

EXPLORING THE CONCEPT OF PREVESCALATION THROUGH THE LENS OF  
TRAUMA: THE ROLE OF STUDENTS AND TEACHERS

A Dissertation  
Submitted to the Graduate Faculty  
of the  
North Dakota State University  
of Agriculture and Applied Science

By

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In Partial Fulfillment of the Requirements  
for the Degree of  
DOCTOR OF PHILOSOPHY

Major Program:  
Developmental Science

May 2021

Fargo, North Dakota

North Dakota State University  
Graduate School

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**Title**

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**DOCTOR OF PHILOSOPHY**

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## ABSTRACT

Numerous studies highlight that adolescence is the peak period of risk for trauma and its negative effects on physical and mental health. The current research focused on two studies examining whether training students and teachers in schools on effective strategies such as trauma-informed practices (TIPs) may help those who have experienced trauma build resilience and prevent the negative effects of trauma from progressing to adulthood. Study one examined the degree of trauma exposure, the role that students play in the implementation of TIPs, and the extent to which implementing TIPs impacts their lives. Participants were students (aged 15-18) participating in an elective Social Emotional Learning course in two rural high schools in the Midwest. Descriptive statistics showed that 46.2% of the students in the sample had at least one adverse childhood experience. Interview data also showed that students implemented Social Emotional Learning, Self-Care, and Restorative Circles in their schools. Results also showed that students trained younger students, same-age peers, and their teachers on these practices. Finally, results indicated that implementing TIPs promoted positive behaviors among students and teachers in the schools. Study two examined whether teachers' professional quality of life and type of training received predicted their implementation of TIPs in schools. Participants were 324 teachers (aged 22-70) from three public school districts in the Midwest (different from the schools in study one). Hierarchical multiple regression analyses showed that compassion satisfaction positively predicted teachers' implementation of TIPs while compassion fatigue negatively predicted teachers' implementation of TIPs. In addition, teaching experience significantly moderated relations between compassion fatigue and teachers' implementation of TIPs. Finally, training on Self-Care and Restorative Circles positively predicted teachers'

implementation of TIPS in schools. Discussion focuses on ways to provide support for students and teachers as they continue to promote the implementation of TIPS in schools.

## ACKNOWLEDGMENTS

I would like to thank my advisor, Dr. Joel Hektner, for his exceptional guidance and timely support till the completion of this dissertation. I would also like to thank my committee members, Dr. Elizabeth Blodgett Salafia, Dr. Sean Brotherson, and Dr. Nathan Wood for their support, invaluable feedback, and encouragement. Your guidance and expertise made this dissertation a success.

Special thanks to my family in Zimbabwe, the *Nyamandes* and *Chinopfukutwas*, I would have never made it this far without their support and understanding.

Finally, I am thankful to and fortunate enough to get endless love and support from my husband and best friend, Anderson Nyamande. To our children, Thandi and Thabiso Nyamande, thank you for being a great source of motivation for excellence.

## **DEDICATION**

To my parents, Simon and Eullah Chinopfukutwa, and my sister Chido Chinopfukutwa: You will always have a special place in my heart.

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# **EXPLORING THE CONCEPT OF PREVESCALATION THROUGH THE LENS OF TRAUMA: THE ROLE OF STUDENTS AND TEACHERS**

## **General Introduction**

Adolescence is a developmental period characterized by biological, cognitive, and social changes (Nooner et al., 2012). Numerous studies indicate that adolescents are at a greater risk of experiencing trauma than children and adults (e.g, Breslau et al., 2004; Kilpatrick et al., 2003). Trauma occurs not only as a result of adolescents' engagement in risky behavior, but as a result of the behaviors of others in the social context. For example, the Adverse Childhood Experiences (ACEs) study demonstrates that neglect or abuse of children and adolescents by caregivers plays a crucial role in the development of trauma (Felitti et al., 1998).

The concept of prevescalation captures the need to prevent the escalation of trauma often occurring from early childhood to adolescence (Perfect et al., 2016). Since children and adolescents spend most of their time at school, prevescalation in the context of trauma should focus on teaching students and school staff in the school environment effective strategies that can help those who have experienced trauma to build resilience and prevent the effects of trauma from progressing to adulthood. These potential intervention strategies, or trauma-informed practices (TIPs) are the focus of the current research. TIPs in schools focus on the school-wide implementation of recognizing, understanding, and responding to the effects of trauma by utilizing evidence-based practices (Substance Abuse and Mental Health Services Administration-SAMHSA, 2014).

## **Prevescalation in the Context of Trauma**

Research on the concept of prevescalation, which has the goal of preventing escalation in problem behavior instead of seeking only to prevent initiation, has been established in preventive

interventions for substance abuse including alcohol, tobacco, and marijuana among emerging adults (e.g., Bernal, 2019; Cheng & Anthony, 2018; Niara, 2018; Villanti et al., 2019). For example, with emerging adults, the concept of prevescalation in the tobacco control field was introduced to complement interventions for new incidents of smoking typically implemented in adolescence. Prevescalation focuses on cases of escalated smoking frequencies as well as cases of clinical tobacco dependence in adulthood (Niaura, 2017; Piper et al., 2017). Villanti and colleagues (2019) argue that since the escalation of smoking behavior often occurs in emerging adulthood, prevescalation strategies play a role in disrupting transitions between experimentation and established use during this developmental period. Hence, prevescalation strategies often encompass both universal and targeted prevention strategies (Villanti et al., 2019).

The concept of prevescalation may apply to contextual factors that contribute to the escalation of trauma. The Centers for Disease Control (CDC, 2019) defines adverse childhood experiences (ACEs) as all types of neglect, abuse, and other traumatic experiences occurring to individuals below the age of 18. Examples of ACEs include experiencing violence, abuse or neglect, witnessing violence in the home, and having a household member attempt or die by suicide (CDC, 2019). Additionally, ACEs can be experienced either directly, through victimization, or by witnessing a traumatic event, specifically in instances where an important attachment figure experiences trauma (secondary traumatic stress; Mash & Barkley, 2014). Reactions to all of these types of traumatic experiences tend to overwhelm an individual's capacity to cope (Poole & Greaves, 2012; Wright, 2014).

Additionally, Perfect and colleagues (2016) suggest that trauma exposure is common before age 17, with approximately two out of every three school-age children having experienced at least one traumatic event in that period. Traumatic experiences accumulate early in life with

the potential to disrupt developmental tasks in childhood and adolescence, increase risk-taking behaviors in adolescence, and heighten the risk of mental illness in adulthood (Copeland et al., 2007; Kaplow & Widom, 2007; Mueser & Taub, 2008; Wenar & Kerig, 2015). Further, individuals exposed to trauma have an 80% risk for experiencing additional ACEs (Felitti et al., 1998). This accumulation of ACEs, which typically occurs from childhood to adolescence, makes the development and wellbeing of students experiencing multiple ACEs, specifically adolescents, a topic of concern (Moore & Ramirez, 2016). Schools are in a strategic position to effectively provide prevention and early intervention services to help students cope proactively with challenges thereby alleviating the impact of traumatic events (Adelman & Taylor, 2012). Therefore, early and routine trauma screenings in schools to identify students at risk of trauma and its impact are vital (Woodridge et al., 2016).

### **Trauma-Informed Approach in Schools as an Example of a Preescalation Strategy**

There is evidence to suggest that a trauma-informed educational approach increases the capacity of students exposed to trauma to reach educational goals by meeting their socioemotional needs (Perry & Daniels, 2016). TIPs in schools aim for system-wide support, safety, and wellness by incorporating counselling and education for students, families, and school personnel regarding trauma (Perry & Daniels, 2016). TIPs also create opportunities for students to build healthy relationships with peers and teachers that are sustainable and meaningful (Perry & Daniels, 2016). Finally, TIPs can address developmental and psychological impacts of trauma such as learning difficulties and mental health concerns (Woodbridge et al., 2016; Wright, 2014). Therefore, TIPs in schools consider students holistically, an important element for students' wellbeing and academic success (Cole et al., 2005).

Trauma-informed schools demonstrate the need for a continuous national movement that is responsive to the educational needs of students experiencing trauma by implementing effective practices (Chafouleas et al., 2015). Overstreet and colleagues (2016) identified 17 states where TIPs are implemented in small clusters of schools (e.g., New Jersey), at district (e.g., Pennsylvania), and state levels (e.g., Wisconsin). Implementation is largely influenced by federal laws such as the Every Student Succeeds Act of 2015 (Civic Impulse, 2016), the reauthorization of the Individuals with Disabilities Education Improvement Act of 2004, and the Elementary and Secondary Education Act (Plumb et al., 2016; Prewitt, 2016). These federal laws provide school staff members opportunities to receive training and implement evidence-based practices, which in turn increase academic achievement for all students regardless of disability status or behavioral needs (Plumb et al., 2016; Prewitt, 2016). For example, the Senate Bill 2048 that was introduced and passed in 2015 requires public school districts in North Dakota to provide at least eight hours of youth mental health training for administrators and teachers from Kindergarten to 12<sup>th</sup> grades every two years (North Dakota Department of Public Instruction, n.d.).

