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Trauma: Constructivist Theoretical Framework

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ABSTRACT

The constructivist approach to learning is a theoretical orientation that posits that individuals create their own understanding and knowledge of the world through their experiences and interactions with it. This approach emphasizes that learning is an active process, and individuals are not passive recipients of knowledge. When used concurrently with trauma-informed practices, a constructivist approach can inform social, emotional, and mental health, as well as academic success. This framework can be applied to teachers and students. When applied to teachers it can be used for purposeful coping mechanisms through restorative justice and dispositional mindfulness. When applied to students the framework can implement proactive, student-based practices such as Response to Intervention and the 4 Rs to connect resiliency and intervention to academic learning. Using a constructivist, trauma-informed framework can provide students with greater sense of control and agency over their trauma experiences and impart confidence in achieving school success.

Keywords: trauma, constructivism, trauma informed practices, instructional strategies

Classrooms serve as the foundation of formal education, providing a structured and organized setting for learning. However, for students who have experienced trauma, the traditional classroom environment may not always be conducive to their well-being and educational success. According to the National Institute of Mental Health, childhood trauma is defined as "the experience of an event by a child that is emotionally painful or distressful, which often results in lasting mental and physical effects" (Griffin et al., 2011, pp.72-73). The current design of most classrooms can inadvertently pose challenges for students with trauma (e.g., re-traumatization, lack

of emotional safety). Traditional classrooms often employ disciplinary methods, such as public reprimands and punitive measures (Warnick & Scribner, 2021), that can retraumatize students who have experienced trauma (Cavanaugh, 2016). These tactics may trigger feelings of shame, fear, or powerlessness, resembling the emotions associated with their traumatic experiences. As a result, students may become more anxious, withdrawn, or resistant to learning, leading to a cycle of behavioral challenges. Noisy, chaotic, or unpredictable settings can trigger heightened anxiety, hypervigilance, or dissociation in students, making it difficult for them to focus on learning or feel secure (Burdick & Corr, 2021). Students who are living with trauma, who may struggle with emotional regulation, may find it challenging to meet academic expectations without adequate support for their emotional needs (Avery et al., 2021). Neglecting the emotional needs of students impacted by trauma can result in the likelihood of lower school success and imminent damage to their collective development. Educational professionals and school systems at large must recognize the importance of trauma-informed practices as the crux to creating safe, supportive, and nurturing learning environments that support the student's emotional and mental health needs in conjunction with academic rigor. Given that all P-12 classrooms have children with a wide range of trauma experiences, there is not a one-size-fits-all approach as to how to frame trauma-informed practices in the classroom.

While not as extensively researched as some other approaches, the effectiveness of trauma-informed practices is increasingly garnering attention, with the empirical foundation expanding (Substance Abuse and Mental Health Services Administration (SAMHSA], 2016). Therefore, we will distinguish and present several frameworks and practices with empirical evidence that are grounded in a constructivist approach and can be utilized when addressing the unique needs of traumatized students in the modern school (Champine et al., 2018; Herrenkohl et al., 2019).

TRAUMA-INFORMED PRACTICES

Trauma-informed practices (TIP) in education represent a paradigm shift in the way schools and educators address the needs of students who have experienced trauma. It is rooted in an understanding of the trauma's far-reaching impact on an individual's cognitive, emotional, and social well-being (Sweeney et al., 2018). In this approach, the focus shifts from asking, "What's wrong with this student?" to "What has happened to this student?" TIP foster a culture of empathy and collaboration among all school community members, recognizing that the effects of trauma extend beyond the classroom. Ultimately, TIP seek to not only address the immediate needs of students with lived trauma but also support their long-term healing and success in education and life; further, it places a premium on creating safe, supportive, and nurturing environments that recognize and respond to the unique needs of students that are trauma-affected. Trauma-informed classrooms can profoundly affect how students living with trauma learn in a positive or negative direction; however, if learning environments that are trauma-informed support the constructivist theoretical framework, individualized, active, and meaningful learning can occur.

