Equipping Preservice Teachers with Trauma Informed Care for the Classroom

Tamarine Foreman
Ohio University, foremant@ohio.edu

Perianne Bates
Ohio University, bates@ohio.edu

Equipping Preservice Teachers with Trauma Informed Care for the Classroom

Abstract

In an effort to prepare preservice teachers to enter the classroom where students may have experienced or been exposed to trauma, the authors designed and facilitated instruction around trauma's influence on the learning process. The intent of the instruction was to improve the preservice teacher's ability to realize, recognize, and respond to students without re-traumatizing the students. The authors compared pre and post scores on the ARTIC-35 Education version (Baker et al., 2016) and found the instruction significantly improved the preservice teachers' knowledge, awareness, and self-efficacy in working with students who have experienced or been exposed to trauma.

Keywords

trauma, preservice teachers, trauma informed care, adverse childhood experiences

Creative Commons License

Cover Page Footnote

Tamarine Foreman, PhD, LPCC-S, is an Assistant Professor in the Department of Counseling and Higher Education at Ohio University (ORCID 0000-0001-5441-061X). Perianne Bates is a Professor of Instruction in the Department of Teacher Education at Ohio University. Correspondence concerning the article should be addressed to Tamarine Foreman, Department of Counseling and Higher Education, 1 Ohio University, McCracken Hall 432L, Athens, OH 45701. Email: foremant@ohio.edu

Introduction

Today, students face an "epidemic of trauma exposure" (Overstreet & Chafouleas, 2016, p. 4). It is estimated that 20 to 48% of American youth have experienced or been exposed to multiple types of trauma (Saunders & Adams, 2014). Therefore, it is likely that most classrooms in the United States have students who have experienced or been exposed to trauma (Stevens, 2012). Trauma ranges from a single event to a culmination of events or set of circumstances experienced as physically or emotionally overwhelming, or life threatening to the extent that an individual's interpersonal or social, intrapersonal, emotional, physical, and spiritual well-being are impacted (Substance Abuse and Mental Health Services [SAMHSA], 2014). With the experience and exposure to trauma, students are tasked with managing the effects of adverse experiences while balancing educational demands. The exposure to trauma impacts development and contributes to students' struggles with attention, attendance, emotional regulation, and overall academic success. In an effort to support students, teachers are tasked with providing educational learning experiences for all students, while also managing classroom behaviors. Without additional training or instruction on how to best facilitate learning for students with a history of trauma, the epidemic is likely to continue impeding academic success and disrupt learning in all classrooms, especially those with students who have experienced trauma. The following review of literature provides the context for this study which aimed to improve preservice teachers' understanding about the underlying causes of trauma and how to better manage the classroom to facilitate success for all students by implementing trauma-informed care for the classroom.

Trauma Prevalence and Impact

The prevalence of trauma that youth have experienced or been exposed to is wide reaching. The experience of childhood trauma adversely impacts academic performance, classroom behavior, and peer relationships (Berger, 2019). As a whole, it is estimated that at least two thirds of youth have endured adverse childhood experiences, such as abuse, neglect, or having a caregiver with a mental health or substance use disorder (Saks & Murphey, 2018). In 2020, it was estimated that at least two thirds of all youth under the age 16 experienced at least one traumatic event (SAMHSA, 2020). Saunders and Adams (2014), in their meta-analysis of studies whose researchers included estimates of prevalence from representative samples of youth, reported up to 19% have been physically abused by a caregiver, 10% have witnessed domestic violence, 20% have experienced the death of a friend or family member due to homicide, nearly 25% experienced a natural disaster, and between 38% to 70% have witnessed violence in their

community. When evaluating sexual abuse, the National Sexual Violence Resource Center (2015) reported one in four females and one in six males will be sexually abused by the time they graduate from high school. In addition, one in five high school students have been bullied at school, one in six high school students have experienced cyberbullying, and 54% of families have been affected by some type of natural disaster (SAMHSA, 2020). The exposure or experience of any type of trauma causes significant stress and impedes a student's ability to be successful in an academic setting with at least one in six learners experiencing multiple trauma symptoms (Felitti & Anda, 2009). The symptoms occur within the physical, behavioral, cognitive, and emotional domains and include sleep disruption, increased aggression, difficulty concentrating, and an inability to regulate emotions, or manage stress (Bell et al., 2013).

Adverse Childhood Experiences

The impact of trauma is compounded by multiple or continued exposure to trauma and toxic stress which contributes to learning, cognitive, and health difficulties. Toxic stress is defined as having multiple experiences of trauma or prolonged exposure to trauma without the dampening effect of adult care givers (National Scientific Council on the Developing, 2014). When toxic stress occurs as a result of trauma, students are at greater risks for developing behaviors that interfere with learning.

