylink.uncc.edu/login.aspx?direct=true&db=psyh&AN=1990-01671-001&site=ehost-live&scope=site

van der Kolk, B. (2003) *Developmental Trauma Disorder, toward a rational diagnosis for children with complex trauma histories*. Psychiatric Annals, 35:5.

Vespa, J., Medina, L., & Armstrong, D. M. (2018). *Demographic turning points for the United States: Population projections for 2020 to 2060*. Retrieved from https://www.census.gov/content/dam/Census/library/publications/2020/demo/p25-1144.pdf

Wade, R, Jr., Shea, J. A., Rubin, D., & Wood, J. (2014). Adverse childhood experiences of low-income urban youth. *Pediatrics, 134(1),* e13–e20. doi:10.1542/peds.2013-2475

Waggoner, D. M. (2019). *Responding to students exposed to community violence: A mixed methods study of teachers' perceptions of trauma-informed service delivery*. *Dissertation Abstracts International: Section B: The Sciences and Engineering*. ProQuest Information & Learning. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2018-52508-280&authtype=shib&site=ehost-live&scope=site

Weathers, F. W., & Keane, T. M. (2007). The Criterion A problem revisited: Controversies and challenges in defining and measuring psychological trauma. *Journal of Traumatic Stress*, *20*(2), 107–121. doi:10.1002/jts.20210

Wendel, E. L. (2018). *Assessing teacher attitudes related to trauma-informed care in three urban high schools. Dissertation Abstracts International:* ProQuest Information & Learning. Retrieved from https://repositories.lib.utexas.edu/handle/2152/73936

Wiest-Stevenson, C., & Lee, C. (2016). Trauma-informed schools. *Journal of Evidence-Informed Social Work, 13*(5), 498–503. doi:10.1080/23761407.2016.1166855

Wilkin, L., & Hillcock, S. (2014). Enhancing MSW students' efficacy in working with trauma, violence, and oppression: An integrated feminist-trauma framework for social work education. *Feminist Teacher*, *24*(3), 184–206. doi:10.5406/femteacher.24.3.0184

Wright, T. (2014). Revisiting risk/rethinking resilience: Fighting to live versus failing to thrive. In M. Block, B. Swadener, & G.S Canella (Eds.), *Reconceptualizing Early Childhood Care and Education* (pp. 183–92). New York: Peter Lang.

Wolpow, R., Johnson, M., Hertel, R., & Kincaid, S. (2016). *The heart of learning and teaching: compassion, resiliency, and academic success*. Olympia: Washington State Office of Superintendent of Public Instruction Compassionate Schools.

Woodbridge, M. W., Sumi, W. C., Thornton, S. P., Fabrikant, N., Rouspil, K. M., Langley, A. K., & Kataoka, S. H. (2016). Screening for trauma in early adolescence: Findings from a diverse school district. *School Mental Health: A Multidisciplinary Research and Practice Journal*, *8*(1), 89–105. doi:10.1007/s12310-015-9169-5

Zimmerman M. A. (2013). Resiliency theory: a strengths-based approach to research and practice for adolescent health. *Health education & behavior: The official publication of the Society for Public Health Education, 40*(4), 381-3. doi:10.1177/1090198113493782

APPENDIX A: RESOURCES FOR PARTICIPANTS

The following are a list of resources that are available to you should you want additional support or information regarding childhood adversity.

Nazareth Child and Family Connection
https://www.nazcfc.org/
1.888.207.0250 phone

North Carolina Department of Health and Human Services
https://www.ncdhhs.gov/providers/provider-info/mh-dd-sas
1-800-662-7030 phone

NAMI – North Carolina
https://naminc.org/
1-800-451-9682 phone
(704) 637-6931 local
919-999-6527 text

ACEs too high
https://acestoohigh.com/

Harvard Center on the Developing Child
https://developingchild.harvard.edu/

Child Trends
https://www.childtrends.org/?s=ACEs

APPENDIX B: RECRUITMENT SCRIPT

Verbal Recruitment Script
Rowan-Salisbury Elementary Schools

I am seeking your participation in my doctoral dissertation research study that I am conducting within the Rowan-Salisbury School System (RSSS). Carol Ann Houpe, the Director of Student Services at RSSS, has agreed to allow the me to invite teachers at all elementary schools within the system to participate in this research study. The goal of this research project is to gain a better understanding of trauma-informed practices. The outcomes of this study will help us develop professional trainings to better support teachers who work with students facing adversities.