CONSTRUCTIVIST THEORETICAL FRAMEWORK

The constructivist theoretical framework provides a powerful lens through which to understand the profound impact of trauma on an individual's cognitive, emotional, and social development in today's classrooms. Constructivism, as a theoretical perspective, asserts that individuals actively construct their knowledge and understanding of the world through their experiences, interactions, and mental processes (Shah & Kumar, 2019). It posits that people are not passive recipients of information; instead, they actively engage in sense-making activities, integrating new information into their existing mental structures (Akhavan & Walsh, 2020; Alvidrez et al., 2022). Constructivists believe successful child learning is not based on one construct but rather co-exists on multiple levels, such as cognition-based, hands-on experiences, and physical interactions (McLeod, 2019). Teachers who use the constructivist theoretical approach to direct learning implement purposeful strategies such as modeling, observation, guidance, coaching, and collaboration, and utilizing the high-impact learning strategy of scaffolding can empower the child to practice the task (Akhavan &Walsh, 2020).

Given that trauma is an overwhelming and distressing experience, educators must realize that the effects of trauma can disrupt a student's sense of self and their ability to make meaning of their experiences. Within the constructivist framework, trauma is not merely an event that happens to an individual but a complex process of constructing meaning and understanding in response to that event (Malchiodi, 2020). The effects of trauma run through a student's academic and social day. Teachers must purposefully design emotional settings that can strengthen traumatized students and assist in ameliorating the challenges they will face while at school. Overall, an emotionally supportive classroom setting for students experiencing trauma would prioritize safety, understanding, flexibility, and the promotion of positive relationships and emotional well-being. Using a constructivist-based classroom approach can strengthen students who have experienced trauma by creating a collaborative environment where the learner actively participates in their learning and teachers are facilitators of learning rather than only providers of instruction (Piaget, 1976; Minahan, 2019). Lastly, constructivist teachers must work to understand the multifaceted needs of their students and must adjust their teaching to match their students' understanding of learning (Minahan, 2019).

The Theory of Constructivism: Piaget and Vygotsky

Constructivism is typically used in the classroom environment for both teaching and learning and often begins with the learner actively seeking and then constructing the meaning of desired concepts (McLeod, 2019). Constructivism is grounded in several conceptual philosophies, including: (a) learning is not passive or innate, and learners are active participants in constructing their knowledge; (b) the learner's personal experiences and reality of learning are based on prior and new schemata; (c) knowledge is constructed through socially interactive learning such as through scaffolding or the notion of the zone of proximal development; and (d)

learner perceptions of their world impact how they connect epistemological learning to prior experiences (McLeod, 2019; Piaget, 1976; Vygotsky, 1978).

Constructivism is often identified within the literature as two primary theories: social constructivism and cognitive constructivism (McLeod, 2019). Although both theories are considered constructivist theories, researchers have delineated the defining characteristics as different, whereas cognitive constructivism is described as "the nature of knowledge," and social constructivism is described as "the process of learning" (McLeod, 2019; McPhail, 2016). Although cognitive constructivists such as Jean Piaget theorize that learners construct new knowledge (assimilation) based on prior knowledge (accommodation), he also theorizes that cognitive development increases as a learner progresses through four developmental stages [sensorimotor, preoperational, concrete operational, formal operational] (McLeod, 2019; Olusegun, 2015; Piaget, 1976).

Whereas cognitive constructivism focuses on knowledge construction, Lev Vygotsky's theory of social constructivism is considered a collaborative process in which the learner develops knowledge through individual interactions (McLeod, 2019; McPhail, 2016). Vygotsky claims that individual social interactions are critical to helping learners find a more in-depth meaning of new information that is presented, and the child's functional development occurs twice, first socially between people (inner-psychological) and then individually inside the child [intra-psychological] (McPhail, 2016; Vygotsky, 1978). Additionally, Vygotsky (1978) theorizes that the most optimal learning occurs through the process of scaffolding that will place the learner in the "zone of proximal development" (Olusegun, 2015; McLeod, 2019; Vygotsky, 1978). Vygotsky defined scaffolding as the provision of temporary support for learners that gives them support at an appropriate time using a level of complexity that matches their ability and then extends the learner's abilities until they can accomplish the activity independently. He believed that learning occurs when a child's internal cognitive process occurs after social interaction and exchanges, and the child better receives information if a person who is more knowledgeable about the content guides the child's learning; thus, it is typically the classroom teacher who provides the temporary support to the learner (McLeod, 2019; Olusegun, 2015; Vygotsky, 1978). Once the theoretical constructs of cognitive and social cognitive theories are recognized as a valid approach to how students learn, it can be further applied to the needs of students who have experienced trauma as a school system response to trauma.