Through the lens of the Adverse Childhood Experiences (ACE) study conducted by Felitti and colleagues (1998) the more exposure to or experience of trauma the greater the impact. An adverse childhood experience includes having one or more of following events during childhood: emotional neglect, physical neglect, emotional abuse, physical abuse, sexual abuse, exposure to domestic violence in the home, separation or loss of a caregiver through divorce or death, person in the home with a substance-related or mental health disorder, and having a household member incarcerated (Felitti et al., 1998). More recently, adverse childhood experiences have been revised to include exposure to violence within a home or community, and economic hardship such as food and housing insecurity (Saks & Murphey, 2018).

According to a brief written by Bethell and colleagues (2017), it is estimated that 47.6 to 55.7% of youth aged five to 17 years have experienced one adverse childhood experience while 22.6 to 29.9% have experienced two or more adverse childhood experiences. The chronic exposure to and experience of trauma affects the neurobiology of the brain, physical health, emotional well-being, social relationships and academic performance (Terrasi & Galarce, 2017). When Blodgett and Lanigan (2018) examined the relationship between adverse childhood experiences and academic and health concerns among children at 10

elementary schools, they found students who experienced at least three ACEs were 3.1 more times likely to fail academically, 4.5 times more likely to have attendance issues, and 4.8 times more likely to have school related behavior problems when compared to those with no history of ACEs. The greater number of adverse childhood experiences the greater the risk of health concerns and academic failure.

Academic Impact

The experience and exposure to trauma affects a student's academic success by challenging their ability to focus and sustain attention, regulate emotions, interact with others appropriately, manage sleep, and other physical symptoms such as reoccurring headaches and stomachaches (Bell et al., 2013; Berger, 2019). Shonk and Cicchetti (2001) reported youth who experienced neglect exhibited difficulty using appropriate social skills, presented with increased behavioral problems, and were more likely to be less engaged in the classroom. Researchers have linked the effect of trauma to the disruption of a child's brain development and executive functioning which controls memory functioning and the ability to process and recall information (DePrince et al., 2009). In the brain's fight-or-flight response to a perceived threat or trauma, a series of chemical reactions leads to the release of cortisol. As a result, cortisol production increases causing a myriad of reactions (Johnson et al., 2019). One result can be decreased memory capabilities, including issues with memory recall and memory processing (Sapolsky et al., 2000). Such a decrease in recall and processing may stem from cortisol buildup in specific regions of the brain, including the amygdala, hippocampus, and corpus callosum (Teicher et al., 2003). This makes the repetition of instructions and classroom guidelines essential for academic success, especially for students who have experienced trauma.

   Other researchers have linked the exposure to trauma to decreased IQ, lower grades, and high school dropout rates (Delaney-Black et al., 2002; Hurt et al., 2001). Shonk and Cicchetti (2001) reported similar findings. Their study included 229 students in kindergarten through sixth grade from socioeconomically disadvantaged children of which 146 reported maltreatment. The researchers reported exposure to trauma and a history of adverse childhood experiences correlated to increased rates of academic failure, increased behavioral problems and decreased attendance. In addition, they reported the relationship between adverse childhood experiences and poor academic success remained significant even after controlling for gender, race, and overall school poverty. Stempel and colleagues (2017) also reported a link between adverse childhood experiences and chronic absenteeism in school aged youth (six to 17 years). The impact of adverse childhood experiences effects academic success and impacts the ability of

students to succeed in school, which also presents challenges to the teachers tasked with educating all students.

Recognizing the Impact of Trauma

Teachers, as well as preservice teachers, are in a prime position to observe the way trauma impacts a student's emotional and behavioral expressions of pain (Alisic et al., 2012; Bell et al., 2013). However, due to the lack of training and experience, many educators do not feel confident in providing support to youth who have a history of trauma (Alisic et al., 2012). The American School Counseling Association (2010) described educators and counselors as professionally and ethically obligated to provide a safe environment to ensure the holistic development of all students. The behaviors exhibited by students who have experienced or been exposed to trauma might cause one to question what is wrong with the child instead of wondering about the underlying problems that contribute to behaviors. This is especially true when preservice teachers are unaware of the impact of trauma on learning and child development. Phifer and Hull (2016) reported current teacher training programs fail to provide adequate instruction on how to address the social and emotional needs of students and do not emphasize the importance of trauma-informed instruction.

Preservice Teachers

Preservice teachers are tasked with taking what they've learned in their own education and implementing the knowledge and skills into the classroom setting (Skovholt & Ronnestad, 2003). Similar to other helping professionals at the beginning of training, preservice teachers might experience variable confidence, episodes of bewilderment, and temporary calm in relation to the development and refinement of skills as they begin to assume the responsibility of a classroom (Skovholt & Ronnestad, 1992). These experiences elevate the risk for additional stressors and shifts in the preservice teacher's beliefs about their own competency and skills (Skovholt & Ronnestad, 2003).

