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Assessing Teacher Attitudes Toward Trauma-Informed Education: Are We Measuring What Matters?

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ABSTRACT

Teachers' attitudes toward trauma-informed approaches to education are frequently targeted for intervention in training offered to school systems intending to implement trauma-informed practices. This focus on attitudes is grounded in the assumption that teachers' attitudes serve as either barriers or facilitators toward actualizing trauma-informed education. However, little research has focused on general attitudes toward trauma-informed care (TIC) among teachers. This quantitative study sought to assess the general attitudes toward TIC among pk-12 teachers in a mid-sized urban center in the U.S. Southwest. Participants completed the Attitudes Related to Trauma-Informed Care in Schools (ARTIC-10 school edition). Findings suggest that teacher attitudes toward TIC in this population are positive, independent of any training in this area. We argue that school districts and researchers should consider assessing variables more proximal to the classroom behaviors trauma-informed professional development is meant to facilitate and suggest new methods may be necessary to accomplish this.

Keywords: trauma-informed practices, trauma-informed schools, trauma-informed education, trauma-sensitive schools, teacher attitudes

The last decade has witnessed a proliferation of attention to the impact of trauma on children in schools and calls for trauma-informed education (Alisic, 2012; Chafouleas et al., 2016; Lorig et al., 2022). While various definitions of trauma-informed care

and trauma-informed education exist, at their core these terms reflect models of care or education which attend to the impact of trauma on clients'/students' development, wellbeing, and performance. According to the Substance Abuse and Mental Health Services Administration (SAMHSA; Substance Abuse and Mental Health Services Administration, 2014a), trauma-informed systems realize and recognize the impact of trauma, respond to these impacts, and resist approaches that contribute to retraumatization. Within this framework, realizing and recognizing the impact of trauma are theorized to be essential to being able to respond to such impacts and resist retraumatization. As such, efforts to develop trauma-informed care have naturally focused on training teachers. A key focus has been helping teachers to develop a knowledge base around trauma and the impact that it has on students and adopting what is referred to as a "trauma-informed lens" (Lohmiler et al., 2022). As such, increasing positive teacher attitudes toward trauma-informed education has been the central input in many efforts to develop trauma-informed education.

Despite increasing attention to trauma-informed education, recent research has questioned existing models (Gherardi et al., 2020), highlighted gaps in the evidence base relating to their impact (Maynard et al., 2019) and identified gaps in integration and implementation of trauma-informed practices (Gherardi et al., 2021). Increasingly, researchers describe scenarios in which teachers understand and have positive attitudes toward trauma-informed approaches yet still feel uncertain about how to meet students' mental health needs (Henderson Smith et al., 2023), experience conflicts between these approaches and existing school policies/practices and resources (Paredes, 2021), or may not sustain trauma-informed interventions after implementation support has terminated (Arnold et al., 2021). These gaps in integration and implementation remind us that knowing about trauma and trauma-informed practices does not automatically equate to enacting them (Blanton et al., 2022). While there is no doubt that teachers must possess an understanding of trauma and accept trauma-informed practices to implement them, emerging evidence calls for an increased focus on implementation and systems-level change to fulfill the promise of trauma-informed education (Chafouleas et al., 2016; Chafouleas et al., 2021; Gherardi, 2022; Temkin et al., 2020).

To further complicate matters, school systems face inherently limited resources available to support the development of trauma-informed education. As aptly summarized in a recent scoping review of facilitators and barriers in the implementation of trauma-informed approaches, the development of "an effective and sustainable trauma-informed approach in schools . . . proves to be a challenging, time-consuming and complex process" (Wassink - de Stigter et al., 2022, p. 470). As such, a better understanding of the relative importance of devoting such resources to develop positive attitudes toward trauma-informed care is warranted. This study utilized survey data from a mid-sized school district near the U.S.-Mexico border to answer two key questions: 1) What do overall attitudes toward trauma-informed care look like in this population? 2) Is there a relationship between teacher-reported training in trauma-informed care and attitudes?

LITERATURE REVIEW

As research has clearly established the negative impact of trauma and its sequelae on educational outcomes (Blodgett & Lanigan, 2018; Perfect et al., 2016; Porche et al., 2011, 2016), the need to ensure that educators recognize and realize the impact of trauma has become a central focus of trauma-informed policy and practice in schools (Chafouleas et al., 2021; Gherardi, 2022). This literature review will outline these developments, examine existing research highlighting the significance of attitudes in the development of trauma-informed systems, describe tools for measuring attitudes toward trauma-informed care, and explore critiques that have focused on attitudes at the expense of other factors.

The Centrality of Attitudes in Trauma-Informed Care

Most widely utilized models for trauma-informed care/trauma-informed education build upon the notion that such practices require cognitive or attitudinal characteristics of implementors. Importantly, the very term "trauma-informed" stemmed from the desire to articulate the necessity of such changes at the systems level to meaningfully support people impacted by trauma (Harris & Fallot, 2001). In more fully describing what such changes might entail, SAMHSA's model posits that trauma-informed systems are those which realize, recognize, and respond to the impact of trauma (Substance Abuse and Mental Health Services Administration, 2014a). SAMHSA further explains, "A trauma-informed perspective views trauma-related symptoms and behaviors as an individual's best and most resilient attempt to manage, cope with, and rise above his or her experience of trauma" (Substance Abuse and Mental Health Services Administration, 2014b). In education, this shift in perspective has been described as the adoption of a trauma-informed lens (Missouri Department of Mental Health, 2019). Indeed, the Missouri Model suggests that trauma-informed education is a developmental process beginning with a shift in awareness/attitudes (trauma-aware) to increasing knowledge (trauma-sensitive) and ultimately progression toward action (trauma-responsive) and systems change (trauma-informed) (Missouri Department of Mental Health, 2019).

