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Teacher Awareness of Trauma Informed Practice: Raising Awareness In Southeast Georgia

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Abstract

While the concept of trauma-informed care has been developed in other fields, its development within the field of Education is relatively new (Thomas, Crosby, & Vanderhaar, 2019), However, as the educational field is becoming more and more aware of this approach, we recognize there is a critical need for teachers and other educational professionals to recognize the symptoms of trauma in students, the associated behaviors of trauma-affected students, and instructional and environmental strategies for addressing these to support student success (trauma informed pedagogy). This paper outlines a study examining the extent to which teachers in the region of southeast Georgia are aware of trauma- informed strategies, the theory undergirding the approach, and the resources available to them for addressing issues related to adverse childhood experiences. With participation from over 500 educators in our study, it is clear that there is a strong need to support teachers and provide resources to support trauma-informed practice.

Keywords

trauma-informed; interventions; teacher support; student support

Teacher Awareness of Trauma-Informed Practice:
An Exploratory Study in Southeast Georgia

Empirical evidence of the prevalence, symptoms, and life impact of specific and complex trauma is vast and well established within social work, psychiatry, juvenile justice, and public health. However, the introduction of trauma-informed practices within education is still novel and sparse. Over the past two decades, the empirical works published on trauma-informed pedagogy have primarily focused on various trauma-informed care models within k-12 school systems with no universal standard of definition or model for pre-service or professional training of teachers in trauma-informed pedagogy (Thomas et al., 2019). There is a critical need for teachers and other educational professionals to recognize the prevalence of trauma, the symptoms of trauma, and the associated behaviors of trauma-affected students. That alone, however, is insufficient. We also need to develop trauma-informed professional skills (Dorado et al., 2016). The initial study of adverse childhood experiences (ACEs) and long-term health outcomes revealed that two-thirds of participants reported at least one ACE, 38% said two or more, and the higher the ACE score, the dramatically poorer the health outcomes (Anda and Felitti, 1998). That is with a population sample that was predominantly middle-class and college-educated. As one can imagine, when the sights are set on poor communities and Title I schools, multiple ACEs and the associated toxic stress among young people are ubiquitous. Teachers must understand the impact adverse childhood experiences can have on their students' emotional, social, and academic development, starting with the familiarization of the ACES study and the theory and study relevant to it.

Plenty of research documents that childhood trauma and stress impact brain development and ultimately can affect cognitive functioning and school performance (Pechtel & Pizzagalli, 2011; Streeck-Fischer & van der Kolk, 2000; Burke et al., 2011; Delaney-Black et al., 2002). Trauma-informed pedagogical practice holds promise to address and remediate the academic gaps caused by adverse childhood experiences, as demonstrated by treatments in the fields of psychiatry, psychology, and social work (Azeem et al., 2011; Rivard et al., 2005; Amaro et al., 2007; Huntingon et al., 2005). While applying the principles of trauma-informed care is relatively new to education, there is some evidence that these practices used in academic settings positively impact student outcomes (Stevens, 2012). Through this research, we have a new way of understanding and anticipating poor results in school and life (Perfect et al., 2016).

There is no disagreement that the need for trauma-informed pedagogy is a critical public health issue. The United States Congress has introduced a bill, HR 7320-Trauma-Informed Schools Act of 2019, in a bipartisan effort to allocate federal funding for schools to implement trauma-informed practices through training and resources (Congress.gov). In their literature review, Thomas et al. (2019) evaluated 33 articles that included 30 various trauma-informed interventions. Of the 33 studies, they noted 32 of the studies conclude their interventions showed effectiveness or improvements in outcomes. Still, there was no standard of measure for the effective results, and all had concerning limitations. Our work contributes to understanding how effective educators' approaches are in addressing what could be trauma-related behaviors.

We decided to learn more about the current knowledge and application of trauma-informed practices among educational professionals in Southeast Georgia. Specifically, we

wanted to gauge educators' awareness of students who have experienced trauma and their knowledge of trauma-informed practices (TIP). We also wanted to understand what strategies they use when working with students who have experienced trauma, regardless of their familiarity with TIP. To gather this information, we surveyed educational professionals (primarily teachers) in the fall of 2018 (see Appendix). As a result of this study, we clarified the local need for professional development to raise awareness of the detrimental effects of toxic stress and promote knowledge and skills with trauma-informed practice.

Our purpose in this paper is two-fold. We present our literature review that examines teachers' knowledge of, attitude toward, and experiences with students impacted by childhood trauma and the need for professional development to promote more widespread trauma-informed pedagogy. We also present the results of our study of local educators' familiarity with the impact of trauma and their strategies to respond to students who have experienced trauma that further supports the need for greater education in this area.

Research Questions

For this exploratory research, we developed a survey for teachers and other school personnel in southeastern Georgia. Our purpose was to gauge their knowledge of and experience with students impacted by trauma or adverse childhood experiences (ACEs) and probe their understanding of trauma-informed practices. We sought to answer these research questions:
1. What is their current level of awareness of the impact of trauma on students' lives?
2. What interventions have they used when working with students who have experienced adverse childhood incidents?
3. What are their perceptions of the effectiveness of these interventions?
4. What is their familiarity with aspects of trauma-informed pedagogy?
5.