In addition to personal stressors, preservice teachers are also exposed to the traumatic experiences of their students. Researchers have suggested that indirect exposure to student trauma experiences can influence the development of vicarious traumatization in student teachers, field instructors, counselors in training, and counselors (Alisic et al., 2012; Butler & Carello, 2014; Cavanaugh, 2016; Foreman, 2015; Foreman 2018). Vicarious traumatization (VT) occurs as a result of listening to or repeated exposure to the traumatic stories of students. The experience of VT has the potential to challenge and change one's view of their self as competent, the belief that others are trustworthy and the world as a safe

place (Saakvitne & Pearlman, 1996; Foreman, 2015). VT also has the potential to impact one's ability to sustain personal wellness and self-care (Foreman, 2018). When self-care is not maintained, preservice teachers and teachers are at risk to inadvertently re-traumatize those they teach. The implementation of instruction about trauma and the trauma-informed classroom assists in educating preservice teachers about the risk of vicarious traumatization and the importance of self-care to foster longevity in the field.

Of equal importance is the ability to support the longevity of teachers to remain in their professions. Researchers cited that 50% of novice teachers leave the profession within the first five years (Ingersoll et al., 2018). Upon further analysis of teacher retention data, the researchers reported 45% of all teacher turnover in public schools occur in 25% of the schools with high poverty rates and are located in rural areas. Ingersoll shared that novice teachers "… pour out emotional energy into their work, which breeds quick exhaustion" (Riggs, 2013). In addition, Rumschlag (2017) reported that the 163 teacher participants in their study scored significantly low in perceived personal accomplishment. This is important as personal accomplishment and emotional exhaustion contribute to burnout which can lead to teachers leaving the profession (Maslach, 2003). According to Alisic et al. (2012) a first step to ameliorating VT and burnout would be providing instruction on trauma-informed care to preservice teachers, teachers, and principals. This study aimed to take a first step by implementing trauma-informed care instruction for preservice teachers based on the trauma-informed care framework developed by Substance Abuse and Mental Health Services Administration (SAMHSA, 2014).

Trauma-informed Care Framework

The SAMHSA developed a framework for implementing a trauma-informed approach to help address the growing need to build awareness of trauma through a trauma-informed approach. A trauma-informed approach is rooted in four assumptions: realization, recognition, responsiveness, and a resistance to re-traumatization (SAMHSA, 2014). The first assumption, realization, pertains to understanding how trauma can and does affect students, families, communities, and ourselves. Recognition is the second assumption. In recognizing the signs of trauma helpers are more informed and aware of how trauma manifests. The third assumption, responsiveness, entails applying the principles of a trauma-informed approach to all areas and includes understanding that trauma can be experienced directly or indirectly. These areas include the school office staff, bus drivers, lunch staff, as well as the teachers and administration. Resisting re-traumatization is the final assumption. Within a trauma-informed approach, preservice teachers are taught how current practices might inadvertently trigger or re-traumatize those

they teach. For example, yelling at a student might trigger responses of fear and cause the student to react, such as shoving books off the desk or yelling back in anger, or respond by shutting down and withdrawing. From a trauma-informed lens, preservice teachers can gain the knowledge to respond in ways that promote safety and trust, foster peer support and collaboration, empowerment, and increased awareness of cultural, historical, and gender issues (SAMHSA, 2014). In building safe and trusting relationships with students, teachers empower students to assist in setting goals and cultivate the ability for self-advocacy (Chafouleaus et al., 2016). When a preservice teacher facilitates learning as a trauma-informed educator, they are better able to view all learners with unconditional positive regard, incorporate social emotional learning into academic activities, actively listen, include culturally relevant materials into the curriculum, collaborate with other educators and service providers, and provide a classroom experience that is organized, predicable and structured (Craig, 2016). The implementation of a trauma-informed approach to training preservice teachers will assist them to realize, recognize, respond, and resist re-traumatization of students.

Risking Re-traumatization

Without providing additional training to preservice teachers to raise awareness of trauma through a trauma-informed lens, there is a risk that students who have experienced or been exposed to trauma will continue to struggle academically, socially, emotionally, and physically. In addition, the lack of training may contribute to preservice teachers feeling ill prepared to develop a learning environment that fosters success for all students. Further, it places the student at risk for being re-traumatized, especially when their behavior is met with discipline without first seeking to understand what is going on with the student. For example, a teacher may view a student as wearing a hat as disrespectful and repeatedly tell the student to take off the hat without realizing the hat is the only thing the student has from their father, and it is the anniversary of the father's death. The implementation of a trauma-informed approach within school systems has been associated with decreased incidents involving physical aggression, expulsions, suspensions, and written referrals (Dorado et al., 2016; Stevens, 2012). In addition, the implementation of trauma-informed care practices has been described as helpful in developing classroom environments where all students, especially those who have experienced trauma, can be successful (Terrasi & Crain de Galarce, 2016). Without the knowledge of how they are potentially negatively impacted by the exposure to their student's trauma, teachers may inadvertently re-traumatize their student.