At the turn of the century, these student-centered concepts often stood in stark contrast to more common disciplinary responses, such as punitive measures and zero-tolerance policies, which disproportionately affected students of color (Dutil, 2020; Englehart, 2014). As awareness of the impact of trauma and the case for trauma-informed education proliferated, models for trauma-informed education followed. These models focused heavily on the shifts in perspectives and attitudes. For example, the Missouri Model described a trauma-informed approach as "a profound paradigm shift in knowledge, perspective, attitudes and skills that continues to deepen and unfold over time" (Missouri Department of Mental Health, 2019, p. 1), presenting a multi-phase model through which schools could develop this shift. Craig (2016, 2017) and Souers and Hall (2016) drew heavily on the importance of a trauma-informed or trauma-sensitive lens as central to their conceptions of trauma-informed schools and trauma-sensitive classrooms. While these models remain widely used and built upon, more recent work has emphasized the significance of systems change. Without

diminishing the importance of trauma-informed attitudes, this body of work has suggested that attitude change alone is not reflective of trauma-informed systems changes and that broader action – both within the school and beyond – is needed (Chafouleas et al., 2016; Chafouleas et al., 2021; Gherardi, 2022; Temkin et al., 2020). Reinforcing this shift, one recent study (Gherardi & Stoner, 2024) directly raised questions about the value of centering attitudes in trauma-informed teacher professional development.

Measuring and Influencing Teacher Attitudes Toward Trauma-Informed Care

In response to the emphasis on cultivating positive attitudes toward trauma-informed care, some research has sought to identify factors which support this shift. Evaluations of a range of trauma-informed training approaches have demonstrated positive impacts on teacher attitudes toward trauma-informed care, including Child-Teacher Relationship Training (Post et al., 2020, 2022), Compassionate Schools (Parker et al., 2020), Trust-Based Relational Intervention (Stipp & Kilpatrick, 2021), Enhancing Trauma-Awareness (Whitaker et al., 2019), and the integration of Trauma and Violence Informed Care into a Mental Health Literacy course for pre-service teachers (Rodger et al., 2020). Other research has sought to explore specific factors which promote positive attitudes. Loomis and Felt (2021) demonstrated that professional development which included self-reflection and skills development had a more positive influence on teacher attitudes than did knowledge-based training alone. O'Toole & Dobutowitsch (2023) found that teacher compassion was predictive of attitudes toward trauma-informed education.

Attitudes toward trauma-informed care have been measured using a range of tools, some of which are specific to the training being evaluated (i.e. Post et al., 2020, 2022). However, the Attitudes Related to Trauma-Informed Care (ARTIC; Baker et al., 2016) scale is the most widely developed and utilized tool. Given the centrality of attitudes in trauma-informed frameworks, the development and widespread use of the ARTIC has been significant to development in the field. Importantly, after the initial development and validation of the scale, a subsequent study (Baker et al., 2021) confirmed its factor structure and reliability. However, this same study raised some questions about construct validity for the tool due to an unexpected lack of significant correlation between ARTIC scores and formal training in trauma-informed care (Baker et al. 2021).

The Potential and Limits of Attitudes

Some research has demonstrated that positive teacher attitudes toward trauma-informed approaches are related to positive changes in teacher-student interactions. Wendel (2018) found that teachers with more positive attitudes on a quantitative measure tended to demonstrate qualitative differences in how they understood factors that contributed to student success. These teachers also utilized different management strategies, and placed a heavy emphasis on positive student-teacher relationships. Loomis, Curby, and colleagues (2023) demonstrated that more positive teacher attitudes toward trauma-informed care predicted lower rates of student expulsion by

preschool teachers. Minne and Gorelik (2022) demonstrated that positive attitudes toward trauma-informed care were negatively associated with perceived stress among teachers and school staff.

However, the overall case linking positive attitudes toward trauma-informed care with changes in actions and outcomes is less clear. Wendel (2018) found no relationship between attitudes and the stage of implementation for trauma-informed approaches. Similarly, Daniels (2021) found that while teacher self-efficacy moderates both teacher attitudes and behaviors related to trauma-informed care, there was no relationship between teacher attitudes and teacher behaviors. Challenges with the implementation of trauma-informed approaches that go beyond the ubiquitous trauma-informed lens have been widely noted (Gherardi et al., 2021). Research in this area has increasingly focused on systems-level changes to support trauma-informed approaches. Importantly, McIntyre and colleagues (2019) demonstrated that when teachers perceived poor fit between trauma-informed practices and their current systems, they tended to view these practices as less acceptable, even as their knowledge of them grew. Meanwhile, some data suggest that teachers tend to have positive orientations toward TIC, independent of efforts to cultivate such positive attitudes. Wendel (2018) reported a sample with a mean ARTIC score of 5.05 (on a 7-point scale) and Howorun (2021) also found that pre-service teachers had positive attitudes toward TIC prior to any training.

As we approach two decades of trauma-informed development in schools, it is important to consider whether there has been a notable shift in general awareness and responsiveness to trauma-informed perspectives that deserves recognition. Given that research has consistently documented the challenges of moving beyond positive attitudes and toward meaningful change in trauma-informed work (Arnold et al., 2021; Gherardi & Stoner, 2024; Wassink - de Stigter et al., 2022), it is worth considering the possibility that the attention traditionally paid to cultivating positive attitudes and changing perspectives may be less efficacious than attention to implementation, skills, and fit of a trauma-informed model with teachers' current systems and practices. At a minimum, a need to understand the baseline attitudes should be a prerequisite for effective change efforts, ensuring that we can maximize their impact. While we have described many studies assessing attitudes before and after training, the authors have not encountered research which samples general populations of teachers to assess their overall attitudes toward trauma-informed education. The current study sought to fill that gap to support meaningful development in this area.