Literature Review

To frame our work in the context of the current field of literature, we focused on reviewing existing research on teacher knowledge, attitudes, and experiences of childhood trauma in the classroom and trauma-informed pedagogy. The primary search of scholarly works focused on books and academic journals within the last five years. We searched across disciplines of social work, psychiatry, child services, education, as well as juvenile justice and focused on trauma-informed pedagogy, teacher buy-in of trauma-informed classroom management, teacher-student relationships, teachers and the trauma-affected student, toxic stress in the classroom, strategies for trauma-informed classroom management, and measures of teacher knowledge, attitudes, beliefs, and perspectives of child maltreatment, sexual abuse, homelessness, peer-victimization, and poverty-associated disparities. This literature review provides the warrant for our study to precisely examine the level of understanding of and experience with childhood trauma and trauma-informed practices among educational professionals in Southeast Georgia.

The literature we review addresses student behaviors and circumstances associated with childhood trauma and teachers' perceptions of the same. Next, we address what research suggests about teachers' lack of knowledge of the influence of trauma and trauma-informed

strategies, which begs the question of the need for professional development that reassures teachers they have a role to play in student support if appropriately equipped. Finally, we present research about established measures that gauge teachers' knowledge, perspectives, and buy-in of trauma-informed pedagogy.

Behaviors Associated with Trauma and Teachers' Perceptions

A systematic review of the literature (n=83) by Perfect and colleagues (2016) identified behaviors often exhibited by trauma-affected students. These behaviors include disruptive external behaviors such as defiance and aggression, bullying, self-harm, unsuccessful peer relationships, and antisocial behaviors. Students who have experienced trauma may also exhibit less obvious internalized behaviors, such as problems with focused attention, poor academic performance, poor school attendance, anxiety and depression, social and familial withdrawal, disrupted eating patterns, and physical ailments unrelated to physical illness (Maguire et al., 2015; Perfect et al., 2016). Left unrecognized and unaddressed by teachers, these behaviors profoundly negatively affect students' academic performance and exacerbate teacher stress. They contribute to negative student-teacher relationships and poor classroom management outcomes (Conley et al., 2014; Martin et al., 2010; Perfect et al., 2016).

Evidence indicates multiple factors contribute to teachers' lack of reporting suspected child maltreatment. Teachers self-report a lack of knowledge of the signs of child maltreatment and sexual abuse, limited understanding of child abuse laws and reporting procedures, compassion fatigue, and uncertainty and fear of repercussions for themselves and the student (Abrahams et al., 1992; Bell and Singh, 2017; Kenny, 2004). Additionally, evidence suggests when teachers know of the prevalence of childhood maltreatment and sexual abuse, they often cannot differentiate student symptomologies of abuse, attributing poor student affect and negative consequences instead to attention-deficit or disruptive behaviors (Martin et al., 2010). In the following, we address the research that addresses two sources of childhood trauma and the results of teachers' perceptions.

Peer Victimization. Research finds that teacher responsiveness to peer victimization is associated with teachers' perspectives of school bullying as a normative school experience. Their responses are influenced by teacher confidence and self-efficacy, race and gender, and the type of bullying (Garner, 2017; Troop-Gordon and Ladd, 2015). Teacher perceptions and lack of knowledge of peer victimization prevalence of sexually diverse students is another dimension that is evidentiary of the need for expanded trauma-informed training for teachers. Results from several studies specific to peer victimization of LGBTQIA students provide compelling evidence that peer victimization and poor teacher-student relationships diminish psycho-social and learning outcomes. Further, these studies indicate teachers erroneously perceive a lower incidence of victimization and a higher level of advocacy and intervention than is reported by the sexual minority students (Aragon et al., 2014; Collier et al., 2013; Kolbert et al., 2015). Substantive quantitative evidence indicates professional development training to improve awareness and foster positive teacher-student relationships can provide a protective function for psycho-social outcomes and a promotive factor for improved learning outcomes for victims of bullying (Cook et al., 2010; Huang et al., 2018).