Study Aims

The current study sought to develop and enhance training for preservice teachers by providing instruction about trauma-informed care that was co-created by a teacher and counselor. The second author is a former special education teacher and is now a professor of instruction of special education at a midwestern university. The primary author is an independently licensed clinical counselor with experience in facilitating counseling with youth in community mental health and school settings and is now an assistant professor of counselor education at the same university. Together, the authors sought to promote success for youth in academic settings by helping preservice teachers learn about trauma, the effects of trauma on learning and development, and how to implement trauma-informed strategies in the classroom. This goal assists in addressing the lack of consistency in training for preservice teachers to obtain trauma-informed instruction (Phifer & Hull, 2016). When considering the prevalence of trauma, the need for additional training and support and having a clear framework, like the one developed by SAMHSA, provides a way to train and prepare preservice teachers to understand and implement trauma-informed care in classrooms.

Purpose of Study

The purpose of the study was to implement instruction designed to educate preservice teachers to realize the impact of trauma, recognize symptoms and causes of trauma, and how they can respond without re-traumatizing students. The aims of the study were to improve the preservice teachers' understanding about the underlying causes of trauma, ways of managing the classroom support the success of all students, and provide implications for teacher educators and future research. The research questions for this study included: 1) How do preservice teachers define trauma?; and 2) Does providing trauma-informed care instruction to preservice teachers significantly change their understanding about the underlying causes of trauma, how to respond to behaviors and symptoms of trauma, how to respond with empathy, their beliefs in their self-efficacy to work with students who have experienced trauma; and their ability to cope with the impact of being exposed to trauma?

Method

After receiving approval from the Institutional Review Board (IRB), the researchers proceeded with recruiting participants and implementing the quantitative study. The participants were conveniently sampled from two undergraduate education classes taught by the second author at a public university

in the Appalachian region of the United States. Prior to beginning the instruction, the second author reviewed the informed consent, distributed the pre-training survey, collected and sealed the surveys in an envelope.

The participants received trauma-informed care instruction during a single class period of 90 minutes facilitated by the second author. No previous instruction on trauma or trauma-informed care had been provided. The instruction included lecture and discussion around defining and exploring the importance of learning about trauma and trauma-informed care. Preservice teachers were introduced to definitions of trauma and provided statistics about the prevalence of trauma within college and school aged learners. The instruction included information on how the brain is impacted when a student experiences stress and how trauma initiates the flight-fight response, interrupts memory, and disrupts attention. Additional information was provided about trauma and stressor related mental health disorders, such as acute stress and post-traumatic stress disorder. Preservice teachers were provided information on the characteristics of a trauma-informed educator based on Craig (2016) and strategies to develop and maintain a trauma-informed classroom. According to Craig (2016) trauma-informed educators focus first on forming positive relationships with all students; avoid implementing abrupt changes; and provide opportunities to practice calming strategies to improve emotional regulation. A trauma-informed classroom also creates a space for students to access that provides calming activities such as coloring, textured items, and visual timers. In addition, preservice teachers practiced breathing and visualization activities, which could be implemented with students in the classroom. At the conclusion of the trauma-informed care instruction, preservice teachers were asked to complete a post-training survey. The surveys were collected, placed in a sealed envelope, and delivered to the primary author. The information collected on the surveys was not shared with the second author until the conclusion of the academic year.

Sample and Participants

A total of 41 preservice teachers participated in the instruction and in completing both the pre-training and post-training surveys. The students were enrolled in either Instructional Adaptations for Adolescent/Young Adult Learners with Exceptionalities and Diverse Needs or Instructional Adaptations for Middle Childhood Learners with Exceptionalities and Diverse Needs taught by the second author. The two classes were found to not differ statistically in gender, age, credit hours obtained, nor on scores on the ARTIC-35 Education measure. The average age of the participating preservice teachers was 21 years with ages ranging from 19 to 32. Preservice teachers predominantly identified as female (35) while six identified as male. All preservice teachers reported being non-Hispanic; 39

selected White, one as Black/African American, one as Asian, and one who identified as both Asian and White. The preservice teachers had completed an average of 87.85 credit hours toward their Bachelor of Science in education degree (Minimum 30, Maximum 120).

Instrumentation

A pre-training survey was utilized to gather demographic information, gender, age, number of credit hours completed, and teacher education program information. In addition, the preservice teachers were asked to define trauma. The definitions were later thematically coded across all participants to allow for emergent codes to be developed.

The Attitudes Related to Trauma-informed Care Scale, (ARTIC; Baker et al., 2016) was utilized to evaluate changes in the preservice teachers' attitudes and understanding about trauma as a result of the trauma-informed care instruction. The preservice teachers completed this scale before and after the instruction. The ARTIC-35 Education version was selected because it was designed to be used in educational settings where trauma-informed care has not yet been implemented. The information on the answer sheet shares that "Trauma-informed care is an approach to engaging people with trauma histories in education, human services, and related fields that recognize and acknowledge the impact of trauma on their lives" (p.1). The ARTIC-35 Education contains 35 questions that instructs participants to select the number along a continuum (from 1 to 7) between two options that represent their personal beliefs. For example, participants are asked to select one to seven on the continuum to indicate their level of belief between I believe "Student's learning and behavior problems are rooted in their behavioral or mental health condition" and "Student's learning and behavior problems are rooted in their history of difficult life events" (ARTIC-35 Education, p. 1). A participant selecting one would indicate a strong belief that learning, and behavior problems are caused by mental health issues, whereas a participant selecting seven would indicate a strong belief that learning, and behavior problems are caused by one's life experiences.

