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Trauma and Rural Schooling: Exploring Educators' Perceptions of the Impact of Various Forms of Childhood Trauma on Students' Academic Success

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In order to develop a better understanding of the perceptions of educators regarding which forms of childhood trauma most severely impact learning outcomes for their students, this study employed Q-methodology with 351 teachers, school counselors, and school administrators from across North Carolina and Missouri. A four-factor solution emerged, centered around (1) various forms of abuse from an adult, (2) violent and unstable relationships at home, (3) negative community and societal factors, and (4) physical and mental illness. Patterns in perceptions emerged across the school community setting (urban, suburban, rural) of the participants. While educators in rural settings were more likely to perceive abuse and violence in the home as most harmful to students' academic outcomes, educators in suburban settings felt systemic community and societal traumas as well as physical and mental illness were more detrimental. The findings of this study provide researchers, educator preparation programs, and school leaders with insight into the misconceptions that may persist among subsets of PK-12 educators regarding traumatized children and potential areas of need for further professional training.

***Keywords*: trauma, trauma-informed schools, Q-methodology**

As PK-12 school practitioners, policymakers, and education researchers strive to identify and implement more effective approaches to support the learning and development of students, the issue of student mental health – most notably trauma and its effects on children – has continued to gain prominence in the field (Stratford et al., 2020). Childhood trauma is "a frightening, dangerous, or violent event that poses a threat to a child's life or bodily integrity. Witnessing a traumatic event that threatens the life or physical security of a loved one can also be traumatic" (National Child Traumatic Stress Network [NCTSN], n.d., para. 1). Two out of every three children have experienced at

least one traumatic event, referred to as adverse childhood experiences or ACEs, by late adolescence (Substance Abuse and Mental Health Services Administration [SAMHSA], 2023a). Due to the effects of trauma, many operate in a "survival mode of fight, flight, or freeze, limiting their ability to learn new information or regulate their emotions" (Reddig & VanLone, 2022, p. 3). As a result, childhood trauma is associated with poor academic outcomes (Sparling & Ford, 2022). More specifically, exposure in early childhood could lead to difficulty with attention, memory, cognition, behavioral regulation, and problem-solving, all critical to learning and academic success (Buxton, 2018; NCTSN, 2016; Van Der Kolk, 2014). Further, the more types of traumatic stress a child is exposed to, the greater their likelihood is for chronic absenteeism, behavior problems, and poor reading, writing, and math skill development (Blodgett & Lanigan, 2018).

For children in rural school communities, the effects of trauma on learning are even more pronounced. "Trauma disproportionately affects rural schoolchildren, putting them at greater risk of academic underachievement and other negative sequelae throughout the lifespan" (Frankland, 2021, p. 51). Children from rural communities go to school with high levels of stress and anxiety carried over from the home environment, resulting in attention and regulation problems that are associated with limiting one's ability to learn (Brown et al. 2022). While challenges for rural schools persist as a result of the trauma experienced by their students, trauma-informed approaches have shown evidence of mitigating the negative effects of trauma and helping close achievement gaps for rural students concerning their suburban and urban peers (Frankland, 2021). Trauma-informed approaches establish a common understanding among teachers and staff regarding how they view trauma and its effects on children, implementing schoolwide evidence-based practices to mitigate those effects to the extent possible (NCTSN, 2017a). With appropriate professional development, educators and schools are well positioned to recognize the signs of traumatic stress exhibited by their students and respond accordingly using trauma-informed practices (Perez, 2021).

Additional efforts to address childhood trauma's impact on education outcomes continue to grow. Over 27 states have instituted legislation that either encourages or requires educators to have training on student mental health and strategies for working with children who have experienced trauma (Education Commission of the States, 2020). To advance this progress, as new research and insights are developed and disseminated on the effects of trauma and how schools can best support traumatized students, it may be beneficial for educational researchers, leaders, and educator preparation programs to have a more nuanced understanding of how PK-12 educators – teachers, administrators, school counselors, etc. – view childhood trauma. More data are needed on what forms of trauma educators believe make effective teaching and learning more challenging as well as what factors influence educators' perceptions of childhood trauma, such as educators'

own personal or professional experiences along with relevant training or the lack thereof. Therefore, the question driving this study asked: What are the perceptions of PK-12 educators regarding which forms of childhood trauma they believe to be most impactful on student learning outcomes and academic success?

Literature Review

Types of Childhood Trauma

Chronic childhood trauma is experienced in many forms, including, but not limited to, abuse (physical, emotional, and sexual), neglect (physical and emotional), witnessing family violence, discrimination (on the grounds of race, gender, sexual identity, religion, etc.), and the death of a friend or family member (Larson et al., 2017). Other experiences that are considered to be traumatic for children include poverty, homelessness, substance abuse by a caregiver, incarceration of a caregiver, divorce and/or separation of caregivers, and mental illness of a caregiver (Larson et al., 2017). Some children fall victim to more than one traumatic event, known as polytrauma or complex trauma.

The consequences of childhood trauma can be severe and chronic. Early traumatic experiences in life have been found to affect cognitive and executive functions of the brain as well as information processing (Cai et al., 2023). Childhood traumas can also affect brain growth and development, which may influence school academic outcomes (2023). Personal identity traumas, such as childhood sexual abuse, may affect perceptual reasoning and working memory, while survival traumas, such as being shot, can affect processing speed (Kira et al., 2012). Abandonment traumas, such as being abandoned by one's mother or father, have been shown to negatively affect IQ (2012).