METHODS

This study sought to contribute to this growing body of literature on trauma-informed education in schools through assessing general teacher attitudes toward trauma-informed care in one mid-sized pk-12 school district in the Southwest U.S. via administration of the ten-item Attitudes Regarding Trauma-Informed Care, school version (ARTIC-10, Baker et al., 2016).

Compliance with Ethical Standards

This project was approved by the researchers' Institutional Review Board at New Mexico State University and the Institutional Review Board of the school district where we conducted our study. Descriptions of the research, including risks and benefits of participation, participant rights, and other required elements of informed consent were provided on the landing page for the online survey; recipients consenting to participate continued to complete the anonymous survey. Participants had the opportunity to opt-in to a drawing to receive a collection of ten books related to trauma-informed education for their school but were not otherwise compensated. While aggregated results were shared with the school district, raw data was only available to the research team.

Population and Sampling

The target population for this study included all teachers (approximately 1,500) working in the target district which serves one mid-sized urban area and surrounding rural communities (approximately 24,000 students) and is located approximately 40 minutes from the U.S.-Mexico border. This district has a history of research collaboration with the researchers including occasional requests to provide professional development opportunities related to trauma-informed education. While the population sampled had not been exposed to specific or systematic training in trauma-informed care, some individual schools and educators had engaged in professional development. The district supported the current study given its alignment with their interest in better understanding opportunities to provide more systemic implementation of trauma-informed practices.

This support was reflective of the awareness of the substantial impact of trauma in this community. The district serves a population that is predominantly Hispanic (approximately 80%). State data from 2020 indicated that the county in which the district was located had a child poverty rate of 41% (New Mexico Voices for Children, 2021) with approximately 70% of students qualifying for free or reduced lunch. In addition to the impact of poverty, the district's proximity to the border implies close contact with immigration-related trauma (Hernandez & Edgar, 2024). While race/ethnicity, poverty, and immigration status are not proxies for trauma, it is well-established that these populations experience childhood trauma at disproportionately high rates. Indeed, Sacks and Murphy (2018) reported that children living in the state of New Mexico had the highest national prevalence of exposure to multiple Adverse Childhood Experiences (ACEs). The high prevalence of trauma-related needs and the district's interest in addressing these issues contributed to a meaningful partnership which supported the current study.

An online survey was utilized for data collection and disseminated by district leaders to all current teachers in early 2020; most data were collected before the sudden closure of in-person schools in March 2020 because of the COVID-19 pandemic, although the survey remained open until April 1, 2020. 241 complete responses were included in the analysis. This number yielded a six percent margin of error and 95% confidence level relative to the target population of teachers in this

district (approximately 1500). Table 1 provides a breakdown of participant characteristics.

Table 1: *Participant Characteristics*

	N	Percentage
Teacher School Level	237	
Pre-K	14	6
Elementary	112	47.2
Middle	57	24.1
High	54	22.7
Participant Age	236	
20-30	18	7.6
31-40	50	21.2
41-50	73	31
51-60	77	32.6
61-70	18	7.6
Years Teaching Experience	234	
0-5 years	32	13.7
6-10 years	36	15.4
11-15 years	31	13.2
16-20 years	55	23.5
21 or more	80	34.1
Race/Ethnicity	238	
Caucasian	105	44.1
Hispanic/Latino/Latinx	116	48.7
Asian American/ Pacific Islander	2	.8
Multi-racial/ethnic	5	2.1
Prefer not to respond	10	4.2
Gender	239	
Male	22	9.2
Female	215	90
Non-Binary	1	.4
Prefer not to respond	1	.4

Data Sources and Instruments

The online survey completed by participants included two sections. The first section collected participant demographics and requested participants to indicate if they had received any training in trauma-informed practices/trauma-informed education.The second section involved administration of the ARTIC-10 school edition (Baker et al., 2016). Overall, the survey was expected to take no more than 15 minutes to complete.

The ARTIC was originally validated using a sample of 760 service providers (165 of whom worked in schools), resulting in the current version(s) of the tool. The ARTIC is designed to assess attitudes toward trauma-informed care in a range of settings, with specific versions for human services and education; each version can be administered on a 45, 35, or 10-item scale. Each of these versions includes items to assess the five core subscales validated during the development of the measure. These subscales include: "a) underlying causes of problem behavior and symptoms, (b) responses to problem behavior and symptoms, (c) on-the-job behavior, (d) self-efficacy at work, and (e) reactions to the work" (Baker et al., 2016). The ARTIC utilizes a bi-polar Likert scale in which respondents choose between two opposing statements reflecting opposite attitudes toward trauma-informed care; after reverse scoring some items, higher scores on the ARTIC are reflective of more positive attitudes toward trauma-informed care.

As described previously, the ARTIC (Baker et al., 2016) has been validated for assessment of attitudes toward trauma-informed care among providers in both human service and school settings. The version utilized included ten items assessing different aspects of attitudes toward trauma-informed care in schools; items arein Table 2. After adjusting for reverse-scored items, higher scores on the ARTIC indicate more positive attitudes toward trauma-informed care.

Data Analysis

Data were cleaned and organized after collection. Responses which did not include completion of all ten items on the ARTIC (Baker et al., 2016) were discarded. ARTIC scores were imported into an Excel scoring sheet provided by the instrument's publisher. The spreadsheet inverted scores on items requiring reverse scoring and calculated overall ARTIC scores for each individual. Subsequently, basic descriptive statistics were calculated for participant demographics (Table 1) and overall scores on the ARTIC-10 (Baker et al., 2016; Table 2). Subsequently, ARTIC-10 (Baker et al., 2016) scores for participants who reported training in trauma-informed practices were compared to those for participants who did not report any training. Because data were ordinal in nature and variances between these two sub-samples could be assumed to be equal (ratio of larger to smaller was 1.18), the Mann Whitney-U test (Mann & Whitney, 1947) was used to determine if there was a significant difference in mean overall ARTIC scores between these two groups.