Five subscales make up the ARTIC-35 Education including: (a) underlying causes of problem behavior and symptoms, which assesses how one views the causes and adaptability of student behavior; (b) responses to problem behavior and symptoms, which explores how one views relationship oriented responses or rules and consequences as agents to influence change in behavior; (c) on the job behaviors, which evaluates if one endorses empathy focused versus control focused modes of interacting; (d) self-efficacy at work, which explores one's confidence in their ability to meet the demands of working with students who have been exposed to or experienced trauma; and (e) reactions to work, which

evaluates the educators ability to cope or ignore the impact of being exposed to the trauma their students have experienced. Higher scores endorse a more positive and adaptive attitude toward trauma-informed care and how to empathically engage with students (Baker et al., 2016). The ARTIC was created by content experts and validated by confirmatory factor analysis, though there is limited use within educational systems. The scale has a Cronbach's Alpha of .82 and achieved strong test retest reliability (Baker et al., 2016). In this study, the first administration of the ARTIC- 35 Education taken prior to instruction achieved a Cronbach's Alpha of .84 and a Cronbach's Alpha of .92 was observed after instruction.

Results

All analyses were computed utilizing SPSS Version 25. Prior to computing the data analysis, the two classes were examined statistically to ensure no significant differences between groups occurred. All variables were then checked to ensure they met statistical assumptions. The researcher examined the skewness and kurtosis to evaluate and ensure the normality of distribution. According to GPower version 3.1 at least 34 participants were needed to achieve a moderate effect size of 0.5 and power of 0.8. The current study included 41 preservice teacher participants.

On the pre-training survey, preservice teachers were asked to define trauma as a way to gauge their initial understanding about trauma. A total of 39 readable and usable responses were provided. The responses were thematically organized, and emergent coding was utilized to develop codes based on the written words provided by the preservice teachers. Eight codes emerged from the preservice teachers' understanding and description of trauma including event or experience; type of impact: emotional, physical, cognitive, negative, and interpersonal; long lasting; and type of trauma. Nearly all of the preservice teachers described trauma as a negative event or experience (94.87%) with many of them viewing trauma as leaving a long-lasting impact on the person (43.59%). In their words, trauma is a "scar", event, or "…circumstance that embeds its scare/anxious into your mind forever" and leaves "…lasting memories that carry on with them". Some preservice teachers described types of trauma (17.95%). The specific examples included "abuse", "physical", "emotional", as "physical or mental burdens that is unwillingly forced on an individual", and "anything physical/mental that affects one's ability to complete tasks (and) cope (with) day to day life". The impact of trauma was categorized as emotional or psychological (56.41%), physical (28.21%), negative (23.08%), cognitive (5.13%), and interpersonal (5.13%). These "life defining experience(s)" result in negative consequences that "includes

the formation of mental illness" and causes physical or emotional harm that hinders the individual".

Paired-samples t-tests were conducted to evaluate the change the trauma-informed care instruction had on the preservice teachers' total scores on the ARTIC 35 – Education (Baker et al., 2016) and subscales. Eta-squared (η^2) was calculated to determine effect size which describes the strength or magnitude of change from pre-test to post-test. As a whole, there were statistically significant increases on all of the subscales with the eta squared statistics indicating large effect sizes ranging from .16 to .45. Information about each subscale is provided in Table 1.

Table 1
Pre and Post-Test Data after Instruction

ARTIC-35 Education	Pre-test		Post-test		t (40)	p	η^2
	M	SD	M	SD			
Underlying Causes	5.15	0.71	5.65	0.70	4.48	.000*	0.33
Responses	5.48	0.66	6.00	0.72	4.21	.000*	0.31
On the Job	5.12	0.62	5.71	0.76	5.78	.000*	0.45
Self-Efficacy	5.76	0.52	6.04	0.62	2.72	.010**	0.16
Reactions	5.53	0.71	6.03	0.75	4.38	.000*	0.32
Full Scale	5.41	0.47	5.88	0.58	5.90	.000*	0.33

Note: N = 41. ARTIC-35 Education refers to the Attitudes Related to Trauma Informed Care (Baker, Brown, Wilcox, Overstreet, & Arora, 2016). Pre and post refer to the when the ARTIC-35 Education was administered, before and after instruction. *p < .001 (two tailed). **p < .05(two tailed)

Discussion

According to the overall total and subscale scores, the trauma-informed care instruction provided by the second author contributed to improved knowledge and attitudes related to trauma-informed care among study participants. Specifically, preservice teachers expressed an improved understanding that a student's learning difficulties and behavioral challenges are related to the student's history and exposure to trauma. Preservice teachers also expressed a greater awareness about the importance of establishing relationships and how to respond and engage with students using empathy. Their responses indicated a willingness and understanding to respond to student behaviors with flexibility as opposed to rigid adherence to rules. The preservice teachers also endorsed a relationship oriented understanding instead of authoritarian. This is similar to the perspective shift

advocated by Milwaukee Public Schools (2020) in their trauma-informed care plan that is incorporated into their positive behavioral intervention and support framework. Their focus is on educating students form a trauma-informed view that focuses on the whole student in a student-centered environment that reframes behavior by identifying student strengths. The instruction provided to the participants in this study accomplished what Sitler (2008) advocated for - "a greater understanding of how trauma manifests itself in learners and greater attention to leaners as whole persons with physical, emotional as well as cognitive needs" (p. 122).