As indicated earlier, preescalation interventions consider all levels of population-based prevention including universal and targeted measures (Villanti et al., 2019). Academic success and healthy social and emotional development of students exposed to trauma requires the school-wide implementation of TIPs (SAMHSA, 2014). Furthermore, a school-wide approach will meet the needs of students experiencing trauma who often suffer in silence because the school staff members may not easily identify them (Craig, 2015). Moreover, TIPs in schools provide effective support for students with their overall learning needs (Colorado Department of Education, 2018). TIPs implemented as targeted intervention help reduce retraumatizing students and support school staff by encouraging them to practice self-care to prevent and mitigate



vicarious trauma and compassion fatigue (Colorado Department of Education, 2018). Thus, TIPs fulfill the goal of preventive interventions that ensure that school environments provide safety, healthy relationships, and support for all students (Colorado Department of Education, 2018).

Additionally, TIPs in schools utilize a Multi-Tiered System of Supports (MTSS) and follow the models of prevention above by implementing evidence-based practices to increase academic, social, and emotional success of all students (Colorado Department of Education, 2018; North Dakota Multi-Tiered System of Supports, 2018). TIPs implemented at tier 1 include Positive Behavioral Interventions and Supports (PBIS) with trauma-informed principles such as building relationships, creating a safe and supportive environment, and direct instruction of state-wide expectations and social emotional skills (Colorado Department of Education, 2018). PBIS promotes positive behavior and addresses disruptive and antisocial behaviors in schools (Sugai & Horner, 2002). The Collaborative for Academic, Social, and Emotional Learning (CASEL) also identifies five core competencies of social emotional learning, which are self-awareness, social awareness, responsible decision-making, self-management, and relationship skills (CASEL, 2014). These core competencies together with school-wide models of PBIS are implemented in the school curriculum with explicit instruction for each, thus creating universal TIPs in schools (CASEL, 2014; Horner & Sugai, 2015).

TIPs implemented at tier 2 target students at risk for further trauma impact or with some symptoms and focus on increasing opportunities for skill development (Colorado Department of Education, 2018). This can be achieved by providing small-group programming with a double dose of instruction in the different areas of social emotional development, self-regulation, and problem-solving, for example (Colorado Department of Education, 2018). Finally, TIPs implemented at tier 3 focus on individual trauma-specific services in schools that meet the needs

of specific students experiencing clinical impairment (Colorado Department of Education, 2018). These students receive evidence-based assessment and intervention conducted by a mental health clinician. Data is collected at each of the three tiers to determine the needs of tiers 2 and 3 of support. Hence, the MTSS provides a continuum of support, screening, and evidence-based assessment as well as intervention for schools. Schools implementing the MTSS with high fidelity demonstrate significant improvements in social and emotional skills, student expulsions, and academic performance lasting up to 18 years postintervention (Freeman et al., 2016; Horner & Sugai, 2015; Taylor et al., 2017).

### **The Role of Students and Teachers in the Implementation of Trauma-Informed Practices in Schools**

Existing research identifies adolescence as the peak period of risk for trauma and its negative effects on physical and mental health, but there are studies that suggest that positive experiences in the family or school may mitigate the detrimental effects of ACEs (e.g., Benson et al., 2003; Hawkins et al., 2003; National Research Council and Institute of Medicine, 2009). Positive experiences in the school may include a safe school environment, provision of adult support, and engaging in extracurricular activities in school (Moore & Ramirez, 2016). More importantly, TIPs may facilitate the provision of these positive experiences for adolescents. Since adolescents understand their own needs, it is important to involve them by providing opportunities for them to implement TIPs in their schools. Yet research highlighting students' role in the implementation of TIPs appears to be missing. Moreover, Phifer and Hull (2016) suggest that collaboration is instrumental in the successful implementation of TIPs, where school mental health professionals, teachers, administrators, and other school staff work together in facilitating the implementation of TIPs. Students may also be involved in this process. Hence,

the first study aimed to investigate students' potential role of promoting resilience and wellbeing in schools.

Research has also demonstrated that teachers are the key players in the implementation of TIPs in schools (Baweja et al., 2016). Teachers have multiple opportunities to provide positive experiences for students, as they have direct interactions with students (Crosby, 2015). However, for teachers to implement TIPs in school successfully, it is important to consider their professional quality of life. Traumatic events experienced by students may influence teachers' professional quality of life (Abraham-Cook, 2012). For example, teachers may experience stress, emotional burden, and anxiety (Alisic et al., 2012; Caringi et al., 2015). Conversely, teachers may experience positive feelings when helping students exposed to trauma (Abraham-Cook, 2012). With limited research on teacher wellbeing, it is important to ascertain whether teachers' professional quality of life may influence their ability to implement TIPs in schools. Hence, this was the focus of the second study.

### **The Current Research**

A few studies exploring the concept of preescalation focus on substance use in emerging adulthood as that is the period of escalation for substance use (e.g., Bernal, 2019; Cheng & Anthony, 2018; Niara, 2018; Villanti et al., 2019). This concept can be applied to other problems besides risky behaviors, such as trauma among adolescents. Research indicates that adolescence is the critical period for trauma when compared to childhood or adulthood due the changes occurring in puberty (Breslau et al., 2004; Nooner et al., 2012). As demonstrated by the ACEs study, traumatic experiences that accumulate early in life as a result of individuals living in toxic environments have potential negative effects throughout the lifespan (Copeland et al., 2007; Kaplow & Widom, 2007; Mueser & Taub, 2008). The current research sought to expand and

build on the concept of prevescalation by exploring prevescalation strategies implemented during adolescence such as TIPs, thus hindering the effects of trauma from escalating into adulthood. Finally, the current research also considered the school environment as the relevant context to maximize efforts of teaching /training both students and teachers to use strength-based approaches by implementing TIPs that will help everyone to rise above the trauma and thrive.

Therefore, two separate studies were conducted for this research. Adolescents implementing TIPs in two rural high schools in Midwestern United States were the focus of the first study in a retrospective and qualitative design. This first study examined the degree of trauma exposure among adolescents to provide insight on the prevalence of ACEs among the sample of adolescents as this helped demonstrate whether TIPs were an effective prevescalation intervention. This study also evaluated students' role in the process of implementing TIPs in their schools and sought to ascertain whether implementing TIPs impacted their lives. Staff members including teachers, the school principals, and school counselors at the two high schools were included in this study to provide a comprehensive understanding of changes that may have occurred in the group of students implementing TIPs in their schools. Teachers implementing TIPs in three public school districts (different from schools in the first study) in the Midwest were the focus of the second study. This quantitative study explored whether their perceptions of their professional quality of life played a role in the way they implemented TIPs in their schools. Furthermore, this study also examined teaching experience as a potential moderator of the relationship between teachers' professional quality of life and their implementation of TIPs in schools. This second study also investigated whether teachers' participation in trauma-sensitive training played a role in their implementation of TIPs.

# **STUDY 1: AN EVALUATION OF ADOLESCENTS' ROLE IN THE IMPLEMENTATION OF TRAUMA-INFORMED PRACTICES IN SCHOOLS**

## **Introduction**

Adverse childhood experiences (ACEs) have become a public health concern, given the evidence in a national study where just under half of the children and adolescents in the United States experienced at least one ACE while at least 10% experienced three or more (Sachs & Murphey, 2018). Felitti et al. (1998) assessed various aspects of ACEs reported retrospectively by adults and classified ACEs into ten categories: emotional abuse, physical abuse, sexual abuse, physical neglect, emotional neglect, domestic violence, having an incarcerated household member, household mental illness, household substance abuse, and parental separation or divorce. Multiple studies focusing on adults and children established the links between ACEs and poor health and wellbeing including poor physical health, behavioral and emotional problems, and lack of economic self-sufficiency in adulthood (e.g., Felitti et al., 1998; Herbers et al., 2014; Metzler et al., 2017). However, more research focusing on adolescents (age 10-18 years) is needed as this is a distinct developmental period characterized by rapid physical, emotional, and social changes occurring simultaneously (Nooner et al., 2012; Soleimanpour et al., 2017).

Adolescents exposed to trauma are more likely to experience challenges when navigating this developmental period due to the negative effects of trauma on their cognitive and emotional development and/or lack of social support (Soleimanpour et al., 2017). Since adolescents are at greater risk of experiencing trauma than children and adults, adolescence is a key developmental period to alter the negative life course trajectory for individuals who did not receive adequate support during childhood or continue to experience traumatic events into adolescence (Breslau et

al., 2004; Soleimanpour et al., 2017). Identifying and implementing effective strategies including trauma-informed practices (TIPs) to cater to the unique needs of adolescents is crucial, specifically in an environment where they spend most of their time such as the school (Baweja et al., 2016). The current study examined the prevalence of ACEs among adolescents in two rural high schools in the Midwestern United States.

Finally, research has established that system-wide supports such as TIPs in schools can mitigate the long-term effects of exposure to ACEs (Bethell et al., 2014). Prior research highlights the teachers' and other school staff members' role in implementing TIPs in schools, yet students' role in this process appears to be missing. The purpose of the current study was to examine students' role in the implementation of TIPs in schools when trained in universal interventions such as Social Emotional Learning, Self-Care, and Restorative Circles and to assess the impact of implementing these practices in their lives.