Research indicates that children and adolescents of low socioeconomic status (SES) and/or racial-ethnic minorities who experience chronic childhood trauma are more likely to develop anxiety, depression, conduct disorder, post-traumatic stress disorder (PTSD), suicidal ideation, and attention-deficit/hyperactivity disorder (ADHD) (Larson et al., 2017). They are also reported to have lower GPAs than their counterparts who are not exposed to trauma (2017).

Childhood Trauma and Academic Achievement

Studies have shown that youth exposed to chronic childhood trauma are at an increased risk of low academic achievement and experiencing mental health disorders (Blodgett & Lanigan, 2018; Larson et al., 2017; Perfect et al., 2016). The Substance Abuse and Mental Health Services Administration (SAMHSA; 2023a) reports that childhood trauma can lead not only to lower grades but also higher suspension and expulsion rates in schools. Children and adolescents of low SES and/or racial-ethnic minorities who experience chronic childhood trauma are reported to have lower GPAs

than their counterparts who are not exposed to trauma (Larson et al., 2017). Trauma-related PTSD, anxiety, aggressive behavior, and depression are found to be predictors of poor academic achievement (2017). Bully victimization, a form of trauma, is associated with poorer academic performance as well as increased mental health issues (Davis et al., 2018). Further, youth who experience bullying often attempt to cope with the stress related to their victimization through risk-taking behaviors such as substance use, which in turn negatively impacts academic achievement (2018).

Low academic achievement is often associated with low levels of social capital, leading to poverty (Larson et al., 2017). This results in a cycle of trauma being passed from generation to generation (2017). Youth who experience chronic trauma are more likely to have low academic achievement and increased risk for long-term medical and mental health issues as well as early death (2017). Further, the frequency of childhood trauma events had the largest impact on the subsequent development of mental health issues and low academic achievement (2017). Similarly, youth with higher exposure to childhood trauma, also referred to as adverse childhood experiences (ACEs), were more likely to have to repeat a grade, experience absenteeism, and have lower school engagement rates (Blodgett & Lanigan, 2018).

Addressing the Effects of Trauma in PK-12 Schools

Children who experience trauma are not doomed to poor academic and life outcomes (Bethell et al., 2016; Moore & Ramirez, 2016). Protective factors are "characteristics associated with a lower likelihood of negative outcomes or that reduce a [childhood trauma] risk factor's impact" (SAMHSA, 2019, p. 1). While some protective factors are fixed, others are variable over time and the amount of exposure to either the traumatic event or to the protective factor (2019). Elementary, middle, and secondary schools can play a significant role in the provision of protective factors and the prevention, identification, and treatment of mental health issues and disorders (Larson et al., 2017). In the absence of a nurturing relationship between a student and a caregiver at home, educators may be able to step in to offer the student a caring and secure relationship, allowing the child to be better able to regulate their emotions (Sparling & Ford, 2022). Supportive relationships such as these provide some level of protection against the effects of childhood trauma (Crouch et al., 2019; Durol-Beauroy-Eustache & Mishara, 2021; Robles et al., 2019, Zhu et al., 2021). The culture, race, and ethnicity of the child and their family can also be a protective factor in recovering from a traumatic event (NCTSN, n.d.). However, if there is a history of racism or discrimination against the child, it can increase the likelihood of the child experiencing post-traumatic stress symptoms (NCTSN, n.d.).

To support children through the addition of protective factors and building resiliency, several universal approaches can be taken by schools and communities.

School-based health centers (SBHCs) are a “model of pediatric primary care delivery that offers comprehensive services provided by a multidisciplinary team on school grounds” (Larson et al., 2017, p. 676). They provide increased access to medical care and mental health care, especially for minority and low SES youth. SBHCs lead to increased school attendance and student grades while decreasing dropout rates (2017).

Another means to address the chronic childhood trauma cycle is by developing trauma-informed schools. According to the Substance Abuse and Mental Health Services Administration (SAMHSA, 2015), trauma-informed schools assess and modify as needed every aspect of their organization to take into account a basic understanding of how trauma affects the lives of its students. For trauma-informed schools to be successful in their work to mitigate the effects of trauma, all levels of the school must be committed to the effort, particularly school administration (Wiest-Stevenson & Lee, 2016). Trauma-informed care is often seen as the primary responsibility of school social workers and school counselors; however, training should be provided to all school employees including administrators, teachers, and support staff, on how they can best support students who have experienced trauma. This is particularly important for teachers as they may misinterpret student behaviors as aggressive or problematic when the issue is more complex and related to current or previous forms of trauma (Von Dohlen et al., 2019).

Implementing a Positive Behavioral Interventions and Supports model (PBIS) is another means by which schools can support students who have experienced trauma. PBIS is an approach to behavior management in schools based on positive intervention, such as promoting and rewarding good behavior (Wiest-Stevenson & Lee, 2016). Exposing PK-12 students to positive coping mechanisms throughout their courses can be an effective intervention strategy in helping students with trauma backgrounds. These coping mechanisms can include deep breathing, positive imagery, and taking small timeouts to regroup when needed (2016). Teaching these skills can help children and adolescents to not only cope with past trauma but also equip them to positively cope with future stressors (2016).