The instruction also assisted preservice teachers with greater feelings of self-efficacy to educate, attend to, and respond to students who have experienced or been exposed to trauma. With a greater sense of self efficacy, the preservice teachers expressed improved self-competence to address and support their students, especially those impacted by trauma. Preservice teachers expressed a greater understanding on how the experience or exposure to trauma impedes the academic success of students and influences development and behavior. Further, preservice teachers reported feeling more confident in their abilities to respond to students with understanding and less rigid adherence to rules. The responses from the preservice teachers in this study are similar to the findings of a longitudinal study conducted by Dorado and colleagues (2016). In their study, teachers across four elementary schools received training from a trauma-informed lens to promote understanding of trauma and stress, establish safety, foster compassionate relationships, promote resilience and social emotional learning, practice cultural responsiveness and how to facilitate empowerment and collaboration. These are similar to the four primary principles of realize recognize, respond, and resist re-traumatization from the trauma-informed framework designed by SAMSHA (2014) and utilized by the authors to develop instruction for the preservice teachers in this study.

In addition, preservice teachers in this study recognized they can be impacted by their work as teachers and endorsed coping strategies that included seeking support and taking care of their selves. The school personnel in the study by Dorado et al. (2016) also expressed increased knowledge about how they are impacted by their work with students who have experienced trauma. This is an important component to for educators to recognize. Specifically, when helpers, such as preservice teachers, are exposed to the traumatic experiences of others they are at risk for developing vicarious traumatization. The stories and experiences of students influence student behavior in the classroom, ranging from withdrawal and isolation to acting out. This can cause a preservice teacher to question their self-efficacy and their ability to manage the classroom and support students. It may also challenge the preservice teacher's view of the world as a safe place for their students. Preservice teachers are best prepared when they are aware

of how their experiences as a teacher may impact them personally and professionally and what they can do to mitigate the negative consequences of the exposure. The expressed increase in self-efficacy among the preservice teachers supports that providing instruction from a trauma-informed lens as described by SAMHSA (2014) and utilized by the authors assisted in improving overall self-efficacy, competence, and understanding.

Based on the answers selected pre and post surveys, the preservice teachers endorsed they would access resources for support and expressed feeling more confident in their abilities to handle situations in the classroom that may be related to trauma. The preservice teachers selected answers indicating they felt more prepared to explore what has happened to a student as opposed to what is wrong with a student. When preservice teachers are forewarned and forearmed with knowledge and skills, they will be better able to approach their classroom from a trauma-informed care lens along with a relationship oriented teaching philosophy and management style.

The preservice teachers also shared their definitions of trauma. Their responses included views of trauma as an event that leaves long lasting impact on a person that effects their physical, emotional, cognitive, and interpersonal functioning. This is in line with SAMHSA's (2014) definition of trauma which includes the impact on an individual's interpersonal or social, intrapersonal, emotional, physical, and spiritual well-being. The understanding of preservice teachers of trauma as having a long-lasting impact on a student's wellbeing provides them with a level of awareness necessary for understanding how trauma shapes a student's learning and development. According to Felitti et al. (2019) the "secondary prevention of the effects of adverse childhood experiences will first require increased recognition of their occurrence and second, an effective understanding of the behavioral coping devices that commonly are adopted to reduce the emotional impact of these experiences" (p. 784). This study equipped preservice teachers with the knowledge of adverse childhood experiences, the impact of these traumas on the student and the classroom, and provided preservice teachers with strategies to help all students be successful.

Limitations

The current study has limitations which support further evaluation and continued research. For example, the study did not implement a control group. Study participants were conveniently sampled from the second author's classrooms in the fall and spring which may have contributed to students wanting to provide the "right" answer. The sample was limited in size and stage of development of preservice teachers, focused only on those studying middle childhood, and was time-limited to the specific academic year. A longitudinal approach would help

assess if the changes in attitudes toward trauma-informed care remain when preservice teachers enter into their yearlong teaching placement and after obtaining employment. It is unclear if other events or experiences impacted the responses from preservice teachers on the surveys. The demographic survey was limited to educational and character questions without evaluating personal variables from the preservice teachers such as their own trauma exposure, adverse childhood experiences, or previous education. In addition, only a 90 minute instruction was provided and there were no observations of preservice teachers' teaching before or after instruction. Despite these limitations, the researchers are able to state that preservice teachers who participated in the study reported an increase in their understanding of trauma as an underlying cause of problem behaviors, how to respond to these behaviors, and endorsed personal coping strategies of obtaining support.