### **Adverse Childhood Experiences among Adolescents**

Research on ACEs among adolescents highlights some disparities in ACEs among adolescents. For example, adolescents from lower income households, having special health care needs, and living in less safe households are more likely to experience ACEs (Bethell et al., 2014). Additionally, certain groups of adolescents including those who are lesbian, gay, bisexual, transgender, queer, or other (LGBTQ/other) and those incarcerated or involved with the juvenile justice system are at great risk of ACEs (Andersen & Blosnich, 2013; Baglivio et al., 2014; Bethell et al., 2014). Yet adolescents may not receive adequate resources to address these concerns effectively (Guterman et al., 2002).

Additionally, ACEs are associated with mental health challenges among adolescents (Lee et al., 2020). In the school context, adolescents exposed to trauma experience challenges such as

externalizing behavior problems, dysregulation of emotions, and low academic performance (Bethell et al., 2014; Bond et al., 2007; Hazen et al., 2009; Patel et al., 2007). Additionally, mental health concerns such as depression and anxiety affect most adolescents (Cummings et al., 2014). Depression is typically comorbid with other mental health disorders such as anxiety (Essau, 2003; 2008). Hence, adolescents experiencing depression may have challenges with relationships with peers and teachers as they typically display either aggressive or indifferent behaviors to others and may have low self-esteem (Lewisohn et al., 1998). Both depressive and anxiety symptoms may continue to influence individuals in adulthood or may lead to suicide (Essau et al., 2014; Kandel et al., 1991). Moreover, with ACEs being risk factors of depressive and/or anxiety symptoms, specifically if experienced in childhood or adolescence (Afifi et al., 2008; McLaughlin et al., 2010), it is important to provide mental health interventions targeting adolescents.

Similarly, multiple studies also demonstrated that ACEs are linked to an increased likelihood of adolescents' engagement in risky behaviors such as substance use in adulthood (e.g., Afifi et al., 2017; Anda et al., 1999; Loudermilk et al., 2018). Adolescence is a developmental period when substance abuse typically begins because of the increase of dopamine associated with increased sensation seeking and impulsivity (Duke et al., 2018; Roberti, 2004). Sensation seeking and impulsivity in adolescence contribute to individuals' engagement in risky behaviors such as substance use, more so among adolescents exposed to trauma as they may use drugs and alcohol to cope with stress (Roberti, 2004). Research involving a sample of adolescents in the United States showed that ACEs were associated with an increased likelihood of substance use such as tobacco and cannabis (Duke et al., 2018). Adolescents with poor self-control are also more likely to act on emotional impulses and engage

in risky behaviors such as drug and alcohol use, which increases their exposure to violent peers or situations that may put them at risk of traumatic brain injury such as motor vehicle accidents (Turanovic et al., 2015). All these outcomes in adolescence, including traumatic brain injury, can cause impaired functioning in adulthood (Jackson et al., 2021). These findings highlight that adolescents may experience co-occurring issues, which are a result of not only the behaviors of others, but their own as well. Clearly, adolescence is a period associated with great risks; thus, there is need to promote health and wellbeing in this developmental period.

However, there is research evidence suggesting that positive connections may mitigate the negative effects of ACEs on adolescent substance abuse. A study conducted in a rural Midwest county examining connectedness at home and school among sixth through eighth graders found that higher ACEs were associated with lower home and school connectedness (Cope-Barnes et al., 2019). On the other and, higher levels of school and home connectedness were linked with adolescents' lower engagement in substance use (e.g., tobacco, alcohol, and marijuana). Moreover, higher school connectedness and home connectedness indirectly mitigated the negative effects of ACEs on substance use. These findings suggest that TIPs targeting adolescents may be more effective if they incorporate aspects focusing on building positive relationships (Cope-Barnes et al., 2019).

Turning to the broader social context, research exploring the prevalence of ACEs in rural versus urban settings is inconclusive. For instance, some studies suggest that there is a slightly lower prevalence of ACEs in rural settings than urban settings (e.g., Chanlongbutra et al., 2018; Radcliff et al., 2018; Talbot et al., 2016). In contrast, some studies reported higher levels of ACEs among children in rural settings (United States Department of Health & Human Services, 2015). Higher levels of ACEs in rural locations have often been associated with social isolation,



poor health, and increased substance use and unemployment (Iniguez & Stankowski, 2016). The National Survey of Children's Health (2020) provided data on the prevalence of parent-reported ACEs among children (ages 0-17 years). The findings showed that in 2017-2018 five out of eight ACEs were more prevalent in rural areas than in urban areas. The most prevalent ACEs were parental divorce or separation, living with a household member engaging in alcohol or drug use, and incarceration (National Survey of Children's Health, 2020). Hence, the current study examined the prevalence of ACEs among adolescents in schools located in rural settings as additional research is warranted. More importantly, location is critical when providing interventions such as a TIPs as they should be culturally responsive to those who have experienced ACEs.

One limitation of previous retrospective studies on ACEs is their focus on adults with a median age in their late 50's reporting their cumulative exposure to childhood adversities (Anda et al., 2006; Felitti et al., 1998). To address this limitation, the current study focused on adolescents' reports of ACEs and provided opportunities for them to identify both cumulative trauma as well as any particular recent adversity (Crouch et al., 2019a). Further, adolescents have an increased chance of providing an accurate recollection of childhood and current events. The identification of ACEs among adolescents may also enhance the ability of healthcare providers, educators, and caregivers to prevent the escalation of trauma exposure through early detection and intervention, thus mitigating the potential poor life course outcomes (Schilling et al., 2007).

Additionally, the present study focused on adolescents in schools because education is important in the transition to adulthood (Crouch et al., 2019b). Research in a cross-sectional study using data from the 2016 National Survey of Children's Health showed that ACEs such as household violence, economic hardship, and living in disrupted households (e.g., living with a

caregiver engaging in substance abuse) were linked with school absenteeism, repeated grades, and lack of school engagement among adolescents (Crouch et al., 2019b). When adolescents have high rates of school absenteeism, they have an increased risk of poor school performance, which puts them at a higher risk for school dropout when compared to students attending school regularly (Allison et al., 2019). Further, changes in the family's socioeconomic status have a more negative impact on adolescents' educational attainment than when this occurs earlier in childhood (Tominey et al., 2015). Even minor disruptions in academic performance reduce adolescents' access to postsecondary and economic opportunities. Thus, it is important to provide interventions in adolescence that aim to prevent or reduce the escalation of the impact of ACEs in adulthood.

The importance of intervening in adolescence is further suggested by research showing that adversities experienced in adolescence have a larger magnitude of risk compared to those experienced earlier in human development (Andersen, 2021). Recent research conducted in Denmark examined the association between time-specific household dysfunction-related ACEs (measured by records of parental incarceration, unemployment, divorce, psychiatric diagnoses, and children's placement in foster care) and children and adolescents' successful transition to adulthood (Andersen, 2021). The findings showed that adolescents (13-17 years) were at an increased risk of not having a successful transition to adulthood (measured from records of criminal charges, education, employment, and psychiatric diagnoses) (Andersen, 2021). Although this study provides evidence related to household dysfunction ACEs, more research focusing on other aspects related to ACEs (e.g., emotional and physical abuse) is warranted for a more comprehensive understanding of the magnitude of the effects of ACEs in adolescence.

Finally, the Centers for Disease Control and Prevention Pyramid (2020) shows that ACEs may disrupt pathways in neurodevelopment, which may lead to cognitive impairment in adulthood. Emerging research shows that early childhood is not the only critical period of neurodevelopment, but considers adolescence as a second critical period as higher-order cognitive functions such as self-control and memory continue to develop due to life experiences (Larsen & Luna, 2018). Development of these higher-order cognitive functions is essential for health and wellbeing across the lifespan (Graf et al., 2021). Therefore, these findings suggest that it is beneficial to provide trauma-informed interventions targeting this developmental period.

### **Self-Determination Theory: Implementation of Trauma-Informed Practices**

Self-determination theory suggests that although individuals have an inherent motivation for learning, mastery, and connection with others, the type of support they receive is crucial for healthy development (Ryan & Deci, 2017). Motivation has two aspects, which are intrinsic motivation, where an individual engages in a task based on interest or value, and extrinsic motivation, the engagement in tasks for rewards or to avoid punishment. Further, individuals have three basic psychological needs, which are autonomy, competence, and relatedness. Autonomy is a sense of ownership and initiative in one's actions. Competence is the feeling of mastery as well as having opportunities to express one's capacities and experience a sense of confidence. Relatedness refers to a sense of belonging and connection. Fulfillment of these basic human needs allows individuals to experience increased intrinsic motivation and wellbeing (Ryan & Deci, 2017).

