

Exploring Attitudes Related to Trauma-Informed Care Among Teachers in Rural Title I Elementary Schools

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ABSTRACT

Teachers and schools have important roles in addressing childhood adversity and trauma. Research over the last twenty-five years indicates that adverse childhood experiences (ACEs) are a significant public health issue (Felitti et al., 1998). Creating trauma-informed schools that help buffer the widespread experience of trauma involves providing training to teachers focused on fostering strong relationships with students and creating an environment of safety. 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 in rural Title I schools. A hierarchical regression was utilized to analyze the data collected from 147 teachers. Results and implications are discussed.

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

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, p. 11). It should be a treasured time where children can live



“free from fear, safe from violence, and protected from abuse and exploitation” (p. 11). Unfortunately, that is not a 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 (Sciaraffa et al., 2017). These events can have negative and long-lasting effects on health during childhood and throughout the lifespan (Anda et al., 2006; Felitti et al., 1998; Substance Abuse and Mental Health Services Administration [SAMHSA], 2014).

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 addiction, witnessing violence within the home, or incarceration of a family member. Research over two decades supports the assertion ACEs are a significant public health issue (Felitti et al., 1998). 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. This results in toxic stress and impacts areas of the brain associated with reasoning, learning, and emotion, resulting in more prevalent emotional, cognitive, and behavioral issues (Sciaraffa et al., 2017).

Research suggests that children who have experienced at least one ACE are at risk for significant language delays, are suspended and expelled more often, 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 et al., 2018, p. 344). Given the impact of ACEs on children, teachers are very likely being tasked with managing students’ emotional, cognitive, and behavioral issues. In fact, research suggests that teachers are increasingly being relied upon “to meet the complex behavioral, cognitive, and relational needs of students struggling in schools” (Brunzell et al., 2016, p. 63).

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), and in some cases, the relationship with their teacher is the most stable relationship in children’s lives (Brunzell et al., 2016). 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 et al., 2011, p. 9). Teachers who choose to work in high-poverty schools face additional challenges, such as a lack of resources and low parental involvement (Brown, 2016).

Training teachers in trauma-informed approaches can reduce the impact of ACEs on the students (Sciaraffa et al., 2018) and the additional stress experienced by the teachers (Cavanaugh, 2016; Eyal et al, 2023). However, little is known about teachers’ attitudes related to trauma informed care and the characteristics that may

impact that attitude. To address this need, the purpose of this research was to examine how teachers' personal trauma history, professional development training, and professional quality of life were related to attitudes toward trauma-informed care among elementary school teachers working in rural Title I schools.

TEACHER CHARACTERISTICS

As noted by Blaustein (2013), "trauma is not solely the burden of childhood" (p. 4). 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 may be limited in their ability to trust and subsequently may have difficulty creating, sustaining, or developing strong relationships (Barile et al., 2014), as well as difficulty in emotional regulation (Rudenstine et al., 2019). Given the prevalence of childhood trauma, it is a logical conclusion that teachers have experienced (or are also currently experiencing) their own toxic stress and may also experience the deleterious effects as a result of trauma (Blaustein, 2013). Additionally, past or present trauma may also impact their ability to regulate emotions that manifest during their work, can trigger memories of their own personal traumas (SAMHSA, 2014), and can lead to depression and over-identification with their students (Martin-Cuellar et al., 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 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).

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 (Post et al., 2019). 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). A trauma-informed approach is a mindset, one where learning and behaviors are viewed through an understanding of how trauma impacts the developing brain. Trauma-informed professional development trainings 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).

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). Compassion fatigue (CF) is defined as a loss of meaning or hope and can lead to reduced empathy, irritability, and difficulty concentrating (Stamm, 2005). It is comprised of burnout and secondary traumatic stress. Burnout (BO) can be

experienced as physical, emotional, and mental exhaustion because of long-term involvement in emotionally demanding situations and can also be accompanied by feelings of disillusionment and negativity (Stamm, 2005). Secondary traumatic stress (STS) is the “traumatic stress that professionals vicariously experience from close involvement with a traumatized client” (Hupe & Stevenson, 2019, p. 4). Symptoms include being afraid, having difficulty sleeping, having images of the upsetting events, or avoiding things that remind you of the event (Stamm, 2005).

Conversely, compassion satisfaction (CS) can be understood as the pleasure or positive emotions one feels in relation to the care they provide for their [students] (Stamm et al., 2005). It is typically higher among teachers than the general population of helpers, including social workers and counselors (Stamm, 2010). This may be due to what Bullough (2019) asserted 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).