Living Conditions. Teacher perceptions of students' socioeconomic status (SES) and living environments can have detrimental impacts on students' classroom behavior and learning outcomes. Data indicate that from 2017 to 2018, the homeless population of K-12 students was over 1.5 million and predominantly made up of disabled, migratory, English-learners, and unaccompanied youth (National Center for Homeless Education, 2020). Several studies provided evidence that there is a gap in reporting student living status to teachers, a lack of knowledge by teachers of how to recognize a homeless or transient student, and a deficit in training and support for the teacher (Sulkowski, 2016; Berliner, 2002). Children in residential or foster care and those who are transient or experiencing unsheltered homelessness are often victims of maltreatment and physical and sexual abuse. They have a higher rate of post-traumatic stress expressions than their non-homeless peers. As a result, these students need unique support systems and strategies that may be overlooked or misunderstood by teachers (Berliner & Elliot, 2002; Sulkowski, 2016; Sulkowski and Joyce-Beaulieu, 2014). Teachers' ability to adequately and appropriately address the unique needs of this student population depends on teachers' awareness of the student's living situation and trauma-informed pedagogy. However, the literature also shows negative consequences from teachers' beliefs about student populations from perceived disadvantaged or impoverished communities. Sorhagen (2013) found teachers' erroneous perceptions and expectations of elementary students from lower SES had a long-term detrimental impact on high school academic performance. More recent studies indicated that teacher expectations of lower minority SES children's academic abilities continue to be systematically biased. Gershenson and colleagues (2016) found racial bias among non-black teachers' expectations of lower SES black students, with the most significant effect between male students and math teachers. Other literature explored common myths about the poor and how they can distort and influence teacher belief systems about and expectations of children from impoverished homes and communities (Ullucci & Howard, 2015). Expanding teacher understanding of the root causes of sustained and intergenerational poverty is crucial for diminishing the gap in knowledge and potential biases that teachers may harbor about their students living in lower SES.

Teachers Lack Preparation

Although an abundance of evidence that supports the benefits of trauma-informed professional development on teacher knowledge and student outcomes (Zacarian et al., 2017; Campbell et al., 2019; Chafouleas et al., 2016), in our review of the literature, three overarching themes emerged: teachers lack knowledge related to the impact of trauma and trauma-informed practice; they are not prepared to implement trauma-informed classroom management; and they affirm a need for trauma-informed professional development (Blodgett & Dorodo, 2016; Conley et al., 2014; Reker, 2016; Thomas et al., 2019; Yoon, 2002).

Multiple studies have shown that teachers consistently self-report they lack adequate knowledge of the various causes and signs of student trauma; they have erroneous beliefs of trauma-affected behaviors and academic outcomes; and they express a desire for trauma-informed professional development (Dods, 2013; Kenny, 2004; Marquez-Flores et al., 2016; Reker, 2016). Classroom outcomes and implications of uninformed and ill-prepared teachers can be detrimental. Implementing mistaken interventions and punishing trauma-affected students holds the potential for re-traumatizing a student (McInerney & McKlindon, 2014). Alisic (2012) found evidence in her initial qualitative study of elementary school teachers (n=21) that while

confident in teaching, teachers were uncertain of their effectiveness and capacities in supportive roles of meeting the unique needs of trauma-affected students. In a more extensive follow-up study, Alisic and colleagues (2012) measured teacher experiences of trauma-affected students. A randomized questionnaire of current teachers (n=765) supported previous evidence of teacher unpreparedness and uncertainty of their role as mediators of trauma-affected classroom behaviors. Most strikingly, the results of this study showed a mere 9% of the respondents had any trauma-informed professional development (Alisic et al., 2016).

Baweja and colleagues (2016) found teachers expressed a need for direct clinician communication in conjunction with more trauma-informed professional development. Despite acknowledging the need for professional development, teachers reported being emotionally and professionally conflicted by competing priorities of being present in the classroom versus attending professional development. Interestingly, in comparing teachers, school mental health providers, and administrators, Moon and Mendenhall (2017) found discrepancies in commitment, specifically with teachers expressing less commitment to student mental health. Sundborg (2019) measured variables that improve teacher commitment to trauma-informed practices and found three that contributed to teacher confidence and commitment: administrative support, increased trauma-informed knowledge, and trauma-informed self-efficacy.

Established Measures

We did find in the literature that there have been various measures utilized to gauge teacher knowledge, perspectives, and buy-in of trauma-informed pedagogy. Kenny (2004) distributed the Educators and Child Abuse Questionnaire (ECAQ), found to be a reliable measure of teacher knowledge and attitudes toward child abuse, discipline, and reporting procedures. Another measure, the Attitudes Related to Trauma-Informed Care Scale (ARTIC) is a valid and reliable measure of staff perceptions of trauma-informed care across disciplines (Baker et al., 2016). The ARTIC Scale holds the most promise as it has variations specific to discipline. The Trauma-Informed Organizational Capacity Scale (TIC Scale) is a psychometric instrument that measures the extent to which an organization is providing trauma-informed care (air.org). The TICOMETER, a tool to measure Trauma-Informed Care in Organizations, is another instrumentation to assess an organization's trauma-informed practice engagement (https://c4innovates.com). Despite the various measures for trauma-informed practices, there is wide variation in their utilization for measuring teacher capacities. Our survey differed from these earlier models and was designed to specifically garner educators' perspectives and practices.

Methodology

In this section, we present our methods for collecting and analyzing data in our exploratory research. Because the purpose of our study was to ascertain the level of awareness and knowledge current educators held about TIP and the level of trauma impacting their students, we geared this as a descriptive survey study (Fowler, 2014).