There is evidence to suggest that trauma negatively impacts students' motivation in school. Research among students who have experienced complex trauma, which involves the exposure to multiple traumatic events over a long period, showed that these students often

dissociate to cope with the occurrence and feelings related to the traumatic event (Cook et al., 2003; Perry, 2003). However, this negatively affects students' behavior, cognition, and ability to connect with others (Perry, 2003). Additionally, social support is often eroded when students are exposed to interpersonal trauma where the perpetrator is a family member (Alisic et al., 2014). This lack of support leads to self-blame and shame, and it represents a betrayal of trust from the people they interact with, further weakening their worldview and disrupting their daily functioning (Freyd, 1996; Janoff-Bulman, 1992; Tolin & Foa, 2006). In school, students' diminished ability to develop intrinsic motivation is manifested through agitation, hypervigilance, and poor self-regulation skills. Hence, when students exposed to trauma are not provided with a supportive environment they are often perceived as defiant and unable to effectively communicate or build relationships. As a result, they often complete tasks through extrinsic motivation to avoid punishment or experiencing feelings of guilt or humiliation (Cook et al., 2003).

In contrast, TIPs in schools represent a support system that can facilitate students' motivation. First, social support is an important resource for students; hence the presence of a caring adult who can provide support and guidance in school is beneficial for students including those exposed to trauma (Greeson et al., 2010; Rutter, 1987). This support enhances students' sense of belonging and connection as they relate positively to teachers, other staff members, and peers. Second, TIPs are provided in a safe structured environment, which allows teachers to facilitate students' development of competence as they provide positive feedback and opportunities for students' growth through engagement in challenging activities. Third, TIPs include strategies that students exposed to trauma can use to regulate negative emotions (Cook et al., 2003). For example, Restorative Circles may be used as a conflict resolution strategy where

the focus is on repairing harm while allowing students and teachers to express their emotions in a safe environment (Guckenburg et al., 2015). As such, students' autonomy is enhanced as they develop a sense of initiative and ownership of their feelings and actions resulting in a peaceful resolution. Clearly, there are many ways in which TIPs facilitate psychological need satisfaction in educational settings (Ryan & Deci, 2017).

### **Mentoring as a Strategy for Implementing Trauma-Informed Practices in Schools**

Despite the negative effects of ACEs, there is emerging research on resilience suggesting that individuals exposed to trauma have both internal (e.g., coping skills) and external (e.g., family and community supports) strengths that may help mitigate the risks associated with traumatic experiences (Soleimanpour et al., 2017). A study by Moore and Ramirez (2016) found several protective factors, including attending a safe school and parental monitoring of friends and activities, to be associated with adolescent wellbeing, even in the presence of ACEs. These findings highlight that various factors in the adolescents' environment play a protective role against the effects of ACEs. Hence, the current study examined adolescents' positive experiences when implementing TIPs in their schools.

Although most research highlights the teachers' and other school staff members' role in implementing TIPs in schools, more research on students' role in this process is needed. The purpose of the current study was to examine students' role as active agents of change who can also be trained on TIPs. Cavanaugh (2016) suggested that peer supports in mental health provide opportunities for students to take leadership roles. For example, peer tutoring provides all students, regardless of whether they have been exposed to trauma or not, opportunities to engage positively in a structured school environment (Cavanaugh, 2016). Bowman-Perret and colleagues (2013) documented academic benefits of peer tutoring in subjects such as reading, math, social

studies, and science. In addition, peer tutoring was effective for both elementary and secondary students (Bowman-Perret et al., 2013). Finally, peer tutoring was beneficial for students with disabilities and at risk for disabilities (Bowman-Perret et al., 2013). With most research on peer tutoring focused on academic achievement (e.g., Bowman -Perret et al., 2013; Moliner & Algegre, 2020; Worley & Naresh, 2014), the current research sought to fill this knowledge gap, specifically when adolescents teach their peers about different TIPs at school with the goal of improving mental health outcomes.

Furthermore, the current research aimed to add knowledge to existing research on mentoring programs in schools. Mentoring programs are widely implemented in schools to promote positive youth development (Quimby, 2018). Most research on mentoring in schools focuses on adult mentoring, in which adult mentors are matched with youth mentees (Grossman et al., 2012). Adult mentors reported improved relationships with youth mentees and improved attitudes and beliefs toward youth mentees (Camino & Zeldin, 2002). Cross-age mentoring is an aspect of peer mentoring that is typically conducted with “an older youth serving as mentor for a younger mentee” (Quimby, 2018, p.9). There is evidence to suggest that cross-age mentoring is more beneficial than adult mentoring because adults usually have multiple responsibilities interfering with their ability to make consistent and long-term commitments to their mentees (Walker, 2005). Older adolescents on the other hand are typically more available because of fewer responsibilities when compared to adults; hence they may have a significant positive influence on younger children (Karcher, 2005). Cross-age mentoring has also been effective because it involves individuals with small generational differences, which makes it easier for mentors and mentees to build rapport successfully (Quimby, 2018). Cross-age mentoring has been recognized as a contributing factor in fostering change (Karcher, 2014; Van Hoon et al.,

2014). Studies show that cross-age mentoring resulted in increased mentee's social skills and connectedness to teachers and the school, and graduation rates improved (Herrera et al., 2008; Karcher et al., 2002; Karcher, 2005).

Substantial benefits were also demonstrated for participating adolescent mentors. Improvements in leadership and personal abilities (e.g., being organized) as well as interpersonal relations with school staff and mentors were reported by participating mentors (Bulanda & McCrea, 2013; Bulanda et al., 2013) They also reported improvements in school connectedness and prosocial behavior (Bulanda & McCrea, 2013; Bulanda et al., 2013; Coyne-Foresi & Nowicki, 2020). In the current study both students and teachers were considered to be mentors to each other. To the best of our knowledge, there is no research on the impact of students in mentoring roles to adults in schools. Recent research by Coyne-Foresi and Nowicki (2020) on cross-age mentoring focusing on youth mentors' role in providing support to younger mentees suggests potential factors for this research gap. These researchers state that although adolescents who participated in their study reported significant improvements in the student-school staff member relationship, some participants had low regard for how school staff members perceived their suitability for the mentoring role (Coyne-Foresi & Nowicki, 2020). School staff may have doubted students' mentoring ability based on poor reputation and challenging histories (Coyne-Foresi & Nowicki, 2020). Given that the current study focused on all adolescents including those exposed to trauma, actively engaging in the mentoring role through implementing TIPs at their school and building relationships with school staff may be a potential source of support and healing for them. The current research aimed to provide more insight through adolescents' reflections on their mentoring experiences with teachers and other students at their school.

## **The Current Study**

Although adolescents are at great risk of trauma exposure due to the physical, emotional, and social changes occurring in this developmental period, there is growing research highlighting that positive experiences may alter the negative life course trajectory of ACEs in adulthood (Breslau et al., 2004; Soleimanpour et al., 2017). Since the evidence on the prevalence of ACEs in rural settings is inconclusive (e.g., Chanlongbutra et al., 2018; National Survey of Children's Health ,2020), the current study aimed to provide more insight by examining the prevalence of ACEs among adolescents in two rural high schools in the Midwestern United States. Moreover, adolescents in the current research had great potential to make a unique contribution to research as they implemented TIPs in their schools. Hence, the current study assessed adolescents' perceptions of their development in terms of behavior before they began implementing TIPs and afterwards. To gain a more comprehensive assessment of adolescents' change of behavior, school staff members who interacted with these adolescents such as teachers, the school principals, and school counselors also reported on their behavior at school. Due to the paucity of research focusing on students' role in the implementation of TIPs in schools, the focus was on exploring and describing participants' experiences in this process rather than testing a predetermined set of hypotheses for them. Thus, an inductive qualitative approach was used in which participants' understandings of their experiences while implementing TIPs using the mentoring strategy were examined through the analysis of in-depth individual interviews.

## **Methods**

### **Description of Evaluation Object**

In two rural high schools in the Midwestern United States, teachers and counselors created an elective SEL course and invited students in grades 10 to 12 to take the course. In both



schools, students were invited who would be most likely to learn, train, and participate in initiatives on mental health. In one high school, this SEL Elective was offered from Monday to Friday and each session was approximately 40 minutes. In the other high school, the class was offered once a week for approximately 25 minutes but due to the COVID-19 pandemic, the class was offered online from March to end of May 2020. An example of an online activity included students sharing software applications with Self-Care practices that promote wellbeing such as meditation, spiritual, and physical fitness. Students were also encouraged to try new software applications and explained how the different software applications helped with their overall mood and/or wellbeing. They resumed to face-to-face instruction during the 2020-2019 academic year. Additionally, students from the two high schools collaborated with each other thus, they learned similar life skills and knowledge.

Although this elective class was student-led, co-educators facilitated this class. The co-educators included the high school counselors and high school teachers. Students in the class would request information in areas they needed to build their life skills; for example, they received training on Restorative Circles, which are techniques for negotiating conflict. The students practiced how to listen respectfully and express themselves in a healthy manner when conflict arises, thus creating a safe classroom environment. Over the course of the academic year, these students also trained the school staff on Restorative Circles. The students also received BOLD (live Brave. be Original. Love big. Dare greatly.) Training (Brown, 2015). This training provides experiential learning activities that equip students with resilience skills such as confidence, courage, and compassion. Furthermore, the students also learned about the CASEL Competencies (self-awareness, self-management, social awareness, relationship skills, and responsible decision-making) (CASEL, 2014) and the Nurtured Heart Approach (positive

behavior management strategies; Glasser & Easley, 1998). Students engaged in self-reflection activities such as journaling. Finally, the students had opportunities to share the knowledge they gained from the SEL Elective class with peers, the school, and the community. This SEL Elective course continued to be offered in the 2020-2021 academic year in one high school while the other high school will resume this course in the 2021-2022 academic year.