Blodgett, in his foreword to Souers and Hall’s *Fostering Resilient Learners* (2015, para. 5), stated 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 (Post et al., 2019). In a recent study, as many as 30% of K-12 teachers reported “clinically impaired levels of stress” (von der Embse et al., 2019, p. 1329). This increased stress can compromise 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 (von der Embse et al., 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 et al., 2015). 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, may affect teachers’ professional quality of life, making teaching one of the most stressful professions (Greenberg et al., 2016).

METHODS

Participants

A purposive sample of teacher-licensed educators working at all 19 Title I elementary schools in a rural county in the southeast United States were invited to participate. There were participants from 18 of the 19 schools that were invited to participate. Six of the schools had participated in school-level trauma-informed professional development training and 12 had not. Inclusion criteria was that the

participant was a licensed teacher who had worked with five or more students at a time at any of the 19 selected schools.

We conducted this study through the spring semester of 2020, during the COVID-19 global pandemic, only 25 participants completed the survey in-person before the schools closed. A total of 182 participants attempted to complete the online survey; however, only 122 met the inclusion criteria, yielding a total of 147 participants. See Table 1.

Table 1: Numbers and Percentages of School Representation and Professional Development (PD) Variables

School	Inclusion in PD	Frequency
School 1		13
School 2		6
School 3		6
School 4		5
School 5		12
School 6	X	13
School 7	X	4
School 8	X	25
School 9		10
School 10	X	7
School 11		13
School 12		11
School 13		8
School 14		0
School 15	X	1
School 16		3
School 17		0
School 18		9
School 19	X	1

Note: School 8 was collected in-person.

Instrumentation

The demographic instrument was used to collect information about participants' race, teacher-licensure status, if they worked with five or more students at a time, years teaching, grade level(s) taught that year, gender, school, and age.

The Attitudes Related to Trauma-Informed Care (ARTIC) scale (Baker et al., 2016) has two setting-specific categories: one for human services settings and one for educational institutions. 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 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. Higher scores reflect a more favorable attitude toward trauma-informed care. In a sample of human services/health providers and educators, Baker et al. (2021) reported a Cronbach’s alpha for the ARTIC-10 of .82. In the current study, the scale demonstrated an acceptable reliability of .77, suggesting that the instrument performed with relative consistency.

Adverse Childhood Experiences (ACEs; Felitti et al., 1998) is a 10-item, self-report questionnaire retrospectively taking inventory of potentially traumatic events in individuals’ life before the age of 18. Participants answer with a dichotomous “yes” or “no” to the questions about potential events, which 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 addiction, 9) witnessing violence within the home, and 10) incarceration of a family member. Examples include: “While you were growing up, during your first 18 years of life: Did a parent or other adult in the household often or very often... Swear at you, insult you, put you down, or humiliate you?”, and “Did you live with anyone who was a problem drinker or alcoholic or who used street drugs?” Participants’ ACE score is the sum of “yes” responses to the 10 items, with possible scores from 0-10.

Previous studies found that retrospective ACEs reports had good to excellent test-retest reliability by calculating Cohen’s kappa values (1960). Results across categories were reported as follows: emotional abuse and neglect = .66, physical abuse and neglect = .55, sexual abuse = .69, witnessing addiction = .75, mental illness = .51, mother treated violently = .71, incarcerated household member = .46, and parental separation or divorce = .86 (Dube et al., 2004).

Participation in professional development was defined as whether the school participated in the professional development provided by the state’s Resilience and Learning Project (Public School Forum of North Carolina, 2018). Schools were categorized based on whether their school participated in the program or not.

The Professional Quality of Life Scale (ProQOL-5) (Stamm, 2010) measures compassion satisfaction, burnout, and secondary traumatic stress. 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. In this study, we measured the participants’ professional quality of life *t*-scores that converts raw scores to *t*-scores with a mean of 50 and a standard deviation of 10 on the three ProQOL-5 subscales: compassion satisfaction, burnout, and secondary traumatic stress. Cronbach’s Alpha for the subscales of the ProQOL ranged from .83 to .92. In this study, we measured the participants’ professional quality of life *t*-scores that converts raw scores to *t*-scores with a mean of 50 and a standard deviation of 10 on the three ProQOL-5 subscales: compassion satisfaction, burnout, and secondary traumatic stress.