Participant Sampling and Research Design

This study follows a non-experimental design. Participants include 414 teachers, counselors, paraprofessionals, and other school personnel from southeast Georgia. We did not collect demographic characteristics because the intent is exploratory in nature.

Instrumentation

We designed our survey to explore what gaps existed in educators' theoretical and practical understandings of trauma-informed practice. Based on what we found in the literature regarding teachers' lack of preparation in areas related to SEL and trauma-informed practice (Dods, 2013; Kenny, 2004; Marquez-Flores et al., 2016; McInerney & McKlindon, 2014; Reker, 2016,), we designed our survey to determine educators' level of experience, use of particular interventions, and notions of important concepts related to TIP.

We organized the survey questions into two sections. Questions in the first section asked of the respondents' awareness of working with students with six types of adverse childhood experiences (ACEs). When they answered yes, an additional question addressed whether they associated the ACE(s) with disruptive behaviors or learning difficulties. Also, for those ACEs, the respondents affirmed, we asked several questions about their experiences with interventions. Questions addressed what interventions were available and their effectiveness, as reported using a five-point Likert scale (5 "highly effective; behavior changed immensely; positive, sustained outcomes" to 1 "worsened behavior"). We also included an open-ended question asking respondents to describe the impact of the intervention on student behavior. In the second section, we asked about 20 concepts that are relevant to trauma-informed pedagogy and practice. We posed them in a five-point Likert scale (5 "I am very familiar; informs my practice often; can teach others" to 1 "I have heard of it; not knowledgeable and 0 "never heard of it"). The survey included open-ended questions for participants to comment on their experience with strategies used to support those students and their perceptions of the impact those strategies had.

Procedures

In the fall of 2018, we sought and gained IRB approval to conduct this survey research. We recruited participants to participate in our survey research using social media posts, advertisements, and emails delivered through professional organizations. We anticipated about 200 participants, but the survey reached over 800 people who answered some of the questions. We chose to use data from surveys completed in full, rendering a final sample of 414. The enthusiastic interest our survey revealed surprised us, and the sheer number of participants underscored our initial thoughts that this is a topic of great interest currently to educational professionals.

Data Analysis

We tested data for basic statistical assumptions and screened for outliers before data analysis. Data met the assumption of normality, linearity, and lack of collinearity among the variables. Further, we detected no extreme outliers in the data that would otherwise unduly influence descriptive statistics. Thus, all data proceeded with 414 complete cases without making any statistical adjustments. A combination of descriptive statistics and exploratory factor

analyses (EFAs) with common factor extraction (principal axis factoring) and an oblique rotation (promax) were employed to answer the research questions and to evaluate the construct validity and internal consistency reliability of the newly-developed survey.

Findings

Construct Validity and Reliability of the Survey

We submitted data from the survey to construct validity and internal consistency reliability analyses. We assessed construct validity by conducting two EFAs with principal axis factoring selected as the common factor extraction method accompanied by a promax oblique rotation, as we expected factors to be related. Regarding the first set of items in the survey, the EFA revealed a two-factor solution explaining approximately 51% of the variability in the set of 12 items about availability and effectiveness of interventions. Factor loadings for this solution on the two factors ranged from .50 to .96, and both factors were modestly and negatively correlated, $r = -.25$. Results of the EFA on the second set of factors also indicated a two-factor solution explaining approximately 50% of the variability in the set of items. Factor loadings for this solution ranged from .34 to .95, and both factors showed a strong, positive correlation, $r = .75$. Thus, the factor structure of the survey appears to be supported by theory and extant research and, with factor loadings that ranged from low to high in magnitude, the two EFAs suggested a viable construct validity. Table 1 contains the factor loadings of the two EFAs and Table 2 displays the internal consistency and descriptive statistics of the various factors.

Table 1

Factor Loadings of the Exploratory Factor Analyses

Item	Part 1		Part 2	
	Factor 1	Factor 2	Factor 3	Factor 4
	Loading	Loading	Loading	Loading
Item 21	.96			
Item 7	.73			
Item 14	.70			
Item 28	.69			
Item 42	.59			
Item 35	.50			
Item 18		.83		
Item 4		.77		
Item 25		.68		
Item 11		.64		
Item 39		.64		
Item 32		.61		
Item 44_19			.95	
Item 44_7			.77	
Item 44_4			.74	
Item 44_18			.72	
Item 44_20			.68	
Item 44_5			.62	
Item 44_12			.59	

Item 44_1	.57	
Item 44_17	.51	
Item 44_16	.47	
Item 44_3	.41	
Item 44_6	.34	
Item 44_14		.78
Item 44_10		.76
Item 44_8		.71
Item 44_9		.71
Item 44_15		.70
Item 44_11		.65
Item 44_2		.64
Item 44_13		.61

Note. Factor labels are as follows: Factor 1 = Source of trauma: effectiveness of interventions; Factor 2 = Source of trauma: how often observed; Factor 3 = TIP-related concepts; Factor 4 = More commonly familiar concepts.