Process evaluation was conducted to explore the concept of preescalation as it might also apply to this SEL Elective course. The evaluation focused on how well teaching students empowered them to be agents of change in reducing the escalation of trauma across the lifespan, specifically to adulthood. As research has already established that adolescence is the peak period of trauma (e.g., Alisic et al., 2014; Breslau et al., 2004; Perfect et al., 2016), this evaluation was appropriate as its purpose was to provide a clear description of an intentional preescalation process. The process was examined through the lens of the target population, that is, adolescents' experiences from their personal perspective as well as from the school staff members' perspective. Finally, students and school staff members also described changes occurring as a result of implementing TIPs at their school.

### **Evaluation Objectives**

The current study used quantitative and qualitative methods to explore the concept of preescalation through the lens of trauma. This study had two main objectives. First, the study sought to provide a comprehensive understanding of the TIPs implemented by students at their school and the roles they play in this process. Second, the study sought to ascertain if any of the students experienced trauma and whether implementing TIPs impacted their lives. Hence, the following research questions were developed to describe students' experiences as they participated in the SEL Elective course: 1) To what extent have the students experienced trauma?

2) Which trauma-informed practices are implemented at the school and what is the students' role? 3) How has the active leadership role and implementation of trauma-informed practices affected students in the short and long range? Responses to these research questions helped to provide a better understanding of whether and how students can be both learners and teachers or mentors of TIPs.

Although this study was largely qualitative and retrospective in nature, this study employed multiple data sources to fulfill its objectives more effectively. Specifically, interviews were conducted with school staff who interacted frequently with the students, such as the co-educators of the SEL Elective course, the high school principal from one high school as well as the superintendents of the two school districts involved in the study. The school staff provided insights that deepened the researcher's understanding of TIPs as a potential effective preescalation strategy against trauma among students. Combining multiple methods (qualitative and quantitative) and multiple data sources in one study captured a broad range of experiences (Kendellen & Camiré, 2020).

## **Participants**

Study participants were adolescents between ages 15 and 18 taking an SEL Elective course at their school in two rural districts in the Midwestern United States during the 2019-2020 and 2020-2021 academic years. Eleven high school students (freshman ( $N = 1$ ), sophomores ( $N = 2$ ), juniors ( $N = 5$ ), and seniors ( $N = 3$ )) taking the SEL Elective course were recruited in the present study. The researcher did not ask participants to provide information about their gender. Two additional students who had taken the SEL Elective course during the 2019-2020 academic year, but recently became college freshmen also participated in this study. Hence, 13 adolescents participated in the current study. Adolescents with an age range of between 15 and 18 years were

selected because they were able to reflect on their experiences and provide more informative data for this study. Since the participants self-selected into the SEL course, the researcher assumed that some of them had some degree of trauma exposure.

Additionally, study participants included co-educators of the SEL Elective course (school counselors ( $N = 3$ ); teachers ( $N = 2$ ); high school principal ( $N = 1$ )) as well as the superintendents of the school districts ( $N = 2$ ) who were also invited to share their experiences and observations on the TIPs implemented by the students. These school staff members were selected because they had regular interactions with the students and facilitated their learning process. Therefore, eight school staff were recruited in the present study.

## **Procedure**

Students and staff members were recruited via purposive and convenience sampling techniques. First, the researcher contacted the school superintendents via email and online videoconference to inform them about the purpose of the research and to request permission to conduct research at their institutions. Next, the school superintendents referred the researcher to the co-educators of the SEL Elective course who then initiated the recruitment process as they interacted with the students when they facilitated the SEL Elective course. The co-educators used class announcements and emails to explain the study details to the students and encouraged them to participate.

In addition, the participants were informed that the interviews were to be conducted online via videoconference and each session would be recorded. Since this study was conducted during the COVID-19 pandemic, all interviews were conducted via videoconference. The purpose of the recordings was to ensure that the information provided by the participants was captured accurately. Since the students in the present study were 15 years and above, it was

assumed that they would understand the purpose of the research, thus they provided a verbal assent and this was documented at the beginning of the recorded online videoconference interview. Each interview session was approximately 20 minutes.

At the end of the interview, the researcher provided a unique code together with the web link for each student to use when completing the survey. Responses from both the interviews and the survey were confidential, but an identifier was used to link each individual's interview with their survey. This data would be important when describing students' perceptions of their potential development (behavior change) that may have occurred as a result of participating in the SEL Elective course. The survey took at least 5 minutes to complete. The students completed the survey after the interview to avoid emotional distress and trauma triggers, which would negatively affect the outcome of the interview. Students each received a \$20 Target gift card after completing the study.

Furthermore, the school staff members provided verbal consent and this was documented at the beginning of the recorded online videoconference interview session. Each interview session was at least 20 minutes since the objective of the interview was to understand the impact of TIPs on students' behavior and learning outcomes.

Finally, all recorded interviews were destroyed once de-identified transcripts had been created. During the interviews with participants, the researcher wrote descriptive notes of her observations in the interview including any significant non-verbal aspects of the interview such as the participant's body language. This combination of recorded interviews and notes increased the reliability and validity of this study (Tessier, 2012). Ethical approval for the study was obtained from the university's Institutional Review Board.

## Measures

**Trauma Exposure.** The Adverse Childhood Experiences Questionnaire (ACEs Questionnaire, Felitti & Anda, 2010) was used to assess the extent of trauma exposure experienced by adolescents in the present study (see Appendix A). This questionnaire assessed physical and mental abuse, neglect, and household dysfunction. Hence, 10 items were used to describe the different traumatic events, for example, “Did a parent or other adult in the household often swear at you, insult you, put you down, or humiliate you? or Act in a way that made you afraid that you might be physically hurt?” Participants provided yes or no responses to each potential traumatic event experienced. The responses were coded 0 (*No*) and 1 (*Yes*). The total ACE score was the sum of the coded responses. Higher scores indicated exposure to multiple traumatic events. The ACEs questionnaire has been found to be a valid and reliable indicator of adverse childhood experiences among children and adolescents (CDC, 2019).

**Interviews with Adolescents.** Individual semi-structured interviews with open-ended questions were used to facilitate this evaluation (see Appendix B). The open-ended questions were developed by the researcher for the purpose of this study. Open-ended questions allowed participants to describe their experiences when implementing TIPs at their school as well as the changes that they have observed from a personal perspective. Participants reported their demographic information such as their age in years and their year of study in school during a brief introduction. Example of questions included: “Tell me about yourself?” and “How old are you?”

Following the introduction, open-ended interview questions were used to explore students’ experiences when implementing TIPs. Example questions included: “How would you describe the class you were taking?” and “Did you have a leadership role? Please describe.”

Furthermore, open-ended interview questions that are retrospective in nature were used to ascertain the impact of implementing TIPs at school in students' lives in the short and long range. Examples of questions included: "Did you learn anything about yourself or your capabilities? Please share your experiences before and after taking the class when answering each of the following questions: Please describe any academic changes that occurred as a result of the practices you implemented at school (please provide specific examples)." Hence, the open-ended interview questions were crucial in meeting the evaluation objectives.

**Interviews with School Staff.** Semi-structured interviews were conducted via online videoconference with the co-educators of the SEL Elective course and the superintendents to explore their perspectives on the students' behavior and learning outcomes as a result of their active role in implementing TIPs at school (see Appendix C). Sample open-ended questions developed by the researcher included: "What impact have TIPs had on students' behavior and learning outcomes? Please describe the academic changes you observed after students took the class."

### **Data Analysis**

To examine the degree of trauma exposure among students, quantitative analysis was conducted in SPSS version 27. In the current research, the goal of the Elective SEL course and TIPs was not only to reduce psychological triggers in the environment that lead to the escalation of trauma among students, but to help students develop the skills and ways of thinking needed to cope with stressful situations and manage their emotions and social relationships. Assessing the degree of trauma helped demonstrate whether TIPs were an effective preescalation intervention. Hence, it was important to assess differences in the extent to which students had some degree of trauma exposure.

To ascertain the extent to which students had been exposed to trauma, descriptive statistics were used to show the ACEs scores for all students. The ACEs questions were sorted into ten categories: emotional abuse; physical abuse; sexual abuse; emotional neglect; physical neglect; parental separation or divorce; violence against household members; living with household members who engaged in substance abuse; living with household members who were mentally ill or suicidal; and living with household members who were imprisoned. To calculate the ACEs score for each individual, the yes responses in each category were given a score of 1. With ten categories, the ACEs scores for each individual could range from 0 to 10. This method was adapted from the World Health Organization's Adverse Childhood Experiences International Questionnaire, which had 13 categories instead of ten (World Health Organization, 2016).

To examine the types of trauma-informed practices implemented at the schools, the students' role, and the impact of implementing these practices, qualitative analysis was conducted. All interviews with the students and school staff were recorded using Zoom videoconferencing software. The recorded interviews together with the notes taken during the interviews were used to create transcripts. The researcher used unique codes to identify participants to protect the identities of the participants when transcribing the interviews. Inductive thematic analysis was used to identify, analyze, organize, describe, and report themes from the data collected from the interviews (Braun & Clarke, 2006). This technique provided detailed information and highlighted similarities, differences, and unanticipated insights from the participants (Braun & Clarke, 2006).