Theoretical Foundation

To better understand the perspectives of rural educators relative to the lived trauma of their students, the *Building Trauma-Informed Teachers* theory (Brown et al., 2022) was utilized for this study. This grounded theory offers insight into how teachers in remote or rural communities work with their students in light of the complex forms of childhood trauma these students may have endured. Central to the theory is the emphasis placed on educators building and maintaining relationships with their students (2022).

The theory consists of seven progressive steps that capture the journey that teachers must advance through to be positioned to work successfully with children who have experienced childhood trauma (Brown et al., 2022). The steps are:

1. Journeying to remote or rural teaching, including adapting to culture shock;
2. Learning about complex childhood trauma;
3. Becoming culturally aware and responsive;
4. Building and maintaining relationships;
5. Understanding children's experiences;
6. Supporting children; and
7. Identifying what is needed to do the work (p. 4).

By explaining the developmental process through which experienced teachers in rural settings refine their pedagogical skills and shift their understanding in support of children who have experienced trauma, the building trauma-informed teachers theory provided the researchers herein with valuable insight into how educators' perspectives on the impact of various forms of trauma on student school outcomes may have been influenced by their own learning and personal experiences.

Methods

Perceptions are elusive, idiosyncratic, and difficult to quantify. As such, accurately measuring and analyzing something as subjective as the perceptions of individuals can be a daunting task. Q methodology is a research method developed in 1935 by William Stephenson to quantify subjectivity. Subjectivity, more specifically subjective communicability, is fundamental to Q methodology and "refers to the communication of a personal point of view" (McKeown & Thomas, 2013, p. 2). In the use of Q methodology, the researcher can apply quantitative measures to understand subjective attitudes and opinions that the participants communicate. Q methodology has been applied in a wide range of fields to explore perception data, including in education with studies examining the perceptions of school principals regarding the role of school counselors (Lewis et al., 2022), the perceptions of assistant principals on their idealized versus current leadership practices (Militello et al., 2015), and the perceptions of nursing students and faculty of the quality of online instruction in a nurse education program (Chung & Chen, 2020).

A Q methodology study has several steps: (1) identify a wide range of potential statements, known as the concourse, relative to the topic at hand and upon which the researcher seeks additional insight through gathering perceptions or opinions; (2) consolidate the potential statements to create a refined final set of statements, called the Q sample. (3) select participants to comprise the sample, referred to as the P sample; (4)

facilitate participants through a forced distribution of the statements, known as the Q sort; and (5) perform factor analysis to identify participant viewpoints (Chung & Chen, 2020; McKeown & Thomas, 2013). Additional qualitative data can be collected following the Q sort through open-ended responses where participants are asked to describe their thinking from the forced distribution process and the rationale for their sorting decisions. The following sections detail the Q methodology steps taken for this study focused on educator participants' perceptions of which forms of trauma they believe to be most impactful on student learning outcomes and academic success.

Concourse to Q Sample

The first step in conducting a Q methodology study involves developing an initial set of statements, referred to as the concourse. This set of statements is generated from an extensive literature review. For this study, a review of the literature led to the initial development of a concourse consisting of specific forms of childhood trauma. The concourse was most influenced by the list of trauma types identified by the Substance Abuse and Mental Health Services Administration's National Child Traumatic Stress Initiative (SAMHSA, 2023b) and the National Child Traumatic Stress Network (NCTSN, n.d.).

Once the concourse has been developed, the second step is for these initial statements to be edited, combined, and refined to create a final list of statements. A pilot study utilized a convenience sample consisting of volunteers from a graduate program in educational leadership and administration. The volunteers were invited to provide input on the concourse. All ten volunteers were either current teachers, or school counselors, or served in an instructional leadership capacity in their respective schools. They were all from rural and suburban school communities. The volunteers were asked to review and add to the statements. After review, several edits were made to the wording of the statements based on recommendations for clarity or consolidation from the volunteer educators. The final 23 Q sample statements are presented in Table 1.

Table 1

Elements of Student Trauma Q-Sample Statements

No.	Statement
1	Bullying
2	Medical trauma or chronic illness of a family member or caregiver
3	Medical trauma/chronic illness of student
4	Loss of parent/caregiver
5	Maternal depression
6	Poverty
7	Neglect – physical
8	Domestic violence
9	Incarceration/criminal behavior in the home
10	Mental illness in the home
11	Mental illness of the student
12	Divorce
13	Neglect – emotional
14	Community violence
15	Discrimination experienced by the student
16	Systemic racism
17	Foster care
18	Emotional abuse
19	Physical abuse
20	Sexual abuse
21	Substance abuse
22	Natural disaster
23	Homelessness

Sampling

The third step in conducting a Q methodology study is to identify participants, known as the P sample. Convenience sampling was used to recruit participants for this study. A mass email was sent out through several professional educator organization listservs for school administrators, teachers, and school counselors across the entire states of North Carolina and Missouri. The email provided informed consent as well as a link to an online demographic questionnaire in Qualtrics. Participants were also asked to forward the email to other qualified educators as appropriate within their educational organizations and networks through snowball sampling.

For this study, 351 PK-12 school administrators, counselors, and teachers completed the Q sort and open-ended survey. Table 2 presents background and demographic data on the participants overall and disaggregated by factor. Participants were predominantly female (80%), white (91%), experienced (66% greater than 12 years of experience), and rural (52%). School counselors comprised nearly half (42%) of respondents while only 11% were from urban settings.