Implications

Despite the limitations, there are indications that facilitating trauma-informed instruction to preservice teachers about trauma and trauma's impact on student learning improved self-efficacy and competence in educating students who have experienced or been exposed to trauma. The preservice teachers reported increased awareness on how they might be impacted through their exposure to the trauma narratives of their students. For these reasons, it is important teacher education include instruction on and about trauma, how trauma disrupts student learning, impacts the classroom, and potentially affects the teacher. In addition, the collaboration between teachers, counselors, and higher education faculty provides a foundation of multiple perspectives to build a network of resources to engage, support, and empower all learners.

Conclusion

In the classroom of today and tomorrow, the need for additional instruction and knowledge about how trauma impacts the success of the student and the classroom environment is a necessity. The preservice teachers who participated in the current study demonstrated an increased awareness of how trauma has the potential to personally and professionally impact their development as a teacher and their students. It is hoped that additional research continues to understand and develop best practices for preparing preservice teachers and teachers at all levels with the ability to apply a trauma-informed approach to help all students succeed.

References

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

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*, *8*(1), 61–76. http://doi.org/10.1007/s12310-015-9161-0

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

Berger. E. (2019). Multi-tiered approaches to trauma-informed care in schools: A systematic review. *School Mental Health 11*, 650-664. https://doi.org/10.1007/s12310-019-09326-0

Bethell, C. D., Carle, A., Hudziak, J., Gombojav, N., Powers, K., Wade, R., & Braveman, P. (2017). Methods to assess adverse childhood experiences of children and families: Toward approaches to promote child well-being in policy and practice. *Academic Pediatrics, 17*, 51-69. doi.org/10.1016/j.acap.2017.04.161

Blodgett, C., & Lanigan, J. D. (2018). The association between adverse childhood experience (ACE) and school success in elementary school children. *School Psychology Quarterly*, *33*, 137–146. https://doi.org/10.1037/spq0000256.supp

Butler, L. D., & Carello, J. (2014, April). *Stress and trauma exposure in MSW education: Predictors of compassion satisfaction and compassion fatigue among students in training*. Grand rounds presented to the Buffalo Center for Social Research, School of Social Work, University at Buffalo, NY.

Cavanaugh, B. (2016). Trauma-informed classrooms and schools. *Beyond Behavior, 25(*2), 41-48. doi: 10.1177/107429561602500206

Craig, S. (2016). The trauma-sensitive teacher. *Educational Leadership, 74* (1), 28-34.

Crosby, S. D. (2015). An ecological perspective on emerging trauma-informed teaching practices. *Children and Schools*, *37*(4), 223–230. doi: 10.1093/cs/cdv027

Felitti, V. & Anda, R. (2009). The adverse childhood experiences (ACE) study: Bridging the gap between trauma and negative consequences later in life. Center for Disease Control and Prevention and Kaiser Permanente. www.acestudy.org

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*, *8*(1), 144–162. doi: 10.1007/s12310-015-9166-8

Delaney-Black, V., Covington, C., Odnersma, S. J., Nordstrom-Klee, B., Templin, T., Ager, J., et al. (2002). Violence exposure, trauma, and IQ and/or reading deficits among urban children. *Archives of Pediatrics and Adolescent Medicine, 156*, 280–285. doi:10.1001/archpedi.156.3.280

DePrince, A. P., Weinzierl, K. M., & Combs, M. D. (2009). Executive function performance and trauma exposure in a community sample of children. *Child Abuse & Neglect: The International Journal, 33*(6), 353-361. doi: 10.1016/j.chiabu.2008.08.002

Felitti, V. J., & Anda, R. F. (2009). *The adverse childhood experiences (ACE) study: Bridging the gap between childhood trauma and negative consequences later in life*. Center for Disease Control and Kaiser Permanente. Retrieved from www.acestudy.org

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., ... Marks, J. S. (2019). 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, 56* (6), 774-786. doi: 10.1016/j.amepre.2019.04.001

Foreman, T. (2015). *A mixed methods evaluation of vicarious traumatization and posttraumatic growth among counselors in training*. ProQuest, UMI Dissertations Publishing.