Data Analysis

Before conducting the analyses, we screened the data for outliers, missing values, normality of distribution, linearity, homoscedasticity of residuals, and multicollinearity. We removed incomplete data sets before analysis, where only the demographic was complete. We replaced missing data that we determined to be missing completely at random by the mean (Gelman & Hill, 2003). We examined outliers and considered them to be acceptable, and Kurtosis and skewness generally did not indicate major departures for normality. Visual inspection suggested that the distribution of the variables was approximately normally distributed. We assessed multicollinearity by examining the variable tolerance and Variation Inflation Factors (VIF). Variation Inflation Factors 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 (James et al., 2013).

Table 2 highlights the hierarchical regression analysis used to determine the amount of variance accounted by the predictor variables: teachers' ACEs; professional development training; and professional quality of life (compassion satisfaction, burnout, and secondary traumatic stress) relative to ARTIC. The variables were entered in the order as they were experienced. First, personal trauma history scores were entered into the regression equation, as these experiences happened during childhood. Second, professional development training was entered into the regression equation. Third, teachers' professional quality of life was entered into the regression equation.

Table 2: 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. ACEs = Adverse Childhood Experiences, PD = professional development, CS = compassion satisfaction, BO = burnout, STS = secondary traumatic stress, ARTIC = attitudes related to trauma-informed care. * Indicates significance at $p < .05$ level.

** Indicates significance at $p < .001$ level.

RESULTS

Demographic data indicated that the participants' ages ranged from 22 years old to 62 years old ($M=39.87$, $SD = 9.36$) and the majority identified as White (85.7%; $n=126$) females (93.2%; $n=137$). Based on the school of employment, 35% ($n=51$) of the participants received school-level professional development (PD) training, whereas 65% ($n=96$) did not. Regarding ACEs, the mean number of reported ACEs was 3.6 ($SD=2.60$).

A Pearson correlation was conducted to examine relationships between the predictor variables: ACEs; PD, compassion satisfaction (CS); burnout (BO); and secondary traumatic stress (STS) and the outcome variable, ARTIC, as shown in Table 3. The findings indicate that 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 ($r=.270$, $p < .001$ and negatively correlated with PD ($r = -.137$, $p < .05$).

Results of step one of the analyses revealed a model that was not statistically significant, $F(1,143) = .186$, $p = .667$. In the first step, the variance accounted for $R^2 = .001$ (adjusted $R^2 = -.006$). The R^2 value suggests that ACEs did not account for much 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 $R^2 = .171$ (adjusted $R^2 = .159$). 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 $R^2 = .258$ (adjusted $R^2 = .231$). Professional development and BO showed statistical significance ($p < .05$) in the final model. All variables accounted for nearly 26% of the variance in participants' attitudes toward trauma-informed care.

Table 3: 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. ACEs = Adverse Childhood Experiences, PD = professional development, CS = compassion satisfaction, BO = burnout, STS = secondary traumatic stress, ARTIC = attitudes related to trauma-informed care. * Indicates significant correlation at $p < .05$ level (1-tailed). ** Indicates significant correlation at $p < .001$ level (1-tailed).

DISCUSSION

Data were collected in-person at one school for twenty-five of the participants prior to schools being shut down for COVID-19. Because of the change to online data collection, an independent *t*-test was conducted to assess the difference between responses of participants from in-person and online data collection. The results indicated no statistically significant differences between in-person and online and participants on ACEs, $t(144) = .16, p = .88$; CS, $t(145) = -.47, p = .64$; STS, $t(144) = -.89, p = .38$; BO, $t(145) = -.06, p = .95$. However, a significant difference was found in ARTIC scores, $t(145) = -12.65, p = .00$, suggesting that in-person participants ($n = 25, M = 3.82, SD = .50$) scored differently than online participants ($n = 122, M = 5.32, SD = .69$). In-person participants reported lower scores on the attitudes towards trauma-informed care scale ($M=3.82$) than those collected online ($M=5.33$). One explanation is that the online data was collected during the week after schools were closed due to COVID-19, so higher ARTIC scores (more favorable to trauma-informed care) found in online participants could be attributed to increased identification with the collective nature of the COVID-19 pandemic and the experiences of their students

Regarding ACEs data, 46 participants (31.5%) reported four or more ACEs, which is the threshold for significant negative mental and physical health outcomes for adults (Dube et al., 2004). This finding is consistent with previous literature that found that ACEs were experienced in the general population (Merrick et al., 2018), as well as in teacher populations (Grybush & Post, 2025), at a higher rate than originally found. This finding reinforces the need for implementing trauma-informed systems. A systemwide approach that acknowledges the widespread impact of trauma and may help the adults, as well as the children, feel safe and connected to one another.