Table 2

Participant Characteristics

Category	Descriptor	Number of Participants
Sex	Female	281
	Male	70
Race	White	321
	Black	16
	LatinX	5
	Asian	2
	Native American	1
	No Response	6
Current Role	Administrator	88
	Counselor	150
	Teacher	113
Years of Experience as an Educator	0-3	28
	4-7	54
	8-11	37
	12-15	60
	16-19	63
	20+	109
School Location	Rural	181
	Suburban	132
	Urban	38
	Total	351

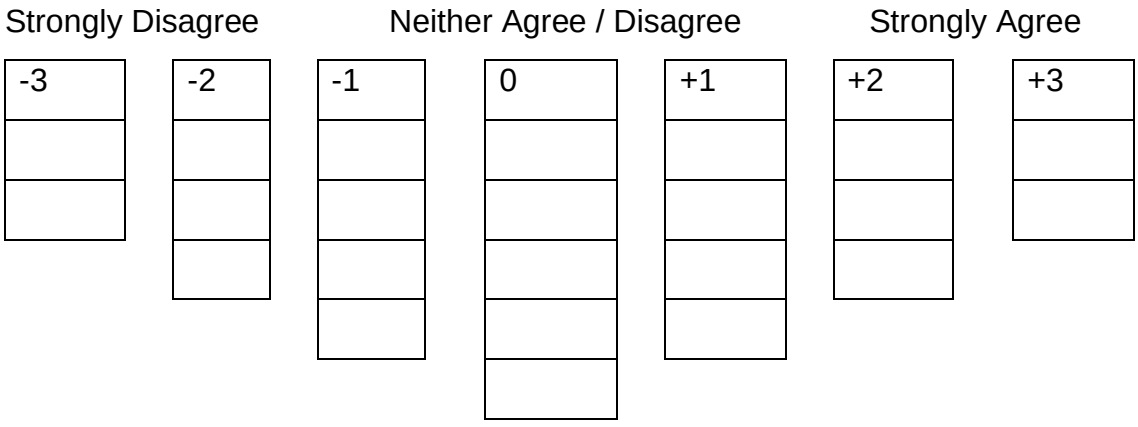
Sorting

The fourth step in conducting a Q methodology study involves having participants sort the Q sample's statements in response to a sorting condition. For this study, the condition for sorting was *This form of childhood trauma is impactful on student learning*

outcomes in school. Statements were uploaded into the QMethodology online sorting platform, and participants in their recruitment email clicked on a link to a demographic questionnaire. At the end of the demographic questionnaire, participants were linked to an online Q-sorting platform. The online Q sort was developed using QMethodology software. For the online Q sort, participants were provided with directions that tasked them with taking the list of statements with the different types of childhood traumas and individually sorting them – in drag-and-drop fashion – into the grid shown in Figure 2. This forced-choice distribution ranged in Likert-type fashion from a positive pole, where the participants placed statements with which they most strongly agree, through zero to a negative pole where these participants placed statements with which they most strongly disagree. For example, participants read the statement “Emotional Abuse” and had to place this statement into the grid based upon the degree – strongly agree to strongly disagree – to which they perceive that this form of childhood trauma is impactful on student learning outcomes in school. Only one statement may be placed in each location in the grid and all spaces must be filled. Participants were able to make changes to the placement of each statement until ready to submit their final sorted order of statements in the online platform. Upon conclusion of the Q sort, participants were directed to complete a brief open-ended survey in the QMethodology online software that required them to reflect on their decision-making process with the Q sort. The open-ended survey questions were used to better understand underlying participant beliefs and perspectives about the impact of various forms of childhood trauma on student academic outcomes in school. Specifically, participants were asked to describe what had the greatest impact on how they sorted the statements, share an explanation for why they placed statements in each of the +3 and –3 columns, and list any statements they had trouble sorting.

Figure 2

Q Sort Distribution Grid



Data Analysis

The fifth and final step in conducting a Q methodology study involves performing factor analysis. While traditional factor analysis involves identifying correlations across variables, Q methodology identifies correlations across participants. More precisely, the factor analysis groups participants with statistically similar perspectives, referred to as factors. “Q methodology examines individuals' points of view about a specific topic under investigation. A well-delivered Q methodology provides the key viewpoints among a group of participants and allows those viewpoints to be understood holistically” (Chung & Chen, 2020, p. E19).

For this study, the quantitative data collected from the Q sorts was analyzed using the KenQ online statistical software program. The software program was used to perform a by-person factor analysis to create a correlation matrix showing how each participant’s sort relates statistically with the other participants’ completed sorts. The potential value of emergent factors was considered by examining eigenvalues after rotation through the Varimax method (Watts & Stenner, 2012). Z scores for individual statements were compared to determine the statements that participants valued most highly. Factor arrays were used to create model sorts for each factor that represented the perspective of that factor. The qualitative data collected through the open-ended survey was examined for patterns and themes and analyzed with a general content analysis (Lincoln & Guba, 1985; Saldaña, 2021). The qualitative data were then combined with the quantitative factor analysis to understand participant viewpoints more thoroughly.

Positionality

The researchers are three White, middle-class, cisgender faculty at large public universities that serve predominantly rural regions. Two of us are male, and one is female. All are from rural communities and have a passion for service and research in support of such communities and the people therein. Additionally, we are all former PK-12 educators – two are former school counselors, and two are former school or district administrators. We acknowledge that our positionality is shaped by our privilege, our biases, and our access to resources and spaces, thus undoubtedly influencing our research. We continually strive to be humble and seek to actively listen to those participants and colleagues with different lived experiences than our own.