RESULTS

Participant responses indicated generally positive attitudes toward trauma-informed care; statistical analysis yielded no significant difference in attitudes between participants who reported training in trauma-informed care and those who did not.

Attitudes toward Trauma-Informed Care: Overall Sample

The sample mean on the ARTIC-10 was 5.43, while the median score was 5.4. Scores ranged from 3.2 to 7.0, with higher scores reflecting more positive attitudes. Of the ten items on the ARTIC-10, means for individual items reflected positive orientations toward trauma-informed care with only one item (item seven which addresses the issues of consequences) reflecting a mean below 5 (mean=4.93).

Attitudes Toward Trauma-Informed Care: Trained vs. Untrained Subsamples

One hundred fifty-one respondents reported some trauma-related professional development, with a sub-sample ARTIC mean score of 5.47 (*SD*=.87, variance=.75). 90 participants reported no trauma-related professional development, with a sub-sample mean of 5.34 (*SD*=.91, variance=.84). The Shapiro-Wilk test of normality (Shapiro & Wilk, 1965) indicated that data for the group who reported trauma-specific professional development was not normally distributed (p=.004). Given non-normal, ordinal data, the Mann-Whitney U test (Mann & Whitney, 1947; Macfarland et al., 2016) was used to assess whether participants who reported trauma-specific training reflected more positive ARTIC scores than those who did not report trauma-specific training. Comparison using Mann-Whitney U test was not significant (p =.187), suggesting no significant difference in overall ARTIC scores between teachers with training versus no training. Table 2 illustrates ARTIC-10 items and mean scores for each, as well as the overall sample mean and sub-sample means.

Table 2: *ARTIC-10 Items, Sample, and Sub-Sample Means*

	N	Mean
Item one: *Students could act better if they really wanted to./ students are doing the best they can with the skills they have*	241	5.18
Item Two: *Focusing on developing healthy, healing relationships is the best approach when working with people with trauma histories./ rules and consequences are the best approach when working with people with trauma histories*	241	5.72
Item Three: *If students say or do disrespectful things, it makes me look like a fool in front of others./ if students say or do disrespectful things to me, it doesn't reflect badly on me*	241	5.31

Item Four: *The ups and downs are part of the work, so I don't take it personally./ the unpredictability and intensity of the work makes me think I'm not fit for this job*	241	5.32
Item Five: *It's best not to tell others if I have strong feelings about the work because they will think I'm not cut out for this job./ It's best if I talk with others about my strong feelings about the work so I don't have to hold it alone*	241	5.44
Item Six: *Students do the right thing one day but not the next. This shows they are doing the best they can at any particular time./ Students do the right thing one day but not the next. This shows they could control their behavior if they really wanted to*	241	5.00
Item Seven: *Students need to experience real life consequences in order to function in the real world./ Students need to experience healing relationships in order to function in the real world*	241	4.93
Item Eight: *I realize that students may not be able to apologize to me after they act out./ If students do not apologize to me after they act out, I look like a fool in front of others*	241	6.08
Item Nine: *I feel able to do my best each day to help my students./ I'm just not up to helping my students anymore*	241	5.78
Item Ten: *The most effective helpers find a way to toughen up- to screen out the pain- and not care so much about the work./ The most effective helpers allow themselves to be affected by the work – to feel and manage the pain –and to keep caring about the work.*	241	5.51
Overall ARTIC Entire Sample	241	5.43
Overall ARTIC Training Sub-Sample	151	5.47
Overall ARTICE No Training Sub-Sample	90	5.34

DISCUSSION

This study yielded two key conclusions that may help to inform current policy and practice in training and professional development for trauma-informed education. First, data from this sample suggests that teacher attitudes toward trauma-informed care are generally positive. The overall sample mean of 5.47 on a 7-point scale suggests that there may not be substantial room or need for growth in terms of self-reported attitudes in some populations of educators. While this does not mean that exploring or continuing to support positive attitudes toward trauma-informed practices is unnecessary, it does highlight the limitations of focusing on attitudes alone. This finding is congruent with several other studies of attitudes toward trauma-informed care among teachers (Howorun, 2021; Wendel, 2018; Williams, 2023).

Second, these positive attitudes toward trauma-informed care appeared to be independent of teacher experiences with training or professional development in this area, as there was no significant difference in ARTIC scores between those who reported trauma-specific professional development and those who did not. This finding is somewhat novel as several existing studies have affirmed a positive relationship between training and increases in positive attitudes. However, most studies have assessed the impact of training utilizing pre and post assessment of attitudes, with post-assessment typically occurring at the conclusion of training with little to no time-lapse between training and assessment of attitudes (i.e., Parker et al., 2020).

Importantly, the 2021 revalidation of the ARTIC (published after the data in this study were collected) observed a similar pattern in which reported training in trauma-informed care did not have significant correlations with ARTIC scores (Baker et al., 2021). Baker and colleagues (2021) suggest that it is possible that this unexpected finding "may point to important differences between human services/health and education sectors that likely impact the reaction of staff in training and the effectiveness of the larger TIC organizational change process" (p. 512). Given these findings, work to establish the continued validity of the ARTIC in educational settings *and* research which examines the general landscape of educator attitudes in an increasingly trauma-informed world is needed. The current study suggests that the lack of correlation between training and positive attitudes may be more reflective of a general positive shift in attitudes among educators (independent of formal training in TIC), rather than an issue with the ARTIC as a measurement tool.

Rethinking the Purpose of Trauma-Informed Professional Development

The high baseline for positive teacher attitudes toward trauma-informed care has important implications for conceptualizing the purpose of professional development in the field of trauma-informed education. The SAMHSA model for trauma-informed care, along with subsequent models for trauma-informed education, emphasized the importance of recognizing the effects of trauma and developing skills to respond to these effects while preventing retraumatization (Substance Abuse and Mental Health Services Administration, 2014a). Prior research has highlighted the tendency for trauma-informed initiatives to focus on realization and recognition at the expense of building skills for effective responses that avoid retraumatization (Gherardi et al., 2020; Gherardi, 2022). This study supports these findings, suggesting that teachers are likely to bring positive attitudes that reflect pre-existing awareness of trauma and its impact with them into their encounters with trauma-informed professional development.