$N = 414$

Table 2

Descriptive Statistics and Internal Consistency Reliability Coefficients of the Four Factors

Factor	M	SD	α
Source of trauma: effectiveness of interventions	2.72	0.58	.84
Source of trauma: how often observed	1.75	0.52	.78
TIP-related concepts	4.00	1.19	.92
More commonly familiar concepts	2.63	1.20	.88

$N = 414$

Encounters and Interventions

The first section of the survey gathered information about whether respondents had encountered students they recognized as being traumatized in a particular way. If so, we asked what common interventions they employed to support the student. We report findings from the survey for each of the specific categories in Table 3.

Table 3

Respondents encounters and interventions

Adverse Childhood Experience	Yes	Interventions used
Child Maltreatment	100%	Counselor referral; special education services referral
Low SES	90%	Special education services referral; counselor referral; offer supplies
Parental absence	87%	Counselor referral; additional tutoring
Family or community violence	55%	Counselor referral; outreach to community resources

Foster care	65%	Counselor referral; special education services referral; time-out of the classroom or from activities
Peer victimization/isolation	60%	Intentionally pairing students for support

As is evident in the table, our respondents are generally aware that they are working with students who have experienced sources of trauma. The most prevalent intervention they report is a referral to a counselor, followed closely by a referral for special education services. Among the problems with this finding is the fact that there is a severe shortage of counselors in school buildings (ASCA, 2019), so the resource they are inclined to invoke may not be available at all or overly subscribed. These findings indicate that respondents are not citing themselves as resources for support, which begs whether they would benefit from professional development focused on trauma-informed practice.

Survey respondents indicated there is a perceived rise in "traumatic events" facing our youth. They specifically cited poverty, violence, family displacement, foster care placements, abuse and neglect, and drug abuse most frequently in the survey, and 88 percent indicated a rise in students experiencing such adverse experiences.

Familiarity with Aspects of Trauma-Informed Practice

The second section of the survey explored respondents' familiarity with and understanding of various concepts related to trauma-informed practice and tenets of trauma-informed pedagogy. We wanted to understand where the need for professional development might be greatest. Responses to our survey indicate educational professionals (teachers mainly) are unaware of topics such as ACES study, meditation, brain-based strategies, community mental health supports, complex trauma, conscious discipline, culturally relevant pedagogical strategies, restorative justice, symptoms/triggers of trauma, toxic stress, vicarious trauma, and wrap-around services

Table 2
Familiarity with key concepts

Concept	Not familiar
Vicarious Trauma	77%
Trauma-Informed Pedagogy	72%
Restorative Justice	72%
Toxic Stress	66%
Wrap Around Services	62%
Symptoms of Trauma	57%
Trauma Triggers	53%
Sensory Breaks	38%
Self- Care	36%
Self-Regulation	35%
Mindfulness/Meditation	32%
SEL	32%
De-escalation	30%

PBIS	8%

The only concept that the participants appear to have a general familiarity with is Positive Behavior Intervention and Supports [PBIS], likely due to many school districts in South Georgia implementing school wide PBIS initiatives over the past five years. Approximately one-third of teachers are unfamiliar with de-escalation, mindfulness and meditation, social-emotional learning (SEL), self-care, and self-regulation. A full one-half to three-quarters of teachers are unfamiliar with terms such as restorative justice, trauma-informed pedagogy, trauma symptoms and triggers, vicarious trauma, toxic stress, and wrap-around services. Two-thirds of the participants indicate they are unaware of local community resources to assist students who experience trauma or need more support.

Confirming earlier findings (Dods, 2013; Kenny, 2004; Marquez-Flores et al., 2016; Reker, 2016; Alisic et al., 2016; Blodgett & Dorodo, 2016; Conley et al., 2014; Reker, 2016; Thomas et al., 2019; Yoon, 2002), there is a great need for professional development in the area of trauma-informed practice and pedagogy. Over 70 percent of participants in our survey indicated that they were unfamiliar with trauma-informed pedagogy and restorative justice. While they reported more familiarity with other tenets and concepts, this finding suggests they lack a coherent framework to organize them as a systematic response to students who have experienced trauma.

As one participant stated, "The majority of educational professionals in today's schools are under-educated, under-informed and ill-prepared to recognize, intervene and support students impacted by trauma." Participants described having very little knowledge of trauma-informed practice, indicating they feel unprepared to deal with students' social and emotional issues. Qualitative responses on our survey noted that trauma symptoms "are overlooked" and student issues "usually get swept under the rug."