Thematic analyses for the interviews conducted with students and school staff were conducted separately, using the process recommended by Braun and Clarke (2006). First, the



researcher familiarized herself with the data by watching each interview recording and reading notes at least once before beginning the coding process. This helped the researcher to identify potential patterns from the different interviews. Second, the researcher generated initial codes from the interviews by focusing on specific aspects of the data and attaching labels as they related to themes related to the research questions. Third, the researcher sorted and collated all coded data into themes. Fourth, the researcher reviewed the themes to assess whether each theme accurately reflected the meanings evident in the overall data, hence allowing the researcher to make changes and create new codes to the themes as needed. Fifth, the researcher defined and created theme names as they related to research questions described above from students' and school staff's perspectives. The researcher wrote a detailed analysis and identified the story each theme portrayed. Sixth, the researcher produced a report based on the themes that helped to provide a comprehensive description reflecting these research questions. Finally, the researcher included direct quotes from students and school staff members in the final report to enhance the understanding of specific aspects of the interpretation of the findings and demonstrate the relevance of the themes.

For purposes of triangulation, another researcher served as an auditor in the data analysis. This involved reviewing decisions taken in the first researchers' initial analytic process, final themes, and corresponding supporting data (quotes). The auditor then provided feedback to the first researcher, who then revised the initial codes and themes, which were incorporated into the final results below (Bouchard et al., 2021).

## Results

### Degree of Trauma Exposure among Adolescents

As indicated in Table 1, descriptive statistics showed that almost half of the students in the present study had some degree of trauma exposure as they reported one or more ACEs. In contrast, half of the participants reported no ACEs. The results demonstrated a bimodal distribution of ACEs showing two main groups (no trauma exposure and significant trauma exposure) with one outlier of one student with one ACE in the middle.

**Table 1**

*Frequency Data for the Degree of Trauma among Students*

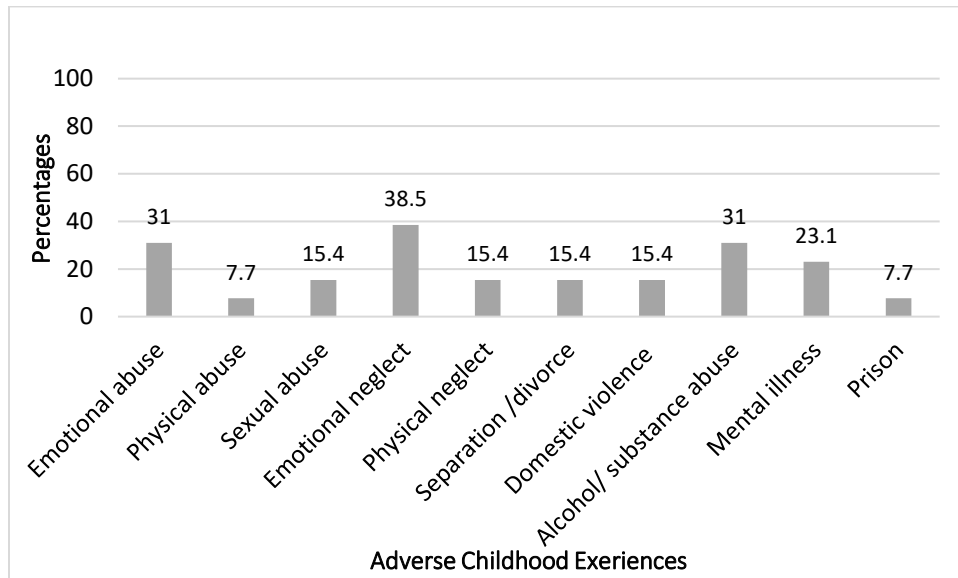
Number of Adverse Childhood Experiences (ACEs)	<i>N</i>	%
0 ACEs	7	53.8
1 ACE	1	7.7
4 ≥ACEs	5	38.5

*Note.* The total number of students in this sample was 13.

Additionally, Figure 1 shows the percentage of students in the sample reporting each of the ten categories of ACEs. Based on these percentages, the most prevalent ACEs among these students were emotional neglect, emotional abuse, and living with household members engaging in substance abuse. Percentages reporting these specific types of ACEs ranged from the low to high thirties.

**Figure 1**

*Percentage of Students Reporting Each Adverse Childhood Experience*



### **Types of Trauma-Informed Practices Implemented**

This section presents the themes that emerged from the interviews conducted among students where they described the types of trauma-informed practices they implemented in their schools. As indicated in Table 2, the themes included student-run activities, Self-Care, Social Emotional Learning, and Restorative Circles.

As indicated in Table 2, the students provided descriptions of the types of trauma-informed practices they implemented at their high schools. A few students ( $N = 2$ ) acknowledged that this was a student-run class based on their needs including mental health needs. The descriptions of activities that emerged from the interviews included aspects of Self-Care ( $N = 3$ ), Social Emotional Learning ( $N = 5$ ), and Restorative Circles ( $N = 3$ ). The students planned the different activities with the guidance of their educators before implementing them in the schools. For example, the students conducted a variety of activities in the school during the mental health

weeks as a way of coping with stress. A student provided a description of another activity related to self-care implemented in their schools:

I know a lot of people do, like, Gratitude Wednesdays, so, like, all the students take five minutes to write down, like, three things they are thankful for and then possibly share. So, like, it's implemented in each classroom. (Senior, age 18)

**Table 2**

*Descriptions of Trauma-Informed Practices Implemented among Students*

Categories of Trauma-Informed Practices	Descriptions
Student-run class activities	<ul style="list-style-type: none"> <li>• Based on students' needs</li> <li>• Students planning activities</li> </ul>
Self-care	<ul style="list-style-type: none"> <li>• Gratitude challenges</li> <li>• Mental health weeks</li> </ul>
Social emotional learning	<ul style="list-style-type: none"> <li>• Opportunity to build friendships (e.g., the marble jar type of friend)</li> <li>• Learning how to have positive interactions and making a positive impact in the school</li> </ul>
Restorative circles	<ul style="list-style-type: none"> <li>• Learning about being vulnerable</li> <li>• Developing empathy</li> <li>• Strengthening communication skills</li> <li>• Empowering students</li> </ul>

Furthermore, students found social emotional learning as an opportunity to build new friendships with others. A few students ( $N = 2$ ) mentioned “the marble jar type of friend,” from the BOLD Training. The marble jar friend represents a friendship that is based on trust that is built over time. Students mentioned that they learned about a list of traits in strong friendships such as empathy and honesty, which helped them identify behaviors that build trust in friendships. The students also mentioned that social emotional learning had a positive impact in the school environment as reflected by a student’s response below:

We're here to learn about how everybody can socially interact with each other and how to make that a positive in school, and stuff like that, and maybe not have everybody as stressed. (Sophomore, 15)

Students in the current sample mentioned that they implemented Restorative Circles in their schools. In restorative circles students learned the importance of accepting vulnerability as they shared their emotions and experiences with others. As one student mentioned, in this process they learned about “their true feelings and not just their school selves.” Communication skills such as active listening with peers were strengthened in this process as well. Students mentioned that they developed empathy as they took time to understand what an individual was experiencing. Hence, they realized that people reacted either negatively or positively based on different situations. Students also felt a sense of empowerment when they implemented restorative circles in their schools as reflected by the response below:

I would say the class is really impactful, specifically the circles part of it because everyone gets a chance to talk and you feel like you have been heard. Its's a very good experience for a high school student. (Sophomore, age 15)

### **Students' Role in the Implementation of Trauma-Informed Practices**

This section presents the themes that emerged from the interviews conducted among students where they described their roles as they implemented trauma-informed practices in their schools. There were differences in students' perceptions of their roles in implementing TIPs in their schools. Most students ( $N = 10$ ) assumed sole responsibility leadership responsibility while others ( $N = 3$ ) assumed equal leadership with others. Table 3 also showed the themes reflecting mentoring strategies such as peer tutoring and cross-age where they described their experiences training same-age peers, younger students, and teachers.

When asked to describe their roles, the majority of students ( $N = 10$ ) assumed the responsibility for leadership to be associated with those in higher grades and the length of time that they had been participating in the class. This is reflected in the following statements:

Not really, not yet because there is like, a lot of seniors in the class so a lot of them take kind of the leadership roles. Probably next year I will. Well, me and another girl we lead like circles when we do circles, that is probably about it right now. (Junior, age 17)

Yes, I would like to think of myself as a leader because I've been in it for the longest and I'm one of the oldest members too. I helped when we did circle activities and I helped plan with others who had not been as long as I had been. I joined the class my freshman year. (Junior, age 17)

In contrast, a few students ( $N = 3$ ) assumed equal leadership roles when planning and implementing activities in their schools. Overall, all students assumed an active leadership role in the implementation of TIPs such as Restorative Circles and Social Emotional Learning in their high schools, specifically when they trained their teachers and other students. Table 3 shows that students in the present study used peer tutoring and cross-age mentoring as strategies to implement these TIPs.