Recognizing that teachers may bring an existing trauma-informed lens to their experiences with trauma-informed professional development has significant implications for what these programs should encompass. Indeed, these data suggest that, in many cases, professional development related to trauma-informed education may not require substantial time or resources devoted to the task of changing teacher attitudes. Given the inherent time and resource limitations in schools, any resources

allocated toward trauma-informed work may be best focused on building teacher skills and collaboratively addressing systemic issues necessary for change.

Rethinking Interactions with School Systems

Indeed, our data on the limitations of attitudes support previous work suggesting that a focus on systems change is necessary. Systemic issues – policies, practices, and school culture – are highly aligned with teacher attitudes. Perhaps unsurprisingly, in school systems which reflect a poor fit with trauma-informed practices, teachers tend to find them less acceptable (McIntyre et al., 2019). However, the reality is that even in places where teacher attitudes are positive, and the practices are deemed highly acceptable, systemic issues can derail progress and sustainability. For instance, teachers participating in focus groups facilitated by Henderson Smith et al. (2023) affirmed their willingness and ability to recognize when individual students may need mental health support but cited systemic barriers, such as awareness of limited school counseling resources and a lack of communication among staff about individual students' mental health needs as contributing to a sense of uncertainty about how to translate their positive attitudes into action in their specific classrooms. Arnold et al. (2021) found that teachers stated a trauma-informed intervention, deemed both acceptable and beneficial when created, was not sustained after the departure of the research team because staff did not feel efficacious to continue delivering the intervention, the faculty faced turnover, and the school faced logistical and financial challenges to continuing to offer this intervention to students.

For schools that have confidence in positive teacher attitudes and buy-in for trauma-informed practices, the need to attend to systemic issues is paramount. Rather than using professional development time to continue to cultivate empathy or explain the rationale for trauma-informed work, allowing staff to work collaboratively to identify systems within the school which are not aligned with these practices could be essential. This might mean collaborative exploration and revision of existing polices related to discipline, attendance, family engagement and support practices, multi-tiered systems of support for student mental/behavioral health, staff wellbeing, or opportunities for student and adult relationship-building. This is by no means an exhaustive list; given the many ways in which the design of school systems often exists in stark contrast to trauma-informed principles, the process of identifying and reshaping these systems presents a ripe opportunity for schools to capitalize on positive teacher attitudes, avoid reform fatigue, and use professional development as an opportunity to develop the environment needed to sustain trauma-informed practice.

Rethinking Trauma-Informed Research

At minimum, it is recommended that schools or districts assess attitudes prior to planning professional development activities to maximize the impact of those resources. Assessing variables such as confidence to act (Alisic, 2012), readiness to change (Blanton et al., 2022), and fit of trauma-informed strategies with the system in which teachers are working (McIntyre et al., 2019) – all variables which are more

proximal to actual use of trauma-informed strategies in the classroom – may offer useful data when planning professional development activities, rather than assuming that enhancing positive TIC attitudes or knowledge is needed or sufficient (Loomis & Felt, 2021). Recent qualitative research suggests that trauma-informed positive education staff development enhances teachers' relational capacity and psychological resources, both of which may be suitable for quantitative measurement (Brunzell et al., 2019). Trauma-informed collaboration behaviors (e.g., seeking and making appropriate referrals) may also be useful to assess (Loomis, Musson Rose et al., 2023).

Herman and Whitaker (2020) offer an interesting example in which quantitative assessments of their professional development course for teachers showed no measurable impact while qualitative responses indicated many participants felt that this experience was transformative, highlighting an inherent limitation of quantitative research: the challenge of determining in advance what is important enough to measure. Qualitative work which assesses attitudes differently or explicitly seeks to understand the contours of teacher understanding of trauma and trauma-informed practice in schools is necessary to explore the impact and limitations of positive attitudes and their relationship to actions. Teachers may agree that a trauma-informed response to challenging behavior is desired, but how does their awareness of trauma shape their interpretation of the behavior? How, then, does this translate into their response? How is their response shaped by their school environment?

Finally, as we rethink research into trauma-informed education and ask what it is that teachers need to effectively implement these practices, the value of longitudinal data becomes apparent. As we have noted before, much of the research utilizes pre-post assessment of attitudes to explore the impact of training. This study sought to take a more expansive look by considering attitudes of all teachers and exploring the potential impact of having experienced training at any point in time. While we found that overall attitudes toward trauma-informed care were positive, we hypothesize that this is the result of a shift in overall attention to this area in education over the last two decades. We do not know what attitudes in our sample looked like a decade ago, five years ago, or what it will look like in a decade. These shifts could provide ripe opportunities for exploration, not only on the impact of professional development and the evolution of teacher understanding and practices in this area over time, but also on the overall acceptability and knowledge of trauma-informed perspectives more broadly.

As additional research in trauma-informed education begins to emerge, studies that explore these and related questions, using similar methods across diverse teacher populations, will be crucial for advancing the field. Importantly, it is such work that can help us redefine the purpose and scope of professional development in trauma-informed education by ensuring that as schools become increasingly trauma-informed, we are developing, supporting, and measuring what matters.

Considering Place and Context

In addition to generalized findings, it is important to acknowledge the ways in which this sample was unique and the potential implications of this uniqueness.

Trauma-informed work has been implemented and studied both in the U.S. and internationally. While trauma is a pervasive experience from which no population is exempt, it disproportionately impacts low-income communities and communities of color (Sacks & Murphey, 2018). We also know that communities with high exposure to the stressors of U.S. immigration enforcement experience yet another level of marginalization that increases trauma exposure (Young et al., 2023).