Findings

When highly corresponded Q-sorts are clustered together, a similarity emerges that is named a factor. Q methodology examines sorts holistically between participants rather than making a comparison of how individual statements were sorted by the participants (Watts & Stenner, 2012). The factors were named based on the statistical

characteristics of highly ranked statements and common themes that emerged from post-sort open-ended survey questions.

Two-, three-, four-, and five-factor solutions were considered. The correlation matrix between factors is shown in Table 3 for each potential solution. Three- and five-factor solutions each resulted in correlation values above 0.6 (values approaching 1.0 indicate a high degree of similarity between factors). The two-factor solution was discarded because it limits the variety of perspectives captured. A four-factor solution was selected because it offered the best balance between high values for variance, the inclusion of participants, and unique factors.

Of the 351 participants, 256 were loaded into one of the four factors. Table 4 presents demographic data on the participants by factor. Ninety-five participants did not load on a factor as they represent individuals whose viewpoints were not statistically similar to the four major viewpoints held by other participants.

Noteworthy for this study is the type of school in which the participating educators work for each factor or grouping. Factor 1 educators are predominantly rural, making up 56% of the Factor 1 group as compared to 33% suburban and 11% urban. Factor 2 educators are even more rural at 78% to 20% for suburban and 2% urban. In contrast to Factor 1 and Factor 2 educators, Factor 3 and Factor 4 groupings lean more suburban. For Factor 3, 51% are from suburban schools, 33% are from rural schools, and 16% are from urban schools. Similarly, for Factor 4, participating educators are 58% suburban, 34% rural, and 8% urban. Each factor was assigned a name by the researchers based on the prevailing forms of trauma deemed by participants within the factor, as evidenced by their sort and their open-ended responses, to be the most impactful on their student's academic outcomes.

Table 3

Correlations Between Factors for 2-, 3-, 4-, and 5-Factor Solutions

# of Factors	Correlation			
2	0.4938			
3	0.4169			
	0.6072	0.3429		
4		0.4120		
	0.5021	0.2535		
	0.4161	0.3280	0.2721	
5		0.3793		
	0.3288	0.2251		
	0.3549	0.2872	0.1276	
	0.6434	0.2715	0.4245	0.31854

Table 4

Participant Characteristics by Factor

Descriptor	Total	Factor 1	Factor 2	Factor 3	Factor 4	No Factor
Total	351	127	54	49	26	95
Female	281	104	41	37	20	79
Male	70	23	13	12	6	16
White	321	124	49	42	23	83
Black	16	1	1	5	2	7
LatinX	5	0	1	1	0	3
Asian	2	2	0	0	0	0
Native American	1	0	1	0	0	0
Did not indicate	6	0	2	1	1	2
Administrator	88	33	15	10	7	24
Counselor	150	61	23	16	10	40
Teacher	113	33	16	23	9	31
0-3	28	6	5	7	3	7
4-7	54	19	7	8	5	15
8-11	37	12	5	6	3	11
12-15	60	24	8	8	5	15
16-19	63	25	10	10	4	14
20+	109	41	19	10	6	33
Rural	181	71	42	16	9	43
Suburban	132	42	11	25	15	39
Urban	38	14	1	8	2	13

Factor One: Abuse and Violence at the Hands of an Adult

A total of 127 participants loaded significantly on Factor One, more than double that for any of the other factors making this the dominant viewpoint. Factor One captures the viewpoint of 36% of the participants. Counselors (48%), those who are white (98%),

female (82%), have 12 or more years of experience (71%), and from rural settings (56%) are the most represented in this factor.

Table 5 presents the statements ranked from highest to lowest from Factor One. Statements located on the boundaries of the distribution grid are most indicative of the group perspective. These extremes are important markers and representative of participants and their perceptions about how different types of trauma impact students.

The highest-scoring statements contained language such as abuse, neglect, and violence. These types of traumas may manifest in more visible and apparent manners. Abuse and neglect indicate the student is in a dangerous environment and does not have consistent access to a protective adult. Discrimination, community violence, and systemic racism were among the lowest-ranking statements.

Participants who loaded strongly on Factor One indicated that based upon their experience working with children in school, abuse in various forms at the hands of adults had a tremendously negative impact on student school outcomes. One participant encapsulated the prevailing perspective of members of this factor, saying "I often find students that come from a background of abuse are some of the most affected."

Systems-level forms of trauma seemed to be a challenge to sort out for members of this factor. Regarding the placement of the statement, one participant shared, “systemic racism was difficult. I am a white woman so I can't pretend to know what that feels like. The students of color in my school ‘seem’ to function very well, but I have never asked them about systemic racism.”

Table 5

Factor One: Placement of Statements

Score	Statement
+3	Sexual abuse
+3	Physical abuse
+2	Mental illness of the student
+2	Neglect – physical
+2	Emotional abuse
+1	Loss of parent/caregiver
+1	Domestic violence in the home
+1	Neglect – emotional
+1	Homelessness
0	Medical trauma/illness of student
0	Substance abuse in the home
0	Mental illness in the home
0	Incarceration/criminal behavior in the home
0	Foster care
-1	Poverty
-1	Bullying
-1	Medical trauma/chronic illness of a family member
-1	Parental divorce
-2	Maternal depression
-2	Discrimination experienced by the student
-2	Community violence
-3	Systemic racism
-3	Natural disaster

Factor Two: Conflict and Unstable Relationships at Home

A total of 54 participants (15%) loaded significantly on Factor Two, significantly fewer than Factor One and comparable to Factor Three (49). Counselors (42%), those who are white (91%), female (76%), have 12 or more years of experience (68%), and from rural settings (78%) are the most represented in this factor. The demographics of Factor Two are similar to Factor One except there is an even greater percentage of participants from rural settings (78% vs. 58%).