The purpose of this study is to examine how personal trauma histories, professional development training, and professional quality of life are related to attitudes toward trauma-informed care among elementary school teachers working in rural Title I schools in the Southeastern United States.

Your decision to participate the research study is completely **voluntary**. You may decide at any time to leave the study for any reason without explanation.

You are being asked to complete a paper and pencil assessment packet today which will take approximately 20 minutes. You will take the assessment during your planning period in a designated data collection room. You will be asked to spread out so that others will not see how you have responded or if you participated. If you choose not to participate, you may choose to remain in the room so that others cannot tell if you did not participate; simply remain in the room for however long you would like and return the unanswered survey packet to me. You are also free to leave the room immediately if you would prefer. All survey packets collected will be grouped together with other participants in the school, so your individual responses or whether you participated or not will always be unidentifiable.

The total time commitment for you is about 20 minutes today. There is no further time commitment.

Your **privacy will be protected.** Assessments will be taken in a room with the other teachers who share your planning period that is being utilized for data collection only. You will be asked to spread out within the room so that no one else will be able to see your responses. In addition, no identifying information about you will be collected. All data collected will be kept confidential.

There are risks to participating in this study. One of the assessments is about your adverse childhood experiences before you were 18 years old. While there is some risk, it is worth noting that although some participants feel discomfort recalling past traumas, 25% report a positive gain from participation. However, to minimize any discomfort associated with recalling these experiences from your childhood, **only the total number**

of ACE categories (0-10) is requested, **not which ACEs you have experienced**. The total number of ACEs will be recorded on a separate sheet of paper from the questionnaire. No information will be reported on the questionnaire. You will use it only to count. You may use dashes, X's, or hashmarks on the ACEs cover page to count the total number if you would prefer not to mark on the ACEs assessment itself. When you are done, if you prefer, you may keep the copy of the assessment or shred it in the shredder that is provided. In the event that you experience any discomfort from answering the questions, a separate sheet with a list of resources has been provided for you. In addition, I will be glad to talk with you privately following the completion of the assessments, should you prefer to speak one-on-one.

The **benefit for participation is** contributing to our understanding about ways to best support teachers as they work with children who live in poverty and who are likely to have experienced high levels of personal trauma.

Again, it is up to you to decide to be in this research study. **Participating in this study is voluntary**. Even if you decide to be part of the study now, you may change your mind and stop at any time. You do not have to answer any questions you do not want to answer.

For questions about this research, you may contact Amy Grybush or Phyllis Post, whose contact information is on the informed consent sheet that you have received. If you have questions about your rights as a research participant, or wish to obtain information, ask questions, or discuss any concerns about this study with someone other than the researcher(s), you may contact the UNC Charlotte Office of Research Compliance whose contact information is also on the informed consent sheet .

APPENDIX C: INFORMED CONSENT

UNC CHARLOTTE

Department of Counseling
9201 University City Boulevard, Charlotte, NC 28223-0001

Consent to Participate in a Research Study

Exploring attitudes related to trauma-informed care among teachers in rural Title I elementary schools: Implications for counselors and counselor educators

Principal Investigator:
Amy L. Grybush, LPCA, NCC
Doctoral Candidate, Counselor Education and Supervision
The University of North Carolina at Charlotte

Co-investigator and Faculty Advisor:
Phyllis Post, Ph.D., LPCS, RPT
Professor, Department of Counseling
Director of Graduate Certificate in Play Therapy
Director of Play Therapy Concentration
The University of North Carolina at Charlotte

Partial Sponsors of Study:
American Counseling Association Foundation
Multicultural Play Therapy Center at UNC Charlotte

You are invited to participate in a research study. Participation in this research study is voluntary. The information provided is to help you decide whether or not to participate. If you have any questions, please ask.

Important Information You Need to Know

- The purpose of this study is to explore attitudes regarding trauma-informed care among teachers working in rural Title I elementary schools. This information will help us determine how to best support teachers working with traumatized students.

- You are invited to participate in this study if you are (a) at least 18 years old (b) a teacher-licensed educator who has ever worked with at least 5 or more students at a time at 18 elementary schools in the Rowan-Salisbury School System. If you choose to participate in this study, you will be asked to complete a 50-item survey and eight questions about yourself. Your time commitment will be about 20 minutes.