SCHOOL SYSTEMS RESPONSE TO TRAUMA

It has been well documented in the research literature that a child who has experienced trauma is strongly associated with poor academic achievement and difficulty in school. However, school systems can develop a system-wide response to children exposed to trauma by using a continuum of trauma-informed approaches that are inclusive of a responsive and positive approach to proactive practices (Chafouleas et al., 2016; SAMHSA, 2014). Understanding trauma alone is not adequate for effecting change. SAMHSA (2014) describes the effectiveness of trauma outcomes based on how it is addressed or what treatments are deployed.

Students need to believe that their classrooms are spaces where they will be emotionally protected, supported, and enabled to take learning risks, make mistakes, and fail without feeling like a failure. Emotional safety can be achieved through validation. Validation communicates value, self-worth, and affirmation. The validating classroom cultivates trust, respect, and empowerment and instills confidence in students to take risks with their learning (TREP Project, 2021). Students' experiences with trauma can also impact the well-being and decision-making of the classroom teacher; however, the theoretical tenets of constructivism can be incorporated into preventative trauma-informed practices for teachers that support positive coping responses.

CONSTRUCTIVISM AND TRAUMA-INFORMED SUPPORTS FOR TEACHERS

The theory of constructivism is often thought to be the basis for how children are taught to create learning experiences that are active and purposeful. However, the paradigms of constructivism, when applied to teachers, can provide them with active and purposeful coping mechanisms to address the challenging behaviors of traumatized children while enabling their overall academic success. Within the research literature, two constructivist-based approaches to trauma-informed practices that teachers can use as preventative trauma-informed supports are restorative practices and dispositional mindfulness (Breedlove et al., 2020; King et al., 2021; Lucht, A., 2024; Mesibov & Drmacich, 2022).

Restorative Practices

Restorative practices are used as replacements for traditional forms of discipline, including ineffective and harmful responses to behavior that were used as punishments as an immediate consequence (Ferlazzo, 2020). Behaviors that are manifestations of chronic or extreme trauma can be misunderstood by educators/administrators and labeled as misbehavior or defiance when, in actuality, it is an expression of the child's emotional pain/suffering or absence of specific skills in areas such as emotional regulation (Hertel & Kincaid, 2016). The goal school professionals should embrace is to increase their understanding of vulnerable and traumatized children to ensure they are served compassionately, such as through restorative practices (Chafouleas et al., 2016; Hertel & Kinkaid, 2016). Teachers who implement restorative practices over traditional punishment responses for trauma-manifesting behaviors give students a feeling of empowerment rather than a negative consequence, thus providing students with a sense of understanding that their choices impact others (Ferlazzo, 2020).

Restorative practices in classrooms serving children living with trauma experiences prioritize the cultivation of a supportive and healing environment through intentional community-building, conflict resolution, and relationship repair. These practices recognize the interconnectedness of individuals within a community and aim to address harm and conflict constructively and empathetically. In such

classrooms, restorative circles are often utilized as a cornerstone practice, providing a structured space for students to engage in open dialogue, share their experiences, and build connections with one another. These circles create opportunities for students to develop empathy, understanding, and communication skills while fostering a sense of belonging and safety within the classroom community.

Teachers and educators play a pivotal role in facilitating restorative practices by modeling empathy, active listening, and non-judgmental support. They guide students through restorative processes, such as informal conversations or formal restorative conferences, where individuals affected by harm or conflict come together to discuss their perspectives, express their feelings, and collectively explore solutions and resolutions. Through these processes, students are encouraged to take responsibility for their actions, repair relationships, and work toward reconciliation and healing.