Table 6 presents the highest- and lowest-ranking statements for Factor Two. The highest-scoring statements in Factor Two contained language such as divorce and abuse, neglect, criminal activity, and mental illness in the home. Discrimination, community violence, and systemic racism were among the lowest-ranking statements. In making the placement of statements, participants indicated that they were driven by a deficit mindset toward students' homes and home life. "The majority of my students are from low-income families with little to no parental support for their student." Another participant noted that "our district/county has a large case of illegal substances that affect student home life." Other responses included language such as "no consistent bedtime, meals, hygiene, clean clothes"; "students have to get ready for school on their own because their parent won't get up, due to being strung out, drunk, or just don't care"; and "they're so quiet that they've been threatened at home to not say anything at school about what goes on at home."

Regarding difficulties found in sorting statements, similar to participants in Factor One, systemic trauma was a challenge for participants in Factor Two. A participant shared, "The minority population in our district is minuscule, and while I am certain systemic racism exists, it is not a topic with which I have a great deal of experience on the job." Similarly, with community trauma, another participant reflected that "the incidence of violence perpetrated by unknown people on our students is not something that I have seen students about much over my career".

Table 6

Factor Two High-Positive and High-Negative Statements

Score	Statement
+3	Poverty
+3	Parental divorce
+2	Substance abuse in the home
+2	Neglect – emotional
+2	Domestic violence in the home
+1	Emotional abuse
+1	Bullying
+1	Neglect – physical
+1	Incarceration/criminal behavior in the home
0	Mental illness in the home
0	Foster care
0	Mental illness of the student
0	Physical abuse
0	Homelessness
-1	Loss of parent/caregiver
-1	Sexual abuse
-1	Medical trauma/chronic illness of a family member
-1	Maternal depression
-2	Medical trauma/illness of student
-2	Discrimination experienced by the student
-2	Community violence
-3	Systemic racism
-3	Natural disaster

Factor Three: Negative External Community and Societal Factors

A total of 49 participants (14%) loaded significantly on Factor Three, significantly fewer than Factor One and comparable to Factor Two (54). In this factor, teachers (47%) and those from suburban settings (51%) represent the largest demographic groups in contrast to the other factors, primarily school counselors and those from rural settings. While participants who are White (86%), female (76%), and have 12 or more years of experience (57%) are again the most prevalent in this factor, the participants for this factor are relatively more diverse, male, and have less experience in educational settings.

Table 7 presents the highest- and lowest-ranking statements for Factor Three. A common theme among the highest-scoring statements contained language such as poverty, homelessness, and loss of caregiver. In contrast to the other three factors, discrimination, community violence, and systemic racism were not among the lowest-ranking statements. Qualitative responses included “with experience teaching in an urban area. I have observed students and community members being marginalized, schools underfunded, and poverty.” Participants in Factor Three seemed to have more of an asset-focused mindset, as one response stated, “I know students in this community can perform as well as their counterparts; however, teachers hired are not always motivated, genuine, or simply caring enough to teach to a student population that does not mirror themselves.”

Table 7

Factor Three High-Positive and High-Negative Statements

Score	Statement
+3	Poverty
+3	Sexual abuse
+2	Mental illness of the student
+2	Homelessness
+2	Loss of parent/caregiver
+1	Systemic racism
+1	Physical abuse
+1	Bullying
+1	Emotional abuse
0	Discrimination experienced by a student
0	Domestic violence in the home
0	Community violence
0	Neglect – emotional
0	Foster care
-1	Incarceration/criminal behavior in the home
-1	Neglect – physical
-1	Substance abuse in the home
-1	Medical trauma/illness of student
-2	Mental illness in the home
-2	Medical trauma/chronic illness of a family member
-2	Parental divorce
-3	Maternal depression
-3	Natural disaster

Factor Four: Physical and Mental Illness

A total of 26 participants (7%) loaded significantly on Factor Four, making this by far the smallest factor. The demographics are similar in some ways to Factor Three as those from suburban settings (58%) were the largest group while teachers (9) were represented nearly as much as school counselors (10) and those with 12 or more years of experience (57%) are nearly identical and less than the first two factors. Participants who are white (88%), and female (77%) are again the most prevalent and more similar to Factors One and Two.

Table 8 presents the highest- and lowest-ranking statements for Factor Four. A common theme among the highest scoring statements contained language such as mental illness of the student and medical trauma of the student and in the home. Similar to Factors One and Two, discrimination, community violence, and systemic racism were among the lowest-ranking statements. In their explanation for how they sorted the statements, participants expressed frustration with the lack of emphasis on mental health concerns and resources. One school counselor noted, “Our community has extremely limited resources for mental health. . . . [so] as a school counselor, I am the frontline worker for addressing suicidal ideation on a daily basis.” Another participant commented, “Students are ill, but they are unable to get medical help. Unfortunately, getting help for mental illness just isn’t as simple as getting help for pneumonia or even COVID-19”.