- One of the surveys asks questions that are personal and sensitive in nature. You may feel mild emotional discomfort in responding to some of these questions. Should you feel discomfort, resources have been made available to you on a separate sheet of paper that is

yours to keep. We do not expect this risk to be common and you may choose to skip questions you do not want to answer.

- Please read this form and ask any questions you may have before you decide whether to participate in this research study.

Why are we doing this study?
The purpose of this study is to examine how teachers' (a) personal trauma histories, (b) professional development, and (c) professional quality of life are related to attitudes related to trauma-informed care among teachers working rural Title I elementary schools.

Why are you being asked to be in this research study.
You are being asked to be in this study because we believe you are at least 18 years old and a teacher-licensed educator who has ever worked with at least 5 or more students at a time.

What will happen if I take part in this study?
If you choose to participate in this study, you will be asked to complete a 50-item survey (attitudes about trauma-informed care, adverse childhood experiences, and professional quality of life), and eight questions about yourself (race, years teaching, etc.). You will be asked to spread out within the room to give yourself some privacy. Your time commitment will be about 20 minutes.

What benefits might I experience?
While you will not directly benefit from this study, this research will contribute to the understanding about teachers working with students experiencing trauma. This information will help us determine how to best support teachers working with traumatized students.

What risks might I experience?
You may feel mild discomfort responding to some of the questions on the Adverse Childhood Experience Questionnaire. Some of the questions asked of you are personal and sensitive. For example, you will be asked about the types of stressful experiences you've had as a child that include household dysfunction, abuse, or neglect. You might experience some mild emotional discomfort when answering these questions. Should you feel discomfort, resources have been made available to you on a separate sheet of paper that is yours to keep. We do not expect this risk to be common and you may choose to skip questions you do not want to answer.

How will my information be protected?
Your participation and responses to the assessment in this study is completely confidential. The survey does not ask for any identifying information about you and cannot be linked back to you in any way. The survey will be kept in a double locked filing cabinet. All electronic data will only be stored in the primary researcher's Selective Sync Dropbox.

How will my information be used after the study is over?
After this study is complete, unidentifiable study data may be shared with other researchers for use in other studies without asking for your consent again or as may be needed as part of publishing our results. The data we share will NOT include information that could identify you.

Will I receive an incentive for taking part in this study?
You will not receive any incentive for taking part in this study.

What other choices do I have if I don't take part in this study?

If you choose not to participate, you may choose to remain in the room so that others cannot tell if you did not participate; simply remain in the room for however long you would like and return the unanswered survey packet to me. You are also free to leave the room immediately if you would prefer.

What are my rights if I take part in this study?
It is up to you to decide to be in this research study. Participating in this study is voluntary. Even if you decide to be part of the study now, you may change your mind and stop at any time. You do not have to answer any questions you do not want to answer.

Who can answer my questions about this study and my rights as a participant?
For questions about this research, you may contact **Amy L. Grybush**, agrybush@uncc.edu, 704-502-9540, or **Dr. Phyllis Post,** ppost@uncc.edu, 704-687-8961.

If you have questions about your rights as a research participant, or wish to obtain information, ask questions, or discuss any concerns about this study with someone other than the researcher(s), please contact the Office of Research Compliance at 704-687-1871 or uncc-irb@uncc.edu.

Consent to Participate

By signing this document, you are agreeing to be in this study. Make sure you understand what the study is about before you sign. You will receive a copy of this document for your records. If you have any questions about the study after you sign this document, you can contact the study team using the information provided above.

I understand what the study is about and my questions so far have been answered. I agree to take part in this study.

_____
Name (PRINT)

_____
Signature Date

_____
Name & Signature of person obtaining consent Date

APPENDIX D: DEMOGRAPHIC QUESTIONNAIRE

Demographic Information

School where you work:

_____

This school year, what grade(s) do you teach?

_____

Including this school year, how long have you been working as a teacher?

_____

Are you a teacher-licensed educator?

- ☐ Yes
- ☐ No

If you answered yes, please proceed to the next question. If you answered no, you may stop and turn in your survey packet. Thank you for your interest in taking part in this research study.

Have you ever worked with 5 or more students at a time?

- ☐ Yes
- ☐ No

If you answered yes, please proceed to the next question. If you answered no, you may stop and turn in your survey packet. Thank you for your interest in taking part in this research study.