Restorative practices in classrooms serving children living with trauma experiences also prioritize the integration of trauma-informed approaches, recognizing the unique needs and experiences of students impacted by trauma. Teachers are mindful of triggers and potential emotional sensitivities, ensuring that restorative processes are conducted in a safe and supportive manner. Additionally, restorative practices emphasize the importance of building positive relationships and fostering a sense of empowerment and agency among students. By centering on principles of respect, dignity, and collaboration, restorative practices contribute to creating an inclusive and equitable learning environment where all students feel valued, supported, and able to thrive academically and emotionally.

Dispositional Mindfulness

Dispositions are considered enhancements in how teachers filter and infer actions using their values/beliefs as they examine and process specific situations, which provides them with beneficial ways to understand how their practical knowledge is built and applied (Männikkö & Husu, 2020). Although dispositions are vital elements in processing and integrating teaching actions, there is a need for additional considerations as to how connections occur between the teacher's purpose, perceptions, and real-world applications (Männikkö & Husu, 2020). Research has indicated that when situation-specific processing occurs, dispositions alter the teachers' reflections on practice to include various habits and views of managing instructional situations (Männikkö & Husu, 2020). Mindfulness has been described in the research literature as a high-quality form of self-awareness that facilitates awareness and attention to experiences such as individual thoughts, emotions, and bodily sensations (Fabbro et al., 2020). Mindfulness is training ourselves to be fully present and aware of where we are, how we are feeling, and what we are doing in the present moment (Broderick & Lyn, 2020; Fabbro et al., 2020). Dispositional mindfulness can be viewed as a constructivist approach as teachers need to remain continually mindful when responding to students, especially students who have experienced trauma (Brown et al., 2007; Fabbro et al., 2020). Further, dispositional mindfulness refers to the inherent tendency or trait of being mindful in one's daily life, characterized by present-focused awareness,

nonjudgmental acceptance, and openness to experience. When using dispositional mindfulness, teachers can engage in non-judgmental reflectiveness, thus separating thoughts about themselves and perceiving the emergence of opinions and feelings in the present moment (Broderick & Lynn, 2023; Tang & Tang, 2020). The goal of mindfulness practice is twofold: first, for the teacher to build personal cognitive, emotional, and behavioral self-regulation, and second, to build necessary stress management and coping skills (TREP Project, 2021). When used in schools, mindfulness is a preventative practice that can improve educational outcomes for both teachers and students by facilitating teaching strategies that calm the body's physiological responses to stress and permits the focusing of the mind (Flook et al., 2013; Hwang et al., 2019; TREP Project, 2021).

By building brief moments of dedicated time for easy-to-learn mindfulness practices into school routines, students and teachers become more calm, focused, and responsive while experiencing less stress and anxiety (Emerson et al., 2017). Mindfulness builds cognitive and emotional self-regulation and, by doing so, also builds behavioral self-regulation, resiliency, and self-efficacy in teacher practitioners while reducing burnout and time pressure (Flook et al., 2013; Franco et al., 2010; Gold et al., 2010; Meiklejohn et al., 2012). Providing teachers with mindfulness training increases the likelihood of having classrooms that include positive interactions as they are more equipped to recognize their awareness of sensations, thoughts, and feelings, and efficacy, which results in self-compassion (Flook et al., 2013; Hwang, 2019).