Conclusions

Our research aligns with current literature and confirms that teachers feel woefully unprepared to deal with the social and emotional needs of many of the students they serve (Dorado et al., 2016). The number of students facing adverse childhood events is rising, noted by the perceptions of the over 500 participants in our study. Given this rise, teachers and other educational personnel are not equipped to meet these challenges of students experiencing traumatic/adverse childhood experiences. They rely primarily on "sending kids to the counselor" as the primary classroom intervention. Respondents selected referral to the school counselor as a leading intervention in nearly all the scenarios related to classroom behaviors and adverse student experiences. While appropriate in many circumstances, relying solely on the school guidance counselor to address student issues of de-escalation and coping skills is problematic as there are not enough counselors to help mitigate all of these issues with students (ASCA, 2019). If teachers (and other school personnel) had more knowledge, understanding, and resources within a framework of trauma-informed pedagogy, they could better serve the social and emotional needs of students. While new in education, trauma-informed practice proves promising to help deliver on that need (Zacarian et al., 2017; Campbell et al., 2019; Chafouleas et al., 2016).

Equipping teachers with this knowledge and information related to reliable local resources is vastly important. Teachers and other school personnel may not be aware of existing wrap-around services and community agencies that can assist students experiencing trauma, as clearly found in our research. The participants in our study noted that classroom teachers could not do this alone. This work involves collaborating with those working in multiple facets of students' lives. We need to advocate for more training for all those who work in fields that impact students. We need to scrutinize our teacher education programs to ensure that we introduce our teacher candidates to trauma-informed practices. We need to be sure that teachers master a repertoire of classroom strategies and trauma-sensitive interventions that address students' emotional, social, and educational needs. We also need to advocate for more counselors and mental health workers in schools to lessen the responsibility teachers have for dealing with the most severe cases of trauma.

References

Abrahams N., Casey K., & Daro D. (1992). Teachers' knowledge, attitudes, and beliefs about child abuse and its prevention. *Child Abuse & Neglect*, *16*(2), 229-238. https://doi.org/10.1016/0145-2134(92)90030-U

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

Alisic, E., Boeije, H. R., Jongmans, M. J., & Kleber, R. J. (2012). Supporting children after single- incident trauma: parents' views. *Clinical Pediatrics*, *51*(3), 274–282. https://doi.org/10.1177%2F0009922811423309

Amaro, H., Chernoff, M., Brown, V., Arevalo, S. & Gatz, M. (2007). Does integrated trauma-informed substance abuse treatment increase treatment retention? *Journal of Community Psychology, 35*, 845-862. https://doi.org/10.1002/jcop.20185

Aragon, S. R., Poteat, V. P., Espelage, D. L., & Koenig, B. W. (2014). The influence of peer victimization on educational outcomes for LGBTQ and non-LGBTQ high school students. *Journal of LGBT Youth, 11*(1), 1–19. https://doi.org/10.1080/19361653.2014.840761

American School Counselor Association (ASCA), Reach Higher and Education Trust. (2019). *School counselors matter* [research brief] https://www.schoolcounselor.org/asca/media/asca/Publications/ASCAEdTrustRHFactSheet.pdf

Azeem, M. W., Aujla, A., Rammerth, M., Binsfeld, G., & Jones, R. B. (2011). Effectiveness of six core strategies based on trauma informed care in reducing seclusions and restraints at a child and adolescent psychiatric hospital. *Journal of Child and Adolescent Psychiatric Nursing*, *24*(1), 11-15. https://doi.org/10.1111/j.1744-6171.2010.00262.x

Baker, C., Brown, S., Wilcox, P., 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.

Bell, M. & Singh, M. (2017). Implementing a collaborative support model for educators reporting child maltreatment. *Children & Schools, 39*(1), 7-14.

Berliner, L., & Elliot, D.M. (2002). Sexual abuse of children. In J.E.B. Myers, L. Berliner, J. Briere, G.T. Hendrix, C. Jenny & T.A. Reid (Eds.), *The ASPAC handbook on child maltreatment* (pp. 55-78). Sage Publications.

Blodgett, C. & Dorodo, J. (2016). *A Selected Review of Trauma-Informed School Practice and Alignment with Educational Practice*. Washington State University Extension, Child and Family Research Unit. https://pdfs.semanticscholar.org/1ed4/9f819d8ffe157e913cbcde89f760efbc4585.pdf?_ga=2.127505413.985427218.1590438567-342660079.1590438567

Burke N., Hellman J., Scott B., Weems C., & Carrion V. (2011). The impact of adverse childhood experiences on an urban pediatric population. *Child Abuse & Neglect*, *35*(6), 408-413. https://doi.org/10.1016/j.chiabu.2011.02.006

Campbell, L., Haugen, J., Sutter, C. & Lambie, G. (2019). Building capacity for mental health literacy of suicidality and self-Injurious behaviors: A formative design investigation. *Journal of Formative Design in Learning 3***,** 53–61. https://doi.org/10.1016/j.chiabu.2011.02.006

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*, 144–162. https://doi.org/10.1007/s12310-015-9166-8

Collier, KL., van Beusekom, G., Bos, H. M., Sandfort, T. G. (2013). Sexual orientation and gender identity/expression related peer victimization in adolescence: a systematic review of associated psycho-social and health outcomes. *Journal of Sex Research, 50*(3-4), 299-317.

Conley, L., Marchant, M., & Caldarella, P. (2014). A comparison of teacher perceptions and research-based categories of student behavior difficulties. *Education, 134*, 439-451.