How would you describe yourself?

- ☐ American Indian or Alaska Native
- ☐ Asian
- ☐ Biracial or Multiracial
- ☐ Black or African American
- ☐ Latinx
- ☐ Native Hawaiian or Other Pacific Islander
- ☐ White (Non-Hispanic)
- ☐ Other _____

Gender Identification

- ☐ Female
- ☐ Male
- ☐ Non-binary
- ☐ Other
- ☐ Prefer not to answer

Age: _____

APPENDIX E: ATTITUDES RELATED TO TRAUMA-INFORMED CARE

ARTIC | *Attitudes Related to Trauma-Informed Care Scale*
VERSION: ARTIC-10 EDUCATION

TRAUMATIC STRESS INSTITUTE

People who work in education, health care, human services, and related fields have a wide variety of beliefs about their students, their jobs, and themselves. The term "student" is interchangeable with "client," "person," "resident," "patient," or other terms to describe the person being served in a particular setting.

Trauma-informed care is an approach to engaging people with trauma histories in education, human services, and related fields that recognizes and acknowledges the impact of trauma on their lives.

INSTRUCTIONS

For each item, select the circle along the dimension between the two options that best represents your personal belief during the past two months at your job.

Sample

	1	2	3	4	5	6	7	
Ice cream is delicious	○	●	○	○	○	○	○	Ice cream is dis[illegible]ng.

Note: *In this SAMPLE ITEM, the respondent is reporting that he/she believes that ice cream is mu[illegible] more delicious than disgusting.*

I believe that…

		1	2	3	4	5	6	7	
1	Students could act better if they really wanted to.	○	○	○	○	○	○	○	[illegible]dents are doing [illegible] they can with the skills they have.
2	Focusing on developing healthy, healing relationships is the best approach when working with people with trauma histories.	○	○	○	[illegible]			○	K[illegible]s and consequence[illegible] are the best approach [illegible]orking with people with trauma histories.
3	If students say or do disrespectful things to me, it makes me look like a fool in front of others.	○	○	○	○	○	○		[illegible]tudents say or do disrespectful things to me, it [illegible]'t reflect badly on me.
4	The ups and downs are part of the work so I don't take it personally.			○	○	○	○		[illegible]redictability and intensity of work makes me thi[illegible] I'm not fit for this job.
5	It's best not to tell others if I have strong feelings about the work because they will think I am not cut out for this job.	○	○	○	[illegible]			○	It's best if I talk with others about my strong feelings about the work so I don't have to hold it alone.
6	Students do the right thing one d[illegible] next. This shows that they are doing[illegible]e best [illegible]n at any particular time.	○	○	○	○	○	○	○	Students do the right thing one day but not the next. This shows that they could control their behavior if they really wanted to.
7	Students need to exper[illegible] cons[illegible] in order to function in the real [illegible]			○	○	○	○	○	Students need to experience healing relationships in order to function in the real world.
8	I realize that student[illegible] may not be a[illegible] ologize to me after t[illegible]	○	○	○	○	○	○	○	If students don't apologize to me after they act out, I look like a fool in front of others.
9	I feel ab[illegible] to do my best[illegible] to help [illegible] stud[illegible]	○	○	○	○	○	○	○	I'm just not up to helping my students anymore.
10	The m[illegible]ve helpers find[illegible]s to toughen up – to screen [illegible]ain – and no[illegible]re so much about the work.	○	○	○	○	○	○	○	The most effective helpers allow themselves to be affected by the work – to feel and manage the pain – and to keep caring about the work.

Thank you for your participation.

KLINGBERG FAMILY CENTERS

Developed and copyrighted by the Traumatic Stress Institute of Klingberg Family Centers in partnership with Dr. Courtney N. Baker, Tulane University.
370 Linwood Street, New Britain, Connecticut 06052 | (860) 832-5562 | artic@klingberg.org | www.traumaticstressinstitute.org

›

Contact Information:
The ARTIC Scales were developed and copyrighted by the Traumatic Stress Institute (TSI) of Klingberg Family Centers, 370 Linwood Street, New Britain, Connecticut 06052, in partnership with Dr. Courtney N. Baker at Tulane University. For information, please contact our team at artic@klingberg.com or (860) 832-5562.

ARTIC-10 Scoring Instructions:
Items 1-10 are scored on a 1-7 Likert scale.