FRAMEWORK FOR TRAUMA IN SCHOOL-BASED SETTINGS

School-based settings have long been the focus of preventative environments for students with challenges in socialization, behavior, and academics (Brooks, 2006; Chafouleas et al., 2016). School professionals may react to child behaviors with punitive and/or harsh responses (e.g., verbal reprimands, suspensions, expulsions), which are counterproductive and could exacerbate existing feelings of trauma in students, thus compounding their feelings of anger, sadness, or adult mistrust (Durlak et al., 2011). Trauma can drastically impair a child's cognitive, social, emotional, and physical development, and if they do not have access to a safe environment, the new trauma they experience will become more complex (Lang et al., 2016; Loomis, 2018). Additionally, when a child's brain and body are constantly activated by stress, they develop a heightened level of negative reactivity to everyday events. To counter this and ensure that children's brains and bodies are functioning in ways that are conducive to learning, children need to trust that their schools and classrooms are safe spaces where they can reduce their hyper-vigilant focus on identifying threats and direct their attention to learning (TREP Project, 2021). Schools can develop a system-wide response to individuals exposed to trauma by using a framework that includes a continuum of trauma-informed approaches that are responsive, positive, proactive, and can be effectively implemented to foster a climate of safety and support (Chafouleas et al., 2016; SAMHSA, 2014). Two constructivist-based interventions that focus on a framework of resiliency and intervention-based proactive practices for students exposed to

trauma are Response to Intervention (RtI) and the 4 R's (Chafouleas et al., 2016; SAMHSA, 2014).

Response to Intervention (RtI) Framework

The RtI framework is a multilevel support system that has been at the forefront of educational practices in the last decade. RtI has targeted reactive practices and implemented new proactive approaches to assist with child resiliency and provide early identification and intervention (Chafouleas et al., 2016). A three-tiered framework, RtI was introduced to schools as a way to offer a continuum of evidence-based services and enhanced support for students who were considered to be at an increased risk of school failure but can also be used to promote resiliency in students who have experienced trauma (Adhwaa, 2019; Bruns et al., 2016; Chafouleas et al., 2016). To be effective, RtI must be a collaborative process and implemented consistently using quality instruction and interventions as each tier is monitored for the continual progress of individual learners, and each tier informs the delivery of instruction and can be modified as necessary (Adhwaa, 2019). Tier 1 strategies of the RtI model are fewer intensive strategies that can be provided to all students regardless of their risk level for trauma, and the focus is to improve the school climate and facilitate skill development (Chafouleas et al., 2016). Within school systems, many students are living with trauma that require assistance in remediating problems and are typically identified under the RtI framework as requiring more intensive support and strategies (Tier 2 and Tier 3). Tier 2 and Tier 3 levels of support in context to children who have severe manifestations of mental or behavioral symptomology resulting from trauma allow for the development and implementation of individualized strategies as a way to improve outcomes (Chafouleas et al., 2016). In contrast to Tier 1 supports, Tier 2 and Tier 3 supports can be used individually, in small or in groups and are used to decrease challenging behavioral manifestations in traumatized children by using strategies such as behavior modification, social skills training, and treatments for mental health as a way to facilitate academic achievement and appropriate social interactions with peers (Chafouleas et al., 2016).

The 4 R's

Using trauma-informed approaches such as the 4 R's and the six guiding principles that inform the 4 R's can incorporate essential assumptions and specific interventions into school structures. SAMHSA refers to the 4 R's and six principles collectively as a trauma-informed framework (2014). SAMHSA defines the 4 R's as (1) Realizing the extensive impact of trauma and what the possible routes are for recovery, (2) Recognizing the characteristics, signs, and symptoms of trauma in those involved in the system (e.g., families, staff, others), (3) Responding by fully integrating information about trauma into new or existing policies, procedures, and practices, and (4) Resisting the re-traumatization of both children and their caregivers.

The SAMHSA framework further describes the 4 R's as informing six guiding principles that lend to a trauma-informed framework approach; these are (1) safety, (2) trustworthiness and transparency, (3) peer support, (4) collaboration and mutuality, (5) empowerment, voice, and choice, and (6) cultural, historical, and gender issues (SAMHSA, 2014). The constructivist approach to learning in context to the 4 R's and six trauma-informed principles framework can co-exist within the theoretical approach of social constructivism as it is considered a collaborative process in which the learner develops knowledge through individual interactions (McLeod, 2019; McPhail, 2016). The constructivist practitioner can utilize the principles of the trauma-informed framework to facilitate individualized social interactions. These social interactions are critical to helping learners find a more in-depth meaning of new information that is presented, first between people (inner-psychological) and then individually inside the child [intra-psychological] (McPhail, 2016; Vygotsky, 1978). In addition to trauma-informed practices and frameworks, it is imperative that schools and educators recognize the importance of adopting constructivist-based teaching strategies that are inclusive of trauma-informed practices if they are to create learning environments that are both academically rigorous and safe, supportive, and nurturing learning environments that support the emotional and mental health needs of students.