Foreman, T. (2018). Wellness, exposure to trauma, and vicarious traumatization: A pilot study. *Journal of Mental Health Counseling, 40* (2), 142-55, doi: 10.17744/mehc.40.2.04

Hurt, H., Malmud, E., Brodsky, N. L., & Giannetta, J. (2001). Exposure to violence: Psychological and academic correlates in child witnesses. *Archives of Pediatrics and Adolescent Medicine, 155*, 1351–1356. doi:10.1001/archpedi.155.12.1351

Ingersoll, R., Merrill, L., & Stuckey, D. (2018). The changing face of teaching. *Educational Leadership, 75*(8), 44-49. *http://www.ascd.org/publications/educational-leadership/may18/vol75/num08/The-Changing-Face-of-Teaching.aspx*

Johnson, A., Perry, N. B., Hosinar, C. E., Gunnar, M. R. (2019). Cognitive-affective strategies and cortisol stress reactivity in children and adolescents: Normative development and effects of early life stress. *Developmental Psychobiology, 61*(7), 999-1013. doi: 10.1002/dev/21849

Maslach, C. (2003). Job burnout: New directions in research and intervention. *Current Directions in Psychological Science, 12*, 189-192. https://doi.org/10.1111/1467-8721.01258

Milwaukee Public Schools (2020). *Trauma and mental health*. Retrieved from https://mps.milwaukee.k12.wi.us/en/Families/Family-Services/Intervention---PBIS/Trauma.htm

National Scientific Council on the Developing Child (2014). *Excessive Stress Disrupts the Architecture of the Developing Brain: Working Paper No. 3*. Updated Edition. Retrieved from www.developingchild.harvard.edu

National Sexual Violence Resource Center (2015). *Statistics about sexual violence*. https://www.nsvrc.org/sites/default/files/publications_nsvrc_factsheet_media-packet_statistics-about-sexual-violence_0.pdf

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

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

Rigs, L. (2013, October 18). *Why do teachers quit? And why do they stay?* The Atlantic. https://www.theatlantic.com/education/archive/2013/10/why-do-teachers-quit/280699/

Rumschlag, K. E. (2017). Teacher burnout: A quantitative analysis of emotional exhaustion, personal accomplishment and depersonalization. *International Management Review, 13*(1), 22-36. https://www.questia.com/library/journal/1P3-4321221659/teacher-burnout-a-quantitative-analysis-of-emotional

Saakvitne, K. W. & Pearlman, L. A. (1996). *Transforming the pain: A workbook on vicarious traumatization*. New York: W.W. Norton & Company.

Saks, V., & Murphey, D. (2018). *The prevalence of adverse childhood experiences, nationally, by state, and by race/ethnicity*. Child Trends Organization website. https://www.childtrends.org/publications/prevalence-adverse-childhood-experiences-nationally-state-race-ethnicity

Sapolsky, R., Romero, L. M., & Munck, A. U. (2000). How do glucocorticoids influence stress responses? Integrating permissive, suppressive, stimulatory and preparative actions. *Endocrine Reviews, 21*(1), 55-89. https://doi.org/10.1210/edrv.21.1.0389

Shonk, S., M., & Cicchetti, D. (2001). Maltreatment, competency deficits, and risk for academic and behavioral maladjustment. *Developmental Psychology, 31*(1), 3-17. doi: 10.1037/0012-1649.31.1.3

Sitler, H. C. (2008). Teaching with awareness: The hidden effects of trauma on learning. *The Clearing House: A Journal of Educational Strategies, Issues, and Ideas*, *82*(3), 119-124. doi: 10.3200/TCHS.82.3.119-124.

Skovholt, T. M., & Ronnestad, M. H. (1992). Themes in therapist and counselor development. *Journal of Counseling & Development*. doi: 10.1002/j.1556-6676.1992.tb01646.x

Skovholt, T. M., & Ronnestad, M. H. (2003). Struggles of the novice counselor and therapist. *Journal of Career Development*, *30*, 45–58. doi: 10.1177/089484530303000103

Stempel, H., Cox-Martin, M., Bronsert, M., Dickinson, L. M., & Allison, M. A. (2017). Chronic school absenteeism and the role of adverse childhood experiences. *Academic Medicine : Journal of the Association of American Medical Colleges*, *17*, 837–843. doi: 10.1016/j.acap.2017.09.013

Stevens, J. E. (2012). *Lincoln High School in Walla Walla, WA tries new approach to school discipline - Suspensions drop 85%*. Retrieved from https://acestoohigh.com/2012/04/23/lincoln-high-school-in-walla-walla-wa-tries-new-approach-to-school-discipline-expulsions-drop-85/

Substance Abuse and Mental Health Services Administration (2014). *SAMHSA's concept of trauma and guidance for a trauma-informed approach*. Rockville, MD: Author. https://acestoohigh.com/2012/05/31/massachusetts-washington-state-lead-u-s-trauma-sensitive-school-movement/

Substance Abuse and Mental Health Services Administration (2020). *Understanding child trauma*. SAMHSA.gov. https://www.samhsa.gov/child-trauma/understanding-child-trauma

Teicher, M. H, Andersen, S. L., Polcari, A. Anderson, C. M., Navalta, C. P., & Kim, D. M. (2003). The neurobiological consequences of early stress and childhood maltreatment. *Neuroscience and Biobehavioral Reviews, 27*, 33-44. doi:10.1016/S0149-7634(03)00007-1

Terrasi, S., & Galarce, P. Crain de (2017). Trauma and learning in America's classroom. *Kappan Magazine*, *98*, 35–41. doi: 10.1177/003172177696476