There are two steps to scoring the ARTIC-10. First, some items have to be reversed. Second, the items must be averaged. The score can range from 1-7. The ARTIC-10 score can be calculated for a given participant as long as he/she completed the majority of items (i.e., at least 6 out of 10 items).

The directions below show the scoring steps in detail.
Step 1: Reverse code items 2, 4, 6, 8, 9 into 2r, 4r, 6r, 8r, 9r (1=7) (2=6) (3=5) (4=4) (5=3) (6=2) (7=1)

Step 2: Average the items.
Overall_ARTIC10 = Mean(1, 2r, 3, 4r, 5, 6r, 7, 8r, 9r, 10)

KLINGBERG FAMILY CENTERS

MAIN CAMPUS

370 Linwood Street, New Britain, CT 06052 Telephone: 860 832.5514
Web: www.traumaticstressinstitute.org | www.klingberg.com

APPENDIX F: ADVERSE CHILDHOOD EXPERIENCES QUESTIONNAIRE

Total ACEs score (possible 1-10) from the following page.

Only the **total number** of "**Yes**" **responses** from the following page is requested here.

You may keep count by using dashes, X's, or hashmarks on this page if you would prefer not to mark on the ACEs questionnaire.

_____

You may tear off the final page to keep it if you would like, or you may shred it in the shredder provided in the room.

Non-proprietary Adverse Childhood Experiences Questionnaire (ACE)
(CDC, 1997, Felitti et al., 1998)

Adverse Childhood Experiences (ACE) Questionnaire

Finding your ACE Score ra hbr 10 24 06

While you were growing up, during the first 18 years of life:

1. Did a parent or other adult in the household **often**… • Swear at you, insult you, put you down, or humiliate you? **OR** • Act in a way that made you afraid that you might be physically hurt?	**Yes**	**No**
2. Did a parent or other adult in the household **often**… • Push, grab, slap, or throw something at you? **OR** • **Ever** hit you so hard that you had marks or were hurt?	**Yes**	**No**
3. Did an adult or person at least 5 years older than you **ever**… • Touch or fondle you or have you touch their body in a sexual way? **OR** • Try to actually have oral, anal, or vaginal sex with you?	**Yes**	**No**
4. Did you **often** feel that… • No one in your family loved you or thought you were important or special? **OR** • Your family didn't look out for each other, feel close to each other, or support each other?	**Yes**	**No**
5. Did you **often** feel that… • You didn't have enough to eat, had to wear dirty clothes, and had no one to protect you? **OR** • Your parents were too drunk or high to take care of you or take you to the doctor if you needed it?	**Yes**	**No**
6. Were your parents **ever** separated or divorced?	**Yes**	**No**
7. Was you mother or stepmother: • **Often** pushed, grabbed, slapped, or had something thrown at her? **OR** • Sometimes or often kicked, bitten, hit with a fist, or hit with something hard? **OR** • **Ever** repeatedly hit over at least a few minutes or threatened with a gun or a knife?	**Yes**	**No**
8. Did you live with anyone who was a problem drinker or alcoholic or who used street drugs?	**Yes**	**No**
9. Was a household member depressed or mentally ill or did a household member attempt suicide?	**Yes**	**No**
10. Did a household member go to prison?	**Yes**	**No**

Add up your "Yes" answers and record **only the TOTAL on the previous page**.
You may keep this page if you would like, or you may shred it before you leave.

The Professional Quality of Life Scale

Compassion Satisfaction and Compassion Fatigue (ProQOL) Version 5 (2009)

When you teach people you have direct contact with their lives. As you may have found, your compassion for those you teach can affect you in positive and negative ways. Below are some questions about your experiences, both positive and negative, as a teacher. Consider each of the following questions about you and your current work situation. Select the number that honestly reflects how frequently you experienced these things in the ***last 30 days***.