CONSTRUCTIVIST TEACHING STRATEGIES

Teachers must understand their student's pre-existing knowledge base and adjust their teaching to match learners' understanding (Minahan, 2019). Teachers who use the constructivist theoretical approach to direct learning implement purposeful strategies such as modeling, observation, guidance, coaching, and collaboration, and utilizing the high-impact learning strategy of scaffolding can empower the child to practice the task (Akhavan &Walsh, 2020; Dennen & Burner, 2008; Hattie, 2009). Many trauma-informed pedagogical teaching strategies can be connected to constructivist theory including the strategies identified within this section. In the context of constructivism, students should not be passive learners but active participants in constructing their learning, and by implementing trauma-informed pedagogical strategies, learners who have experienced trauma can have the opportunity for increased personal and academic success (Akhavan & Walsh, 2020; Dennen & Burner, 2008: Duran & Topping, 2017). Examples of constructivist, trauma-informed teaching strategies outlined in this section include (1) scaffolding, (2) embedded instruction, and (3) verbal questioning.

Scaffolding

Scaffolding has been defined in the social constructivist theoretical literature as a temporary support that the teacher provides to facilitate a student's ability to make progress and self-regulation to follow through with the teacher's encouragement (Graham & Harris, 2019). Scaffolding occurs when the process of giving the learner support at an appropriate time and level of sophistication would facilitate moving beyond the zone of proximal development (Clark, 2018; Vygotsky, 1978).

Scaffolding is grounded in Vygotsky's theory of social constructivism, in which he deemed that social interactions are caveats to helping learners find a more in-depth meaning of new information presented. (Vygotsky, 1978). Vygotsky believed that learning occurs when a child's internal cognitive process occurs after social interaction and exchanges, and the child better receives information if a person who is more knowledgeable about the content guides the child's learning (Clark, 2018; Vygotsky, 1978). Initially providing high levels of guidance and then reducing guidance as students begin independently performing the target skill allows students to build confidence and be successful as they learn because it bridges the gap between the current individual abilities of learners and the goals of instruction (Archer & Hughes, 2011; Friend & Bursuck, 2021). Scaffolding can be relative to trauma-informed practices as students are provided with supports that allow them to feel validated in their choices, thus building trust and confidence in their learning (TREP Project, 2021).

Embedded Instruction

Embedded instruction can be described as a constructivist approach in which instructional practices are naturally occurring but are inclusive of systematic instructional procedures that transpire within the typical structures of the classroom and daily routines (Koslouski & Stark, 2021). Embedded instruction allows students to receive individualized and effective instruction to acquire a target skill across core content areas (Grisham & Hemmeter, 2017; Koslouski & Stark, 2021). The advantages of using embedded strategy instruction are that it represents a generalisntruction format, is inclusive of environmental cues that can encourage desired behaviors, provides the learner with opportunities to engage in appropriate peer interventions, and increases motivation (Grisham & Hemmeter, 2017). Developing and implementing embedded strategies for students who have experienced trauma begins with the teacher prioritizing relationships with and between peers (Koslouski & Stark, 2021). Next, teachers should allocate time to teach students social and self-regulation skills and support students academically, socially, and emotionally (Koslouski & Stark, 2021). Embedded learning instruction is an educational approach that integrates learning opportunities into real-world contexts or everyday activities and requires the teacher to consider skills that build on the student's strengths and weaknesses (Grisham & Hemmeter, 2017). Embedded strategy instruction supports emotional and academic pedagogy as it ensures the efficiency of instruction will be maximized as learners have multiple practice opportunities that increase the likelihood that skills are remembered (Grisham & Hemmeter, 2017; Koslouski & Stark, 2021). Furthermore, the embedded learning opportunities are meaningful and active as the teacher discerns which skill is taught and how the skill provides the learner with more independence during the activity or routine (Grisham & Hemmeter, 2017; Koslouski & Stark, 2021).