First, students ( $N = 4$ ) described their experiences of teaching other learners taking the same elective course, specifically “newer members in the class;” thus they used peer tutoring for Restorative Circles and Social and Emotional Learning. The other students who had been taking this course a year before trained students who had joined this course more recently. Students mentioned that they enjoyed this collaborative training experience because it provided more social interactions and helped build new friendships:

With students we did a training a year ago with this and did it again with newer students. So, both times were a lot of fun because we got to meet new people because with the first time, the other high school trained us. (Junior, age 17)

Second, students in the present study ( $N = 9$ ) described the cross-age mentoring strategy for implementing Restorative Circles and Social Emotional Learning with younger students and their peers. Additionally, students mentioned that when compared to peers of their age, they felt more comfortable implementing practices with younger students:

So, when we go to elementary it's a bit easier because you know, they are younger kids so you feel kind of comfortable and we basically explain to them what circles are, and we

ask them questions and give them answers, and help guide them the best we can. When we do it with high school students, it's a little more nerve wrecking because they are peers that we are with the whole day, so there is fear of them not enjoying it, but mostly with elementary it's really good to teach younger kids how to do that stuff. (Junior, 16)

All students in the present study also described cross-age mentoring with their teachers. Some students ( $N = 8$ ) felt nervous about training their teachers how to implement Restorative Circles in their classrooms. One of the reasons for this feeling of nervousness was that students, due to their young age, felt that they were inexperienced compared with their teachers who were already equipped with effective teaching skills. Hence, they were not certain whether their teachers would accept and implement these practices in their classrooms after the training sessions. However, students realized that as training sessions progressed, they felt more comfortable sharing these practices with their teachers. Their level of comfort also increased as they noticed familiar teachers who had taught them in elementary and middle school and some knew them not as just their teachers; thus, they felt supported. Further, some also realized that there was no need to be nervous because they had been adequately trained by their teachers on how to train others. This gave them a sense of confidence when sharing the Restorative Circles with their teachers. Students ( $N = 3$ ) also stated that training teachers allowed them to learn more about their teachers, specifically the personal and emotional aspects. Specifically, these training showed students that they shared similar experiences with their teachers:

It just felt good knowing that the educators are people too and they struggle with things as well, and I loved it. I think everyone really enjoyed that. (Junior, age 17)

Finally, some students ( $N = 2$ ) acknowledged that training teachers provided a sense of empowerment and connectedness with the teachers and the school:

I think that was one moment where I felt like I was part of change, part of a difference just because we were making the school better. We were improving ways on connecting kids and showing teachers how to connect with their learners. (Junior, age 16)

It made me feel more respected, it was a fun way of respective authority that you don't usually get as a teen, which was really empowering. (Senior, age 18)

**Table 3**

*Descriptions of Mentoring as a Strategy for Implementing Trauma-Informed Practices*

Mentoring Strategy	Descriptions
Peer tutoring	<ul style="list-style-type: none"> <li>• Training other students on Restorative Circles and Social Emotional Learning.               <ul style="list-style-type: none"> <li>○ Collaboration</li> </ul> </li> </ul>
Cross-age	<ul style="list-style-type: none"> <li>• Training younger students, peers, and teachers in their schools               <ul style="list-style-type: none"> <li>○ Differences in levels of comfort</li> <li>○ Opportunity to learn about their teachers.</li> <li>○ Acknowledgement of their role as agents of change in the school</li> </ul> </li> </ul>

**Staff Members' Perspectives on Students' Role in the Implementation of Trauma-Informed Practices in Schools**

This section presents the themes that emerged from the interviews conducted among staff members where they described the types of trauma-informed practices students implemented in their schools. As indicated in Table 4, the themes included descriptions of Self-Care, Social Emotional Learning, and Restorative Circles. Additionally, themes emerged from the interviews conducted among staff members where they described the benefits and challenges they observed when students trained them as shown in Table 5.



**Table 4**

*Staff Members' Descriptions of Trauma-Informed Practices Implemented in Schools*

Categories of Trauma-Informed Practices	Descriptions
Self-care	<ul style="list-style-type: none"><li>• Gratitude challenge</li><li>• Mindfulness activities</li></ul>
Social emotional learning	<ul style="list-style-type: none"><li>• Based on students' emotional needs</li><li>• Focused on relationships</li></ul>
Restorative circles	<ul style="list-style-type: none"><li>• Conflict resolution strategies</li><li>• Empowering students</li><li>• Creating a safe environment</li></ul>

Staff members' descriptions of the TIPs implemented in their schools were similar to students' in that they highlighted that students had an active role in the process (Table 4). The educators of the course ( $N = 5$ ) reported that they designed the class to meet students' needs and experiences. Hence, there was no set curriculum. As a result, they integrated aspects of self-care, social emotional learning, and restorative circles in the curriculum. For example, social emotional learning allowed students to reflect and regulate their own emotions. The educators also emphasized that the goal of the course was for students to apply the course material in their students' own lives:

So, like when we go through certain curriculum or training, then we kind of just see where the classes as like a whole, and what are their needs and desires to learn more about themselves in the world and apply those things. So, we don't have a set curriculum that we use, we just try to base it upon the experiences and really, it's all about connection, it's building connection and perspective about one another.

Additionally, other staff members ( $N = 3$ ) highlighted that Restorative Practices were implemented at the two high schools as a conflict resolution strategy. They reported that restorative circles allowed students to experience a “different way of having deep and meaningful conversations” in a safe environment. A staff member indicated that Restorative

Practices were beneficial at their school because there were challenges related to students’ engagement in risky behaviors such as drug and alcohol abuse. Hence, this was used as a peaceful resolution strategy, instead of using punitive approaches. Moreover, staff members acknowledged the benefits of including students as a result of implementing Restorative Practices, specifically using this group of students as advocates for other students in the school as they implemented these practices:

There's nothing special about what we're doing except we're giving them the time and the voice to figure out what they need to make our place a better place. And a lot of times we as adults think we know, but talking to them gets us to a different place than we thought we were going to go, but the goal ends up being the same. So, this is their school and we want them to feel comfortable with it.

Additionally, all staff members described some of the benefits and challenges associated with students training teachers on Restorative Circles (Table 5). They all referred to the training sessions as the most powerful experiences they had ever experienced in their careers as exemplified by the following statement:

Powerful afternoon. I would say that our teachers, for the most part would say that was one of the most impactful professional development days that they've ever had.

**Table 5**

*Staff Members' Descriptions of Mentoring as a Strategy for Implementing Trauma-Informed Practices*

<u>Descriptions</u>		
Mentoring Strategy	Benefits	Challenges
Cross-age – Training teachers	<ul style="list-style-type: none"> <li>● Teachers actively engaged to support students</li> <li>● Connections between teachers and students established</li> <li>● Students demonstrated leadership skills</li> </ul>	<ul style="list-style-type: none"> <li>● Some teachers uncomfortable with new experience</li> <li>● Preparation required                             <ul style="list-style-type: none"> <li>○ To increase students’ level of comfort</li> </ul> </li> </ul>

Staff members ( $N = 4$ ) mentioned most teachers actively participated in the training sessions to support their students:

I think anytime that adults can see that it's important to kids and that there's some good in it, I think they're just more willing to engage in it and try it and keep working through it. Long after that, we had adults asking those kids to come in and work with them in the classroom. We had teachers asking teenagers to come and show them how to do things and work with their kids in their own room, so I thought that was pretty cool.

Moreover, the staff members ( $N = 2$ ) also reported similar descriptions as students which demonstrated that training teachers was beneficial because an emotional connection between teachers and students was established as students shared similar experiences and emotions with their teachers. Staff members ( $N = 2$ ) acknowledged that although some students were nervous, they demonstrated strong leadership skills and confidence. Students demonstrated vulnerability and sharing of information in the various groups they led in restorative circles. Staff members reported that this made it easier for teachers to openly express their emotions as well. Students were able to provide appropriate support needed, thus facilitating the emotional healing process:

I was absolutely blown away as to how kids demonstrated vulnerability and the sharing of things. And, as they went around the various circle groups, adults kind of put down their boundaries or their protective things and we had just an incredible afternoon of connection in some ways, emotional healing. And all of that started with kids being willing to be vulnerable first and foremost, and it took down the defense mechanisms that we sometimes as adults continue to put up.

Staff members also described some of the challenges in training sessions. They ( $N = 3$ ) mentioned that a few teachers were not receptive to students because they did not feel comfortable having students lead because they were not open to new experiences:

I would say, most of the challenges have been from a small percentage of our adults who aren't comfortable going there, probably maybe they're old school and it's about teachers in charge and discipline and control instead of the other, which is support and trust, and you know those kinds of things.

Another reason for lack of participation among a few teachers was that teachers were not willing to share information about their feelings because they felt that it was important to build

trust with students before disclosing personal information or expressing their emotions. The educators ( $N = 5$ ) mentioned that they spent a lot of time preparing students to effectively deal with potential challenges that could occur during the training sessions. During this preparation period, the educators mentioned that students reported that they felt insecure about their teaching abilities and expressed fear of judgement that they placed on teachers' personalities. For example, they were concerned that male teachers were less likely to openly express or talk about their emotions to students. However, the educators mentioned that this preparation was helpful as students knew what to expect during the training sessions.