1=Never	2=Rarely	3=Sometimes	4=Often	5=Very Often

_____ 1. I am happy.
_____ 2. I am preoccupied with more than one person I teach.
_____ 3. I get satisfaction from being able to teach people.
_____ 4. I feel connected to others.
_____ 5. I jump or am startled by unexpected sounds.
_____ 6. I feel invigorated after working with those I teach.
_____ 7. I find it difficult to separate my personal life from my life as a teacher.
_____ 8. I am not as productive at work because I am losing sleep over traumatic experiences of a person I teach.
_____ 9. I think that I might have been affected by the traumatic stress of those I teach.
_____ 10. I feel trapped by my job as a teacher.
_____ 11. Because of my teaching, I have felt "on edge" about various things.
_____ 12. I like my work as a teacher.
_____ 13. I feel depressed because of the traumatic experiences of the people I teach.
_____ 14. I feel as though I am experiencing the trauma of someone I have taught.
_____ 15. I have beliefs that sustain me.
_____ 16. I am pleased with how I am able to keep up with teaching techniques and protocols.
_____ 17. I am the person I always wanted to be.
_____ 18. My work makes me feel satisfied.
_____ 19. I feel worn out because of my work as a teacher.
_____ 20. I have happy thoughts and feelings about those I teach and how I could help them.
_____ 21. I feel overwhelmed because my workload seems endless.
_____ 22. I believe I can make a difference through my work.
_____ 23. I avoid certain activities or situations because they remind me of frightening experiences of the people I teach.
_____ 24. I am proud of what I can do as a teacher.
_____ 25. As a result of my teaching, I have intrusive, frightening thoughts.
_____ 26. I feel "bogged down" by the system.
_____ 27. I have thoughts that I am a "success" as a teacher.
_____ 28. I can't recall important parts of my work with trauma victims.
_____ 29. I am a very caring person.
_____ 30. I am happy that I chose to do this work.

WHAT IS MY SCORE AND WHAT DOES IT MEAN?

In this section, you will score your test and then you can compare your score to the interpretation below.

To find your score on **each section,** total the questions listed on the left in each section and then find your score in the table on the right of the section.

Compassion Satisfaction Scale:

3. _____
6. _____
12. _____
16. _____
18. _____
20. _____
22. _____
24. _____
27. _____
30. _____

Total: _____

The sum of my Compassion Satisfaction questions	So My Score Equals	My Level of Compassion
22 or less	43 or less	Low
Between 23 and 41	Around 50	Average
42 or more	57 or more	High

Burnout Scale:

*1. _____ = _____
*4. _____ = _____
8. _____
10. _____
*15. _____ = _____
*17. _____ = _____
19. _____
21. _____
26. _____
*29. _____ = _____

Reverse the scores for those that are starred.

0=0, 1=5, 2=4, 3=3, 4=2, 5=1

Total: _____

The sum of my Burnout Questions	So My Score Equals	My Level of Burnout
22 or less	43 or less	Low
Between 23 and 41	Around 50	Average
42 or more	57 or more	High

Secondary Trauma Scale:

2. ____
5. ____
7. ____
9. ____
11. ____
13. ____
14. ____
23. ____
25. ____
28. ____

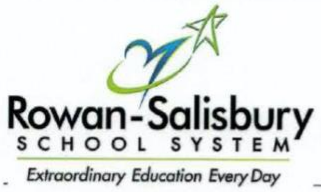
Total: _____

The sum of my Secondary Traumatic Stress questions	So My Score Equals	My Level of Secondary Traumatic Stress
22 or less	43 or less	Low
Between 23 and 41	Around 50	Average
42 or more	57 or more	High

Reference

Stamm, B.H. (2010). The Concise ProQOL Manual. Pocatello, ID: ProQOL.org.

APPENDIX H: LETTER OF SUPPORT FROM ROWAN-SALISBURY SCHOOL SYSTEM (RSSS)



Carol Ann Houpe
Director of Student Services
500 N. Main Street
Salisbury, NC 28144
Phone: 704-630-6033
carol.houpe@rss.k12.nc.us

January 6, 2020

To Whom It May Concern:

The Rowan-Salisbury School System has been collaborating with UNC Charlotte in an action research program involving teachers for the past two-and-a-half years with Dr. Phyllis Post.

We support the dissertation research work of Amy L. Grybush, a doctoral candidate at UNC Charlotte, under the supervision of Dr. Post, to assess how our elementary school teachers' personal trauma histories, professional development training conducted by the North Carolina Resilience and Learning Project, and professional quality of life are related to attitudes toward trauma-informed care in an effort to help counselors, counselor educators, and the North Carolina Resilience and Learning Project implement future professional development for teachers regarding trauma-informed care.

Please feel free to contact me if you have any questions,

Sincerely,

Carol Ann Houpe

Carol Ann Houpe
Director of Student Services