Verbal Questioning

Using verbal questioning as a constructivist teaching strategy allows students to construct and connect new information to previous knowledge through teacher-guided questioning and in-depth feedback responses (Clark, 2018; Minahan, 2019). Using a verbal questioning strategy assists students by allowing them to check their understanding of the provided concepts and skills, remain on task, and ensure they are attentive and actively engaged in their learning (Archer & Hughes, 2011). When teachers plan for verbal questioning, they must ensure a high level of interactions, specifically teacher-student interactions that provide students with predictable interaction, which can decrease the activation of stress responses in children with trauma and increase positive, proactive, and safe learning environments (Archer & Hughes, 2011; Chafouleas et al., 2016).

CONCLUSION

Students who experience trauma often struggle with the development of emotional regulation which can lead to behavioral challenges, difficulty in meeting academic expectations, and impaired development (Avery et al., 2021). Often, schools of today frame trauma-informed practices in the classroom as a "one size fits all" approach to learning for students who have experienced trauma (Koslouski & Chafouleas, 2022; Tempkin et al., 2020). However, more attention as to how trauma-informed practices are implemented in the classroom warranted further explanation. Using an evidence-based theoretical approach, such as constructivism, as part of the trauma-informed framework provides teachers with the knowledge that learning constructs can co-exist with trauma informed practices as an overarching framework (McLeod, 2019). Using a constructivist approach imparts that students are active learners and students who have experienced trauma need additional and proactive learning supports to meet their emotional vulnerabilities if learning is to be empowering, beneficial, and meaningful (Akhavan & Walsh, 2020; Chafouleas et al., 2016).

The research literature described two constructive-based and trauma-informed frameworks that address the learning and social-emotional needs of traumatized children; these are Response to Intervention (RtI) and the 4 R's. Using RtI with students who have experienced trauma allows for a multilevel intervention approach to teaching and learning in which students are provided with three tiers of increasing support that uses quality and collaborative instructional interactions to encourage student learning while promoting resilience (Adhwaa, 2019; Bruns et al., 2016; Chafouleas et al., 2016). Often, individuals exposed to trauma can have a myriad of social and emotional challenges due to the impact of trauma, such as feelings of mistrust, failure, a lack of emotional safety, and an inability to regulate emotions. The use of the 4 R's framework and the six principles that informed them can be used as intervention tools. The 4 R's address the realization of the impact of trauma, recognition of the characteristics, signs, and symptoms of trauma, responding by integrating information about trauma into policies, procedures, and practices, and resisting re-traumatization. The six principles that inform the 4 R's include providing students with environment and practices that promote safety, trustworthiness, transparency, peer support, collaboration and mutuality,

empowerment, voice, and choice, and cultural, historical, and gender issues (SAMHSA, 2014). Additionally, the implications for teachers who have traumatized students in their classroom is that they can experience the negative effects of the resulting behaviors and interactions; thus, it is crucial to discuss how students can develop coping mechanisms.

Two trauma-informed and constructivist approaches that teachers can use to assist in developing coping mechanisms and decrease negative responses to students with trauma are restorative justice and dispositional mindfulness. Both approaches allow the teacher to self-reflect and recognize what is actually occurring rather than relying on their perceptions of what is occurring (Chafouleas et al., 2016; Hertel & Kinkaid, 2016; (Broderick & Lynn, 2023; Tang & Tang, 2020). Academic success is significant for students who have experienced trauma; thus, the implications of choosing evidence-based, pedagogical teaching strategies that are both constructivist and trauma-informed is critical to student success (Chafouleas et al., 2016). Examples of these types of teaching strategies found within the research literature include scaffolding, embedded instruction, and verbal questioning. Lastly, schools must have a willingness to consciously make an effort to create a trauma-informed, theoretical based framework if they are to best serve the needs of students impacted by trauma and provide appropriate supports that promote the student's overall well-being, resilience, empowerment, and academic success.

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