Given that the sample in this study is situated at the nexus of these challenging realities (either personally or vicariously through their students), it may be reasonable to conclude that this sample would present with a positive orientation to trauma-informed care. While this may be the case, it further strengthens the call to consider and assess attitudes and experiences before making assumptions about the types of professional development that will benefit teachers. Furthermore, it suggests that there may be something unique to learn from training pk-12 teachers working in similar contexts to develop and implement trauma-informed practices in places where sociopolitical circumstances may naturally build trauma-awareness.

Limitations

While the data in this study have important implications for efforts to design and implement trauma-informed school practices, and for the role of teacher professional development in these efforts, this study had several limitations. First, although the sample provides unique insights into the attitudes of a teaching population who have not been studied (specifically teachers in the borderlands, a majority of whom identify as Hispanic/Latinx), findings are not generalizable to other schools or districts. As such, the use of screening tools like the ARTIC-10 (Baker et al., 2016) may be useful in assessing baseline attitudes in other communities. Second, these data came from a sample taken at a unique point in time (the onset of the COVID-19 pandemic in 2020); this reality may have heightened trauma-awareness or had other unintended impacts on data. Third, teachers who reported "professional development in trauma or trauma-informed education" in this study may have been referring to a range of different experiences. Given the potentially wide range in the type and quality of "professional development or training" it is appropriate to approach the interpretation of the findings around the potential impact of reported training on attitudes with caution. Finally, despite the documented validity and widespread use of the ARTIC as a tool for measuring attitudes toward trauma-informed care, there are inherent limitations in the use of quantitative tools in measuring attitudes; this study was not immune from these. While acknowledging these limitations, the high ARTIC-10 scores of teachers with no reported exposure to trauma-specific professional development seems to suggest that teachers' baseline attitudes toward trauma-informed care may not be a critical barrier toward implementation of these practices.

Implications

Trauma-informed education has gained substantial traction as a core area of education and school reform in the last decades. The data reported in this study may, in fact, be evidence of this progress. Considering the growing awareness of trauma's

impact, both broadly and more specifically on student success in school, it is not surprising that our findings show positive teacher attitudes toward trauma-informed care, independent of specific training in this area.

These findings do encourage new and important questions as this field continues to develop. In populations for whom any awareness of trauma or its impact is entirely novel, the cultivation of trauma-informed attitudes has been an important target for intervention. However, given the rate and volume of growth in this field over the last decade, changing or measuring attitudes may be yielding diminishing returns. For schools and districts committed to developing trauma-informed schools, it is recommended that professional development focus heavily on developing skills and policies to support trauma-informed practices. When developing a trauma-informed school culture, efforts should be paired with practical initiatives to develop actionable skills and relevant policy.

New tools to measure trauma-informed behaviors may also be useful. While tools assessing school or district wide indicators of implementation exist (Missouri Department of Mental Health, 2019), these are consensus-based assessments of broad indicators. Other tools like the New Orleans Trauma-Informed Walk-Through Checklist (2020) provide opportunities for direct observation of trauma-informed practices. However, specific scales measuring teacher practices which could be administered individually are yet to be developed. Finally, we are cognizant again of the limitations of quantitative methods in this area. Qualitative research, case studies, and observational data all have strong potential to complement our findings, providing additional insight into what is needed to support teacher development toward trauma-informed practice.

CONCLUSION

This study provides timely and important insights into the progress and limitations of the trauma-informed education movement. The reality that teachers serving a student population significantly impacted by trauma and ACEs demonstrate positive attitudes toward trauma-informed care, independent of focused efforts to cultivate those attitudes, is a substantial asset. And yet, equating positive attitudes with trauma-informed practices is inaccurate and misleading. Indeed, the district surveyed was interested in collaborating on this research due to the stated need/desire to develop more trauma-informed approaches. Given these realities, it is time to reconsider the current state and importance of trauma-informed teacher attitudes to ensure that we are measuring and cultivating what matters.

REFERENCES

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

Arnold, K. T., Pollack Porter, K. M., Frattaroli, S., Durham, R. E., Clary, L. K., & Mendelson, T. (2021). Multilevel barriers and facilitators to sustainability of a universal trauma-informed school-based mental health intervention following an

efficacy trial: A Qualitative Study. *School Mental Health*, *13(1),* 174–185. https://doi.org/10.1007/s12310-020-09402-w

Baker, C. N., Brown, S. M., Overstreet, S., & Wilcox, P. D. (2021). Validation of the attitudes related to trauma-informed care scale (ARTIC). *Psychological Trauma: Theory, Research, Practice, and Policy*, *13(5),* 505–513. https://doi.org/10.1037/tra0000989

Baker, C. N., Brown, S. M., Wilcox, P. D., Overstreet, S., & Arora, P. (2016). Development and psychometric evaluation of the attitudes related to trauma-informed care (ARTIC) scale. *School Mental Health*, *8(1),* 61–76. https://doi.org/10.1007/s12310-015-9161-0

Blanton, M. A., Richie, F. J., & Langhinrichsen-Rohling, J. (2022). Readiness to change: A Pathway to the adoption of trauma-sensitive teaching. *Behavioral Sciences*, *12(11),* 445. https://doi.org/10.3390/bs12110445

Blodgett, C., & Lanigan, J. D. (2018). The association between adverse childhood experience (ACE) and school success in elementary school children. *School Psychology Quarterly*, *33*(1), 137–146. https://doi.org/10.1037/spq0000256

Brunzell, T., Stokes, H., & Waters, L. (2019). Shifting teacher practice in trauma-affected classrooms: Practice pedagogy strategies within a trauma-informed positive education model. *School Mental Health*, *11(3*), 600–614. https://doi.org/10.1007/s12310-018-09308-8

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. https://doi.org/10.1007/s12310-015-9166-8

Chafouleas, S. M., Pickens, I., & Gherardi, S. A. (2021). Adverse Childhood Experiences (ACEs): Translation into action in K12 education settings. *School Mental Health*, *13(2),* 213–224. https://doi.org/10.1007/s12310-021-09427-9

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

Craig, S. E. (2017). *Trauma-sensitive schools for the adolescent years: Promoting resiliency and healing, grades 6–12.* Teachers College Press.