The data analysis included the three subscales, compassion satisfaction, burnout, and secondary traumatic stress, of the Professional Quality of Life (Stamm, 2010). Results indicated that participants in this study reported higher than average scores on compassion satisfaction ($M = 54.06$) which indicated that teachers experienced a higher amount of pleasure in their work than the standardized mean of 50 (Stamm, 2005). This finding was consistent with prior research stating that teachers find satisfaction in being able to contribute through their work (Grybush & Post, 2025). Results also revealed that participants reported scores higher than the standardized mean of 50 on burnout, ($M = 52.43$) and secondary traumatic stress ($M = 52.37$). These findings were consistent with prior research that states that teachers often experience higher levels of burnout as a result of their job (Santa, 2017) and with a large body of research that reported that burnout and secondary traumatic stress are often experienced together (Stamm, 2010). These results highlighted 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. 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).

Our research study findings have implications for educational settings and teacher education programs. Results indicated that professional development was

inversely related to attitudes related to trauma-informed care, which is contrary to previous literature (Brown et al., 2012). Eysers et al. (2023) found that there is increased buy-in from teachers when professional development training is conducted in small groups, increasing feelings of community among members. Additionally, a trauma-informed approach recognizes the impact of potential traumatic experiences on all within the system and should apply that knowledge to the delivery of the potentially triggering aspects of trauma-informed care training. In addition to fostering feelings of community through small training groups, professional development training and teacher education programs can “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.

Attending to teachers’ professional quality of life can improve student outcomes (Herman et al., 2017). This study identified that burnout is inversely linked to attitudes related to trauma-informed care; therefore, professional development training aimed at helping teachers identify and address their experiences with burnout and the identification of protective factors that buffer that experience is warranted. Teacher education programs should provide teachers-in-training specific training on the neurobiological, social, and emotional impact of childhood trauma, both during childhood as well as in adulthood. Additionally, teacher education programs should consider providing training in trauma-informed system frameworks, further familiarizing teachers-in-training with the concepts and principles of trauma-informed care in schools. The results of this study demonstrate the importance of teacher preparation programs offering trauma-informed courses or infusing trauma-informed principles into existing coursework. These types of programs would prepare teachers to effectively navigate trauma-informed systems and principles.

Finally, teacher 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. Teachers need to be familiar with symptoms of burnout and ways to take care of themselves in order to increase compassion satisfaction.

There were several notable limitations to this study, including the generalizability of the study, professional development categories, change in data collection procedures, and increased stress that may have been a result of the pandemic. Regarding generalizability, our results cannot be generalized to all teachers, such as those who are not licensed, work in circumstances where they instruct fewer than five students at a time, or do not live in rural areas. Additionally, generalizability is limited based because the purposive sample were solely elementary schools in one school system. Social desirability is also a limitation of this study. The inclusion criteria regarding school-level professional development training were an additional limitation. Professional development training was defined as whether the reported school of employment provided training. There were no specific criteria as to the type, level, or amount of training in the schools. Finally, a limitation includes data collection, which occurred in-person at just prior to the COVID-19 pandemic and had to be converted to online data collection soon thereafter. The originally planned in-person data was collected from only one school. For those teachers who

responded online, the enormous impact of the pandemic could have impacted their attitudes related to trauma-informed care as well as their professional quality of life responses.

Additionally, demographic data indicated a lack of diversity in the participants, especially when compared to the student demographics of the school. The majority of teachers, 85%, identified as white, and 10% identified as Black. This data aligns with the most recent national data, where 82% of all elementary and middle school teachers identified as white (U.S. Department of Education, 2016). Notably, the participants of this study work in a school system where 58% of the students identify as White and 19% as Black, leaving a divide between the demographics of the teachers and the students that they teach. Most of the participants identified as female (93%), whose ages ranged from 22 years old to 62 years old, with a mean of 39 that is consistent with national data (U.S. Census Bureau, 2018)

Regarding future research, this study should be replicated among school counselors and other school personnel. Additionally, future research could focus on other characteristics that could impact attitudes toward trauma-informed care, such as years of experience counseling or teaching, level of empathy, perceived social support, or school climate, all of which are supported by prior research (Anderson et al., 2015). Research that examines the impact of trauma-informed approaches on students' sense of belonging, feelings of safety, and academic achievement is also indicated.