Cook, C., & Williams, K., Guerra, N., Kim, T. & Sadek, S. (2010). Predictors of bullying and victimization in childhood and adolescence: a meta-analytic investigation. *School Psychology Quarterly, 25*(2), 65-83.

Delaney-Black, V., Covington, C., Ondersma, S. J., Nordstrom-Klee, B., Templin, T., Ager, J., Janisse, J., & Sokol, R. J. (2002). Violence exposure, trauma, and IQ and/or reading deficits among urban children. *Archives of Pediatrics & Adolescent Medicine*, *156*(3), 280–285. https://doi.org/10.1001/archpedi.156.3.280

Dods, J. (2013). Enhancing understanding of the nature of supportive school-based relationships for youth who have experienced trauma. *Canadian Journal of Education/Revue Canadienne de l'education, 36*(1), 71-95

Dorado, J., Martinez, M., McArthur, L., & Leibovitz, T. (2016). Healthy Environments and Response to Trauma in Schools (HEARTS): A whole-school, multi-level, prevention and intervention program for creating trauma-informed, safe and supportive schools. *School Mental Health: A Multidisciplinary Research and Practice Journal, 8*(1), 163–176.

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

Fowler, F.J. (2014). *Survey research methods* (5th ed). Sage Press.

Garner, P. (2017). The role of teachers' social-emotional competence in their beliefs about peer victimization. *Journal of Applied School Psychology, 33*(4), 288-308.

Gershenson, S., Holt, S, & Papageorge, N. (2016). Who Believes in Me? The Effect of Student-Teacher Demographic Match on Teacher Expectations. *Economics of Education Review, 52*, 209-224. https://doi.org/10.1016/j.econedurev.2016.03.002

Huang, F., Lewis, C., Cohen, D., Prewett, S., Herman, K. (2018). Bullying involvement, teacher-student relationships, and psycho-social outcomes. *School Psychology Quarterly, 33*(2), 223-234.

Huntington, N., Jahn Moses, D., & Veysey, B. M. (2005). Developing and Implementing a Comprehensive Approach to Serving Women with Co-Occurring Disorders and Histories of Trauma. *Journal of Community Psychology, 33*(4), 395–410. https://doi.org/10.1002/jcop.20059

Kenny, M. (2004). Teachers' attitudes toward and knowledge of child maltreatment. *Child Abuse & Neglect, 28,* 1311-1319.

Kolbert, J., Crothers, I., Bundick, M., Wells, D., Buzgon, J., Berbary, C., & Senko, K. (2015). Teachers' perceptions of bulling of lesbian, gay, bisexual, transgender, and questioning

(LGBTQ) students in a southwestern Pennsylvania sample. *Behavioral Sciences, 5(2), 247-263.*

Maguire, L., Niens, U., McCann, M., & Connolly, P. (2016). Emotional development among early school-age children: Gender differences in the role of problem behaviours. *Educational Psychology, 36*(8), 1408–1428. https://doi.org/10.1080/01443410.2015.1034090

Martin, C., Cromer, L. & Freyd, J. (2010). Teachers' beliefs about maltreatment effects on student learning and classroom behavior. *Journal of Child & Adolescent Trauma. 3*, 245-254. https://doi.org/10.1080/19361521.2010.523061

Marquez-Flores, M., Marquez-Herndandez, V., & Granados-Gamez, G. (2016). Teachers' knowledge and beliefs about child sexual abuse. *Journal of Child Sexual Abuse, 25*(5), 538-555.

McInerney, M., & McKlindon, A. (n.d.). Unlocking the door to learning: Trauma-informed classrooms & transformational schools [Editorial]. Education Law Center. Retrieved from http://www.elc-pa.org/wpcontent/uploads/2015/06/Trauma-Informed-in-Schools-Classrooms-FINAL-December2014-2.pdf

Moon, J., Williford, A., & Mendenhall, A. (2017). Educators' perceptions of youth mental health: Implications for training and the promotion of mental health services in schools. *Children and Youth Services Review, 73,* 384–391. https://doi.org/10.1016/j.childyouth.2017.01.006

National Center for Homeless Education. (2020). *Federal data summary school years 2015-16 through 2017-18: Education for homeless children and youth*. US Department of Education, National Center for Homeless Education (NCHE) at the University of North Carolina at Greensboro. https://nche.ed.gov/wp-content/uploads/2020/01/Federal-Data-Summary-SY-15.16-to-17.18-Published-1.30.2020.pdf

Pechtel P., & Pizzagalli D. (2011) Effects of early life stress on cognitive and affective function: an integrated review of human literature. *Psychopharmacology*, *214*(1), 55-70. https://doi.org/10.1007/s00213-010-2009-2

Perfect, M., Turley, M., Carlson, J. S., Yohannan, J., & Gilles, M. S. (2016). School-related outcomes of traumatic event exposure and traumatic stress symptoms in students: A systematic review of research from 1990 to 2015. *School Mental Health, 8*(1), 7-43. https://doi.org/10.1007/s12310-016-9175-2