Daniels, M. L. (2021). *Do Teachers' attitudes about trauma informed care predict trauma-informed behaviors in the classroom?* [Master's thesis, Tulane University]. https://www.proquest.com/openview/78a750be04e158c6b6104d89da21306f

Dutil, S. (2020). Dismantling the school-to-prison pipeline: A trauma-informed, critical race perspective on school discipline. *Children & Schools*, *42(3),* 171-178. https://doi.org/10.1093/cs/cdaa016

Englehart, J. M. (2014). Considerations for 21st-century disciplinary policy and practice. *Journal of School Leadership*, *24(4),* 666-690. https://doi.org/10.1177/1052684614024004

Gherardi, S. A., & Stoner, A. (2024). Transcending attitudes: teacher responses to professional development in trauma-informed education. *Discover Education*, *3(1),* https://doi.org/10.1007/s44217-024-00207-6

Gherardi, S. A. (2022). *Improving trauma-informed education: Responding to student adversity with equity-centered, systemic support.* National Education Policy Center. http://nepc.colorado.edu/publication/trauma

Gherardi, S. A., Flinn, R. E., & Jaure, V. B. (2020). Trauma-sensitive schools and social justice: A critical analysis. *The Urban Review*, *52(3),* 482–504. https://doi.org/10.1007/s11256-020-00553-3

Gherardi, S., Garcia, M., & Stoner, A. (2021). Just trauma-informed schools: Theoretical gaps, practice considerations, and new directions. *International Journal of School Social Work*, *6(1).* https://doi.org/10.4148/2161-4148.1070

Harris, M. E., & Fallot, R. D. (2001). *Using trauma theory to design service systems*. Jossey-Bass/Wiley.

Henderson Smith, L., Franco, M. P., & Bottiani, J. H. (2023). "We're teachers right, we're not social workers?" teacher perspectives on student mental health in a tribal school. *School Mental Health*, *15(4),* 1113–1127. https://doi.org/10.1007/s12310-023-09607-9

Herman, A. N., & Whitaker, R. C. (2020). Reconciling mixed messages from mixed methods: A randomized trial of a professional development course to increase trauma-informed care. *Child Abuse & Neglect*, *101*, 104349. https://doi.org/10.1016/j.chiabu.2019.104349

Hernandez, J. R., & Edgar, H. J. (2024). Migrant deaths in New Mexico: What is known; what is unknown. *Journal on Migration and Human Security*, *12(3),* 226-242.

Howorun, N. (2021). *Pre-service teacher attitudes relevant to trauma-informed practice* [Master's thesis, University of Calgary]. https://prism.ucalgary.ca/items/d76a4321-9862-4a55-8d27-7a2f2e0e88df

Lohmiller, K., Gruber, H., Harpin, S., Belansky, E. S., James, K. A., Pfeiffer, J. P., & Leiferman, J. (2022). The S.I.T.E. framework: A novel approach for sustainably integrating trauma-informed approaches in schools. *Journal of Child & Adolescent Trauma*, *15(4),* 1011–1027. https://doi.org/10.1007/s40653-022-00461-6

Loomis, A. M., Curby, T. W., & Zinsser, K. M. (2023). Beyond the behavior: Teachers' trauma-informed attitudes relate to lower expulsion risk among uninhibited preschoolers. *Children and Youth Services Review*, *145*, 106806. https://doi.org/10.1016/j.childyouth.2023.106806

Loomis, A. M., & Felt, F. (2021). Knowledge, skills, and self-reflection: Linking trauma training content to trauma-informed attitudes and stress in preschool teachers and staff. *School Mental Health*, *13(1),* 101–113. https://doi.org/10.1007/s12310-020-09394-7

Loomis, A. M., Musson Rose, D., & Mitchell, J. (2023). Closing gaps in care: Effects of CARE training on early childhood provider trauma-informed attitudes and collaboration. *Journal of Child and Family Studies, 33,* 924-938. https://doi.org/10.1007/s10826-023-02720-y

Lorig, C. E., Krupina, A., & Varjas, K. (2022). Social justice and trauma-informed care in schools. *International Journal of School Social Work*, *6(2).* https://doi.org/10.4148/2161-4148.1080

MacFarland, T. W., Yates, J. M., MacFarland, T. W., & Yates, J. M. (2016). Mann–Whitney u test. *Introduction to nonparametric statistics for the biological sciences using R*, 103-132.

Mann, H. B., & Whitney, D. R. (1947). On a test of whether one of two random variables is stochastically larger than the other. *The annals of mathematical statistics*, 50-60.