Given that over 31% of participants in the current study reported having experienced four or more ACEs, research that further examines the impact of personal trauma history on behaviors and attitudes is recommended. The current study used the original ACEs questionnaire developed by Felitti et al. (1998) This questionnaire may not be as sensitive as some of the newer versions of the questionnaire that include involvement in the foster care system, bullying, loss of parent or guardian due to death, deportation, medical trauma, exposure to community violence, and discrimination (i.e., race, sexual orientation, birthplace, disability, or religion). Our results 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.

Teachers, teacher educators, and schools all have important roles in effectively addressing childhood adversity, yet, doing so also calls for systemic change. 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” (n.d., as cited in Advokids, 2024). School systems, administrators, and teacher education programs can provide the framework, support, and training necessary to help change the trajectory of children facing adversity and experiencing toxic stress.

REFERENCES

- Advokids (2024). *Adverse childhood experiences study*.
<https://advokids.org/adverse-childhood-experience-study->

- aces/#:~:text=Robert%20Block%2C%20the%20former%20President,%20This%20is%20treatable.
- Alisic, E. (2012). Teachers' perspectives on providing support to children after trauma: A qualitative study. *School Psychology Quarterly*, 27(1), 51-59. <https://doi.org/10.1037/a0028590>
- 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), <https://doi.org/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, <https://www.adi.org/journal/2015fw/AndersonEtAlFall2015.pdf>
- Baker, C. N., Brown, S. M., Overstreet, S., & Wilcox, P. D. (2021). Validation of the Attitudes Related to Trauma-Informed Care Scale (ARTIC). *Psychological Trauma: Theory, Research, Practice, and Policy*, 13(5), 505–513. <https://doi-org.wake.idm.oclc.org/10.1037/tra0000989>
- 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. <https://doi.org/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. <http://doi.org/10.1037/a0038202>
- 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). Oxford University Press.
- Blodgett, C. (2015). Foreword. In Souers, K. & Hall, P. A., *Fostering resilient learners*. (para 5). Association for Supervision and Curriculum Development.
- Brown, S. M., Baker, C. N., & Wilcox, P. (2012). Risking connection trauma training: A pathway toward trauma-informed care in child congregate care settings. *Psychological Trauma: Theory, Research, Practice, and Policy*, 4(5), 507–515. <https://doi.org/10.1037/a0025269>
- Brown, L. (2016). *The Impact of Reflective Supervision on Early Childhood Educators of At-Risk Children: Fostering Compassion Satisfaction and Reducing Burnout* (Publication No. 10193236) [Doctoral Dissertation, University of California]. ProQuest Dissertations & Theses Global.
- 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. <https://doi.org/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. <https://doi.org/10.1080/13540602.2019.1602518>

- Butler, L., Carello, J., & Maguin, E. (2017). 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. <https://doi.org/10.1037/tra0000187>
- Cavanaugh, B. (2016). Trauma-informed classrooms and schools. *Beyond Behavior*, 25(2), 41–46. <https://doi.org/10.1177/107429561602500206>
- Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement*, 20, 37–46. <https://doi.org/10.1177/001316446002000104>
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112(1), 155–159. <https://doi.org/10.1037/0033-2909.112.1.155>
- Cole, S., Eisner, A., Gregory, M., & Ristuccia, J. (2013). *Helping traumatized children learn: Creating and advocating for trauma-sensitive schools* (Vol. 2). Massachusetts Advocates for Children. <https://traumasensitiveschools.org/wp-content/uploads/2013/11/HTCL-Vol-2-Creating-and-Advocating-for-TSS.pdf>
- Craig, S. E. (2016). *Trauma-sensitive schools: Learning communities transforming children's lives, K-5*. Teachers College Press.
- 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. <https://doi.org/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–viii. <https://doi.org/10.1016/j.chc.2014.01.002>
- 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. <https://doi.org/10.1016/j.chiabu.2003.08.009>
- Eyal, M., Gearhart, C., Mosley, K., & McCarthy, C. (2023). Evaluation of a teacher stress reduction group during a pandemic. In C. McCarthy and R. Lambert (Eds.), *Research on teacher stress: implications for the COVID-19 pandemic and beyond*. Information Age Publishing.
- Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P., & 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. [https://doi.org/10.1016/S0749-3797\(98\)00017-8](https://doi.org/10.1016/S0749-3797(98)00017-8)
- Gelman, A., & Hill, J. (2006). *Analytical methods for social research: Data analysis using regression and multilevel/hierarchical models*. Cambridge University Press.
- Goodwin-Glick, K. L. (2017). *Impact of Trauma-Informed Care Professional Development on School Personnel Perceptions of Knowledge, Dispositions, and Behaviors toward Traumatized Students* (Publication No. 10587819) [Doctoral Dissertation, College of Bowling Green State University]. ProQuest Dissertations & Theses Global. http://rave.ohiolink.edu/etdc/view?acc_num=bgsu1487245316067513