Reker, K. (2016) *Trauma in the Classroom: Teachers' Perspectives on Supporting Students Experiencing Child Traumatic Stress* (Doctoral dissertation). Loyola University, Chicago https://ecommons.luc.edu/luc_diss/2146

Sorhagen, N. S. (2013). Early teacher expectations disproportionately affect poor children's high school performance. *Journal of Educational Psychology, 105*(2), 465–477. https://doi.apa.org/doi/10.1037/a0031754

Streeck-Fischer, A & van der Kolk, A. (2000). Down will come baby, cradle and all: diagnostic and therapeutic implications of chronic trauma on child development. *Australian and New Zealand Journal of Psychiatry*, *34*(6):, 03-918. https://doi.org/10.1080%2F000486700265

Sulkowski, M.L. (2016). The student homelessness crisis and the role of the school psychologist: missed opportunities, room for improvement, and future directions. *Psychology in the Schools, 53*, 760-771. https://doi.org/10.1002/pits.21936

Sulkowski, M. L., & Joyce-Beaulieu, D. K. (2014). School-based service delivery for homeless students: Relevant laws and overcoming access barriers. *American Journal of Orthopsychiatry, 84*(6), 711-719. https://doi.apa.org/doi/10.1037/ort0000033

Sundborg, S. (2019). Knowledge, principal support, self-efficacy, and beliefs predict commitment to trauma-informed care. *Psychological Trauma: Theory, Research, Practice and Policy, 11*(2), 224-231.

Thomas, M. S., Crosby, S., & Vanderhaar, J. (2019). Trauma-informed practices in schools across two decades: An interdisciplinary review of research. *Review of Research in Education*, *43*(1), 422–452. https://doi.org/10.3102%2F0091732X18821123

Troop-Gordon, W. & Ladd, G. (2015). Teachers' victimization-related beliefs and strategies: Associations with students' aggressive behavior and peer victimization. *Journal of Abnormal Child Psychology, 43*, 45-60. https://doi.org/10.1007/s10802-013-9840-y

Ullucci, K., & Howard, T. (2015). Pathologizing the poor: Implications for preparing teachers to work in high-poverty schools. *Urban Education*, *50*(2), 170-193. https://doi.org/10.1177%2F0042085914543117

Yoon, J. S. (2002). Teacher characteristics as predictors of teacher–student relationships: Stress, negative affect, and self-efficacy. *Social Behavior and Personality: An International Journal*, *30*(5), 485-494.

Zacarian, D., Alvarez-Ortiz, L. & Haynes, J. (2017). *Teaching to strengths: Supporting students living with trauma, violence and chronic stress*. ASCD.

APPENDIX

APPENDIX: Initial Survey (abbreviated version)https://docs.google.com/document/d/1G4SHthS7YgUOKkM3FgTRHyOg_agWEYW3A6wUE6Z-2sI/edit?usp=sharing

Participants were asked about their knowledge of and/or experience with students experiencing the following and their approach to addressing the needs of the students.

1. Victim of Bullying
2. Poverty
3. Recent Changes in Lifestyle/Living Environment
4. Parental Absence
5. Family/Guardian Illness
6. Mental Health Issues in the Home
7. Violence in the Community
8. Violence in the Home
9. Substance Abuse in the Home
10. Lives in Foster Care
11. Experienced Neglect
12. Experienced Abuse

If Yes: Did the student display any disruptive behaviors or learning difficulties
If Yes: What interventions were available to this student (tried either by you or others):

How effective were these interventions?

_____

Highly Effective	Effective	Mildy Effective	Made No Difference	Worsened Behavior
Behavior Changed Immensely;		Behavior Changed;	Behavior Never Changed	
Positive, Sustained Outcomes		Positive Outcome Inconsistent	Not Sustained	

Describe how behavior was impacted as a result of the interventions you tried:
For the remaining questions, please gauge your knowledge and/or understanding of the following concepts:

_____

5	4	3	2	1
0				
I am very familiar;	I am familiar;	I have a basic grasp	Have heard of it;	Never heard of it
Informs my practice	Doesn't inform my	Has never informed	not knowledgeable	
Often;	practice regularly	my practice		
Can teach others				

Trauma informed pedagogy
1.   Culturally responsive pedagogy
1.   Positive Behavior Intervention Support
1.   ACES Study
1.   Vicarious Trauma
1.   Principles of Social and Emotional Learning
1.   Trauma Triggers
1.   Executive Functioning
1.   Brain Development
1.   Self-Care
1.   Restorative Justice
1.   De-escalation
1.   Self-Regulation
1.   Toxic Stress
1.   Conscious Discipline
1.   Complex Trauma
1.   Meditation
1.   Mindfulness
1.   Sensory Break
1.   Symptoms of Trauma
1.   Social Emotional Learning
1.   Wrap Around Supports
1.   Community Mental Health Supports