Maynard, B. R., Farina, A., Dell, N. A., & Kelly, M. S. (2019). Effects of trauma-informed approaches in schools: A systematic review. *Campbell Systematic Reviews*, *15(1–2),* e1018. https://doi.org/10.1002/cl2.1018

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

Minne, E. P., & Gorelik, G. (2022). The protective role of trauma informed attitudes on perceived stress among teachers and school staff. *Journal of Child & Adolescent Trauma*, *15(2),* 275–283. https://doi.org/10.1007/s40653-021-00389-3

Missouri Department of Mental Health. (2019). *The Missouri model: A developmental framework for trauma-informed approaches*. https://dmh.mo.gov/media/pdf/missouri-model-developmental-framework-trauma-informed-approaches

New Mexico Voices for Children (2021). 2020 New Mexico kids count data book: Building on resilience. Retrieved from: https://www.nmvoices.org/wp-content/uploads/2021/02/KidsCount-DataBook2020-web.pdf

New Orleans Trauma-Informed Schools Learning Collaborative. (2020). Trauma-informed schools walk-through checklist. Retrieved from: http://safeschoolsnola.tulane.edu/wp-content/uploads/sites/121/2020/07/TIS-LC-Walk-Through-Checklist-Updated-July-2020.pdf

O'Toole, C., & Dobutowitsch, M. (2023). The courage to care: Teacher compassion predicts more positive attitudes toward trauma-informed practice. *Journal of Child & Adolescent Trauma*, *16(1),* 123–133. https://doi.org/10.1007/s40653-022-00486-x

Paredes, T. (2021). Side-lining trauma sensitive practices in schools and next steps. *Journal of Cases in Educational Leadership*, *24(4),* 74–83. https://doi.org/10.1177/15554589211009587

Parker, J., Olson, S., & Bunde, J. (2020). The impact of trauma-based training on educators. *Journal of Child & Adolescent Trauma*, *13(2),* 217–227. https://doi.org/10.1007/s40653-019-00261-5

Perfect, M. M., Turley, M. R., Carlson, J. S., Yohanna, J., & Saint Gilles, M. P. (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

Porche, M. V., Costello, D. M., & Rosen-Reynoso, M. (2016). Adverse family experiences, child mental health, and educational outcomes for a national sample of students. *School Mental Health*, *8(1),* 44–60. https://doi.org/10.1007/s12310-016-9174-3

Porche, M. V., Fortuna, L. R., Lin, J., & Alegria, M. (2011). Childhood trauma and psychiatric disorders as correlates of school dropout in a national sample of young adults. *Child Development*, *82(3),* 982–998. https://doi.org/10.1111/j.1467-8624.2010.01534.x

Post, P. B., Grybush, A. L., Flowers, C., & Elmadani, A. (2020). Impact of child–teacher relationship training on teacher attitudes and classroom behaviors. *International Journal of Play Therapy*, *29(3),* 119–130. https://doi.org/10.1037/pla0000118

Post, P. B., Grybush, A. L., García, M. A., & Flowers, C. (2022). Child–teacher relationship training exclusively in the classroom: Impact on teacher attitudes and behaviors. *International Journal of Play Therapy*, *31(2),* 97–106. https://doi.org/10.1037/pla0000173

Rodger, S., Bird, R., Hibbert, K., Johnson, A. M., Specht, J., & Wathen, C. N. (2020). Initial teacher education and trauma and violence informed care in the classroom: Preliminary results from an online teacher education course. *Psychology in the Schools*, *57(12),* 1798–1814. https://doi.org/10.1002/pits.22373

Sacks, V., & Murphey, D. (2018). The prevalence of adverse childhood experiences, nationally, by state, and by race or ethnicity. *Child Trends*, . Retrieved from: https://www.virtualeduc.com/v7/resources/data/AYL/PrevalenceofAdverseChildhoodExperiences.pdf

Shapiro, S. S., & Wilk, M. B. (1965). An analysis of variance test for normality (complete samples). *Biometrika*, *52*(3-4), 591-611.

Souers, K., & Hall, P. (2016). *Fostering resilient learners: Strategies for creating a trauma-sensitive classroom.* ASCD.

Stipp, B., & Kilpatrick, L. (2021). Trust-based relational intervention as a trauma-informed teaching approach. *International Journal of Emotional Education*, *13*(1), 67–82.

Substance Abuse and Mental Health Services Administration. (2014a). *Trauma-Informed Care in Behavioral Health Services: TIP 57.* https://store.samhsa.gov/product/TIP-57-Trauma-Informed-Care-in-Behavioral-Health-Services/SMA14-4816

Substance Abuse and Mental Health Services Administration. (2014b). *Concept of trauma and guidance for a trauma-informed approach.* https://store.samhsa.gov/system/files/sma14-4884.pdf

Temkin, D., Harper, K., Stratford, B., Sacks, V., Rodriguez, Y., & Bartlett, J. D. (2020). Moving policy toward a whole school, whole community, whole child approach to support children who have experienced trauma. *Journal of School Health*, *90*(12), 940-947.

Wassink - de Stigter, R., Kooijmans, R., Asselman, M. W., Offerman, E. C. P., Nelen, W., & Helmond, P. (2022). Facilitators and barriers in the implementation of trauma-informed approaches in schools: A Scoping review. *School Mental Health*, *14*(3), 470–484. https://doi.org/10.1007/s12310-021-09496-w

Wendel, E. L. (2018). *Assessing teacher attitudes related to trauma-informed care in three urban high schools* [Doctoral dissertation, University of Texas at Austin]. http://dx.doi.org/10.26153/tsw/1068

Whitaker, R. C., Herman, A. N., Dearth-Wesley, T., Smith, H. G., Burnim, S. B., Myers, E. L., Saunders, A. M., & Kainz, K. (2019). Effect of a trauma-awareness course on teachers' perceptions of conflict with preschool-aged children from low-income urban households: A cluster randomized clinical trial. *JAMA*

Network Open, *2*(4), e193193. https://doi.org/10.1001/jamanetworkopen.2019.3193

Williams, T. (2022). Implementation of trauma-informed care in an urban school district. *Education and Urban Society*, *55*(4), 418–432. https://doi.org/10.1177/00131245221076100

Young, M. E. D. T., Chen, L., Sudhinaraset, M., Saadi, A., Kietzman, K. G., & Wallace, S. P. (2023). Cumulative experiences of immigration enforcement policy and the physical and mental health outcomes of Asian and Latinx immigrants in the United States. *International Migration Review*, *57*(4), 1537-1568. https://doi.org/10.1177/01979183221126726

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