- Greenberg, M. T., Brown J. L., & Abenavoli, R. M. (2016). *Teacher stress and health effects on teachers, students, and schools*. Edna Bennett Pierce Prevention Research Center, Pennsylvania State University. <https://prevention.psu.edu/wp-content/uploads/2022/09/rwjf430428-TeacherStress.pdf>
- Grybush, A. L. & Post, P. B. (2025). Trauma-informed care in classrooms: Child-teacher relationship training. [manuscript in preparation].
- Herman, K. C., Hickmon-Rosa J., Reinke W. M. (2017). Empirically derived profiles of teacher stress, burnout, self-efficacy, and coping and associated student outcomes. *Journal of Positive Behavior Interventions*, 20(2), 90–100. <https://doi-org.wake.idm.oclc.org/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*, 16(4), 364–386. <https://doi.org/10.1080/15379418.2019.1663334>
- James, G., Witten, D., Hastie, T., & Tibshirani, R. (2013). *An Introduction to Statistical Learning: with Applications in R* (1st ed. 2013.). Springer. <https://doi.org/10.1007/978-1-4614-7138-7>
- Ludy-Dobson, C. R., & Perry, B. D. (2010). The role of healthy relational interactions in buffering the impact of childhood trauma. In E. Gil (Ed.), *Working with children to heal interpersonal trauma: The power of play* (pp. 26–43). The Guilford Press.
- Martin-Cuellar, A., Atencio, D. J., Kelly, R. J., & Lardier, D. T., Jr. (2018). Mindfulness as a moderator of clinician history of trauma on compassion satisfaction. *The Family Journal*, 26(3), 358–368. <https://doi.org/10.1177/1066480718795123>
- Merrick, M. T., Ford, D. C., Ports, K. A., & Guinn, A. S. (2018). Prevalence of Adverse Childhood Experiences From the 2011–2014 Behavioral Risk Factor Surveillance System in 23 States. *JAMA pediatrics*, 172(11), 1038–1044. <https://doi.org/10.1001/jamapediatrics.2018.2537>
- Morton, B. M., & Berardi, A. A. (2017). Trauma-Informed School Programing: Applications for Mental Health Professionals and Educator Partnerships. *Journal of child & adolescent trauma*, 11(4), 487–493. <https://doi.org/10.1007/s40653-017-0160-1>
- Post, P. B., Grybush, A. L., Elmadani, A., & Lockhart, C. E. (2020). Fostering resilience in classrooms through child–teacher relationship training. *International Journal of Play Therapy*, 29(1), 9–19. <https://doi.org/10.1037/pla0000107>
- Public School Forum of North Carolina (2018). *North Carolina Resilience and Learning Project*. <https://www.ncforum.org/wp-content/uploads/2018/10/Resilience-Learning-October-2018-Update.pdf>
- 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. <https://doi.org/10.1037/a0022714>

- 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. <http://doi.org/10.1037/trm0000176>
- Santa, J. (2017). *The impact of secondary traumatic stress on urban educators in schools with high at-risk student populations* (Publication No 10106159) [Doctoral dissertation, Johnson & Wales University] Available from ProQuest Dissertations & Theses A&I; ProQuest Dissertations & Theses Global; Social Science Premium Collection.
- 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. <https://doi.org/10.1007/s10643-017-0869-3>
- Stamm, B. (2005). *The ProQOL manual: Professional quality of life scale: Compassion satisfaction, burnout, and compassion fatigue/secondary trauma scales*. Sidran Press.
- Stamm, B.H. (2010). *The Concise ProQOL Manual*. Pocatello, ID: ProQOL.org.
- 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.
- United Nations International Children's Emergency Fund (UNICEF) (2005). *The state of the world's children 2005*. <https://www.unicef.org/media/84801/file/SOWC-2005.pdf>
- United States Census Bureau (2018). <https://statisticalatlas.com/school-district/North-Carolina/Rowan-Salisbury-Schools/Household-Income>
- 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.
- von 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>
- 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.

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