Table 8

Factor Four High-Positive and High-Negative Statements

Score	Statement
+3	Mental illness of the student
+3	Medical trauma/illness of student
+2	Loss of parent/caregiver
+2	Poverty
+2	Bullying
+1	Medical trauma/chronic illness of a family member
+1	Neglect – emotional
+1	Mental illness in the home
+1	Neglect – physical
0	Sexual abuse
0	Domestic violence in the home
0	Substance abuse in the home
0	Incarceration/criminal behavior in the home
0	Maternal depression
-1	Parental divorce
-1	Homelessness
-1	Emotional abuse
-1	Physical abuse
-2	Foster care
-2	Discrimination experienced by the student
-2	Systemic racism
-3	Natural disaster
-3	Community violence

Consensus Statements

A consensus statement is a statement that was placed in a statistically similar location on the grid in each of the model factor arrays. The four-factor solution utilized by this study generated two consensus statements with each on the negative side of the continuum. The consensus statements are shown in Table 9, natural disasters and maternal depression were not viewed as substantially negatively impacting student outcomes at school relative to other forms of trauma. Additionally, poverty was considered a significant form of trauma in Factors Two, Three, and Four (+3, +3, +2 respectively) but not in Factor One (-1).

Table 9

Consensus Statements

Statement	Grid Placement by Factor
Natural Disaster	-3 -3 -3 -3
Maternal Depression	-2 -2 -3 -1

Discussion

The descriptive names assigned to each of the four factors that emerged from the Q sort factor analysis were: (1) abuse and violence at the hands of an adult; (2) conflict and unstable relationships at home; (3) negative external community and societal factors; and (4) physical and mental illness. These distinct perspectives that emerged from the four factors offer meaningful insight that may be used as a starting point for further investigation. Rural educators were largely represented in Factors 1 and 2 while more suburban educators made up the majority for Factors 3 and 4. Out of 181 rural participants, 113 were loaded on Factors One or Two (62%). For rural educators, the results indicate that they largely perceive trauma inflicted directly by adults in the home or outside of school – such as physical, mental, and sexual abuse, violence, and unstable relationships – as most harmful to the academic outcomes of their students. In contrast, suburban educators place greater emphasis on systemic issues, such as poverty, homelessness, systemic racism, and community violence.

While Factor 1 was the largest group, despite being made up of a majority of rural educators, there was still a sizable number of suburban educators who fell into Factor 1 and supported the perception that abuse and violence at the hands of an adult were the most harmful forms of childhood trauma concerning student academic outcomes. Further,

while poverty was viewed as an influential component in school performance relative to childhood trauma in three of the four factors, it was not highly regarded by those in Factor 1, which accounted for 36% of participants and was made up of largely rural educators. These rural educators seem to frame poverty differently about childhood trauma, which warrants further investigation.

Factor 2 participants were predominantly rural and emphasized the negative effects of conflict and unstable relationships at home on students' academic outcomes. Open-ended survey responses indicate that experience with these forms of trauma impacting their students was the underlying rationale for these participants' sort decision. Research has found that conflict and instability in the home are more prevalent in rural communities (Calthorpe & Pantell, 2021; Crouch et al., 2020; DuBois et al., 2019; Peek-Asa et al., 2011). The results of this study, particularly around Factor 2, would support these previous findings.

Racism, discrimination, and community violence were only recognized as significant by Factor Three, where the participants tended to be younger, more diverse (albeit with small sample size), more suburban, and more likely to be classroom teachers with more frequent direct contact with students. To combat the effects of trauma within the school setting, marginalized students require compassionate, open, safe spaces that acknowledge the harm caused by systemic racism (NCTSN, 2017b). Schools and classrooms that do not offer such spaces will likely fail in efforts to close achievement gaps and improve outcomes for students of color (Howard, 2019). Given that the factors consisting of mostly rural educators captured perspectives that did not elevate the impact of systemic and community-based trauma, marginalized students impacted by such forms of trauma are not being fully supported within their rural schools. A dedicated schoolwide emphasis on meeting all students' needs through applying culturally responsive teaching strategies would be a worthy starting point. This requires school administrators to prioritize issues of equity and social justice in all aspects of their students' learning environment, from representative textbook content to the hiring of diverse faculty and staff (Grissom et al., 2021).

When training school personnel in trauma-informed approaches to use with students, it is important to note the subjective impacts that specific forms of trauma may have on a student. As one participant stated, "Every student is unique." While all trauma is significant in a child's life, each traumatic event will not have the same effect on a child's behavioral or academic performance in school. Variables such as a child's level of resiliency and the existence of any positive relationships in their lives contribute to a reduced effect of trauma on behavior or academic performance (Yule et al., 2019; Bartlett & Steber, 2019). Educators have a front-row seat to the behaviors students exhibit daily, making them the first line of defense at the school when supporting a child who may be

experiencing or have experienced a traumatic event. However, if educators are not aware of the existence of all of the various forms of childhood trauma, unfamiliar with the signs for each respective type of trauma, not privy to the importance of protective factors, or uninitiated into trauma-informed practices, they may otherwise label disengaged students as slow learners in need of exceptional children's services, contributing to growing levels of disproportional representation of some student populations in exceptional children's programming. Additionally, such educators may mistakenly identify symptoms of trauma as disruptive behaviors worthy of punishment, contributing further to disproportionally high rates of school removal for suspension for students of color (Dutil, 2020; Leban & Masterson, 2022; McGruder, 2019; Tuchinda, 2020).

Finally, two forms of childhood trauma were rated as not as impactful on student academic outcomes across all factors. They were maternal depression and natural disasters. For maternal depression, unlike some of the other forms of trauma, educators may not be as privy to the information and context about their students' mothers necessary to aid in identifying maternal depression as the cause of a student exhibiting the warning signs of childhood trauma. Therefore, their placement decision in the sort could have been impacted by a lack of exposure and experience with this particular form of childhood trauma. Natural disasters are not as widespread as other forms of trauma and, as such, affect specific communities rather than existing across almost all communities. Limited experience in working with students displaced or traumatized by such an event would explain the low consensus Q sort placement of natural disasters by participants.

Limitations

Several noteworthy limitations impact the findings of this study. Most significant is the lack of diversity in the participants. Q methodology is useful in identifying different perspectives within a group of participants. However, if the participants share similar viewpoints, the findings may need to be viewed cautiously. In this case, with 91% of participants identifying as White and 80% female, it is not surprising that viewpoints expressed in Factor One accounted for nearly as many participants (127) as the other three factors combined (129). While the perspectives of White females are worthy of investigation, the inclusion of more males and participants of color likely would have uncovered additional perspectives with a more even distribution across the factors.

Further, participants self-identified their demographic information, including whether or not their school community was rural, suburban, or urban. No definitions for these categories were provided, nor was any data or source referred to so as to assist participants in making this determination. Participants themselves were left to make their determination as to whether their school communities were rural, suburban, or urban.

Lack of experience with some forms of trauma in their students may have impacted our results. Weather-related trauma, such as home displacement or loss of a family member due to flooding, hurricane, tornado, or fire, may not have been widely experienced by the students of many teacher participants. This may explain why natural disaster resulting in trauma was rated low across all factors.

Finally, 95 participants, or 27% of all participants, did not load on a factor, meaning they did not share one of the four perspectives identified by the four factors identified in this study. More participants and increased diversity of participants could lead to more than four factors, thus providing additional potential loading options for these 95 participants so that their perceptions could be more meaningfully included.

Implications for Research and Practice

There are numerous implications for research and practice as a result of this study. For the largest factor, Factor One, qualitative responses indicated a lack of awareness as well as deficit thinking. The participants in this factor were predominantly rural, White, female, veteran educators. Comprehensive, ongoing professional learning in conjunction with the utilization of schoolwide trauma-informed practice has been shown to improve student well-being and overall school performance (Morton, 2022; Stokes, 2022). For rural school communities, utilization of Title I funding, partnerships with regional and online universities, and access to any local mental health resources could be the starting point for the development and provision of such training to expand rural educators' understanding of trauma in its various forms, the impact that adverse childhood experiences have on student academic performance, and strategies to support traumatized students in their classrooms or schools. Given the distinctions between responses for factors predominantly consisting of rural educators (Factors 1 and 2) – whose perspectives were influenced by their focus on problems in their students' homes – versus factors predominantly consisting of suburban educators (Factors 3 and 4) – whose perspectives were influenced by their view of systemic, societal issues, further research is needed on the nature of these differences in how rural and suburban educators' conceptualize the harm caused by trauma. Rural students may be experiencing different types of traumas than their suburban and urban peers (Sanchez et al. 2017), or perhaps their teachers and counselors are less skilled at identifying trauma caused by discrimination, racism, and community violence (Palma et al., 2023).

To combat the effects of trauma within the school setting, marginalized students require compassionate, open, safe spaces that acknowledge the harm caused by systemic racism (Palma et al., 2023; NCTSN, 2017b). Schools and classrooms that do not offer such spaces will likely fail in efforts to close achievement gaps and improve outcomes for students of color. A dedicated schoolwide emphasis on meeting all students' needs through applying culturally responsive teaching strategies would be an appropriate

starting point. This requires school administrators to prioritize issues of equity and social justice in all aspects of their student's learning environment, from representative textbook content to the hiring of diverse faculty and staff. Based upon the results of this study, marginalized, rural students would benefit the most from such steps by school and district leadership and policymakers.

In addition to providing current educators with ongoing professional learning in culturally responsive and trauma-informed practices, teacher and principal preparation programs must also emphasize these practices and related skill development in their coursework (Hoppey et al., 2021). Rural schools may lack the necessary funding and resources to provide such training and, therefore, must rely upon educator preparation programs to produce future employees for their schools who will be mindful of creating equitable, trauma-informed learning environments. This is even more significant when considering the challenges rural schools face in recruiting and retaining qualified, diverse educators (Brenner et al., 2021). Without such training and preparation, many teachers feel ill-equipped to meet the needs of their students, particularly those in poverty (Blitz et al., 2016) and in rural settings (Shamblin et al., 2016).

Educational leaders and policymakers have attempted to require PK-12 schools to implement trauma-informed practice, such as with U.S. Senate Bill 4614, known as the Trauma-Informed Schools Act of 2022. Unfortunately, these legislative efforts have been slowed by opposition due to funding concerns. Until such legislation is passed, further efforts to promote trauma-informed practices should be encouraged at the state and local levels. Additionally, teacher preparation programs and local school districts should collaborate to develop common practices and vocabulary around trauma for all educators, such that it is as ingrained into their lexicon as Bloom's taxonomy. This would help to counter the criticism that educator preparation programs have received for not providing practical training and skills in how to teach students affected by childhood trauma (Koenen et al., 2021).

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