**The Impact of Students' Role in the Implementation of Trauma-Informed Practices in Schools**

**Table 6**

*Descriptions of the Impact of the Implementation of Trauma-Informed Practices*

Types of Changes	<u>Descriptions</u>	
	Before	After
Academic	<ul style="list-style-type: none"> <li>• No academic challenges related to grades</li> <li>• Experienced stress due heavy work load</li> <li>• Fixed mindset</li> </ul>	<ul style="list-style-type: none"> <li>• Using more effective study skills</li> <li>• Reduced stress because of implementing self-care strategies</li> <li>• Growth mindset</li> </ul>
Behavioral	<ul style="list-style-type: none"> <li>• Quick to judge</li> <li>• Uncomfortable sharing emotions</li> <li>• Fear of judgement</li> </ul>	<ul style="list-style-type: none"> <li>• Developing empathy</li> <li>• More open to sharing emotions</li> <li>• Increased confidence</li> </ul>
Social interactions or relationships	<ul style="list-style-type: none"> <li>• Poor relationships</li> <li>• Less social interactions</li> <li>• Poor communication skills</li> </ul>	<ul style="list-style-type: none"> <li>• Building positive relationships</li> <li>• Feeling a sense of connectedness</li> <li>• Developing strong communication skills</li> </ul>

This section presents the themes that emerged from the interviews conducted among students where they described the impact of implementing the different trauma-informed practices in their lives. There were themes highlighting students' reasons for taking the SEL course. Table 6 also showed themes with descriptions of academic, behavioral, and relationship changes students observed from before to after taking the SEL course.

To examine the impact of students' role in the implementation of TIPs in the short and long term, the researcher asked students to state reasons why they decided to take the SEL course. This was an important question because this was an elective course. Students stated that they participated in the class because they wanted to be a part of something that would make an impact in the community ( $N = 2$ ), to explore new opportunities such as leadership and friendships ( $N = 6$ ), and had perceptions that the training would be beneficial for a college resume ( $N = 1$ ). Other students also mentioned that participating in the class was helpful because they were experiencing challenges adjusting to high school and they had mental health challenges such as depression ( $N = 4$ ).

Further, students described academic, behavioral, and social changes they observed about themselves or their capabilities as a result of participating in the class (Table 6). The researcher used the unique identifier to identify adolescents with one or more ACEs and examined the impact of their role in the implementation of TIPs in schools. When compared with students with no ACEs, there were no differences in their descriptions of changes observed as a result of participating in the class. Similarly, no differences were observed in some of the reasons they mentioned for participating in the class. For example, some students from both groups mentioned mental health challenges as a reason for participation.

When describing academic changes, most students ( $N = 11$ ) mentioned that they did not have any academic challenges in the past, but they developed more effective study skills and implemented self-care strategies to reduce stress related to heavy academic workload after taking the class:

I began the class as a sophomore, before that, I really struggled with test anxiety and a constant sense of being overwhelmed. I had a really bad concept of time management. Now if I get nervous about a test, I use some of our mindfulness exercises, like our box breathing. I have much better time management. (Junior, age 16)

Additionally, some students ( $N = 2$ ) reported that before participating in this class, they had a fixed mindset about their academic abilities but participating the class helped them develop a growth mindset. Thus, they put in more effort to improve their academic performance.

Students also reported behavioral changes. Students ( $N = 5$ ) mentioned an improvement in their development of empathy after participating in the class. For example, before participating in the class, they mentioned that they were quick to judge other people experiencing different challenges before taking time to understand the reasons, which they were able to do more effectively after participating in the class. Additionally, some students ( $N = 5$ ) mentioned that they did not feel comfortable sharing their emotions in the past, but as a result of the class they learned about the importance of vulnerability and felt comfortable expressing their emotions. Students ( $N = 3$ ) also gained more confidence as opposed to past experiences, which were characterized by fear judgement from their peers:

Um, talking more of some of my teammates, I'm feeling more comfortable around them, like, it's okay to add in my opinions and that even if I'm afraid of being judged I shouldn't because it'll happen anyway and there's no point in trying to push myself aside just to feel more safe. (Freshman, age 15)

The students also described changes in their relationships and social interactions as a result of participating in the class. For example, some ( $N = 4$ ) had experienced poor relationships

in the past but participating in the class helped them identify traits of positive relationships, specifically with their peers:

We focus a lot on relationships in SEL. Before, I was the type of person that settled for anything as long as people were around me then I was fine, but I wasn't always around the right people. I had like weak, toxic relationships. But after the class, we learned about marble jar friends, which is traits in people that you would like to see that you would want in your life. And I have just really realized that I need to set boundaries and I need to be around people that not only want to see me grow, but also help me grow as a better person. (Junior, age 16)

Further, students ( $N = 6$ ) reported that they noticed changes in the frequency of interactions with others. Before participating in the class, they had fewer social interactions with others when compared with more social interactions after participation. As a result of the more frequent conversations they engaged in, students felt more connected to their teachers and peers, specifically those who were part of the class. This connectedness also motivated the adolescents to help their peers more and accept help and guidance from others as well.

Finally, the students ( $N = 3$ ) reported that they observed improvements in their communication skills, specifically in their families. They highlighted that before the class they did not implement effective communication skills such as listening, which led to conflict. Conversely, after the class they developed strong communication skills with family members, thus leading to positive relationships in the family.

### **Staff Members' Perspectives on the Impact of Students' Role in the Implementation of Trauma-Informed Practices in Schools**

This section presents the themes that emerged from the interviews conducted among staff members with Table 7 showing descriptions of academic, behavioral, and relationship changes that staff members observed after students started taking the SEL course.

Staff members described the changes they observed from students taking the SEL course. Most of their responses were similar to students' own descriptions of changes they had observed

(Table 7). For academic changes observed, staff members ( $N = 3$ ) mentioned that they could not state with certainty that students' participation in the class contributed to their academic success because most students were academically inclined. Educators from the other high school ( $N = 2$ ) also mentioned that they had stopped the in person class due to the COVID 19 pandemic; hence, they could not ascertain academic changes. For the few students experiencing academic challenges, the educators ( $N = 3$ ) mentioned that they observed growth in their progression and confidence in their academic performance. Students' school attendance also increased. The educators also suggested that students were more willing to try new challenging courses. Hence, they gained more autonomy:

Almost all those kids are taking dual credit courses right now. So, they're pushing themselves really hard through some academic stuff independently. I can't say it coincides or not I don't know, but I think academically I see that they're just more willing to take risks and ask questions, put themselves into their stuff a little more into what their passions are and not just what they feel like they're supposed to do or supposed to say.

All staff members in the present study highlighted that students engaged in positive behaviors. For example, students had positive and frequent social interactions with their peers. These frequent social interactions also facilitated students' development of compassion and empathy for others. Honesty was another trait that staff members reported. They stated that implementing restorative circles helped students to recognize that "they are not viewed as a terrible person, but rather a bad choice." Hence, they were more truthful if an incident occurred. Students were also seen as positive agents of change against bullying. The staff recognized that this group of students had a more positive influence on their peers than adults. As a result, the staff members reported that incidents of bullying in the school had decreased. Further, students were also advocating for mental health for themselves and their peers by implementing self-care strategies in schools. The educators suggested that these students were willing to advocate for mental health because most of them identified as having personal challenges with mental health.



The staff members also described changes related to social interactions that they observed among the students. The staff members ( $N = 5$ ) stated that they noticed strong social connections among students because their interactions were sincere. Moreover, staff members ( $N = 2$ ) also observed that students were able to identify characteristics of healthy relationships, which made it easier for them to deal with family challenges more effectively. Similarly, they also selected friends based on trust and respect rather than trying to fit in. Improved student-teacher relationships were also observed:

So, I would say relationship wise, it's interesting how powerful our bonds have become. Then I've had some of them in regular classrooms after that, and it becomes so much easier to work with them because you know the nuances of that learner at a much deeper level.

A potential dependency syndrome was observed ( $N = 1$ ) among the students. As a result, some students experienced mental health breakdowns. However, the school counselors were there to help them cope:

Then I think a weird unpredicted side effect has been the dependency that I think we have created with those learners because they know us so well now as educators and they've had an hour a day with us, it's almost like therapy. And we've almost become their crutch. And so that's been really interesting once that stopped because we stopped at semester break here in January. Now all of a sudden, they have that hole of an hour, that 50-minute period where they don't have us anymore to reset and recalibrate.

Overall, the staff members ( $N = 4$ ) stated that the willingness of teachers and students to learn and implement these practices in their schools contributed to changes that not only occurred among students directly involved with the SEL course, but changes were also observed with the rest of the school. Notable changes included an overall increase in students' involvement in extracurricular activities exceeding 90% as reported by a staff member in their high school. Staff members ( $N = 2$ ) also reported a decline in discipline issues, less engagement in drugs and alcohol abuse, and reduced incidents of conflict as a result of the adoption of restorative practices in their schools. They ( $N = 2$ ) acknowledged that students in the SEL class

were the key players in redirecting negative behaviors and staff members also worked with families involved to provide support and boundaries that promote positive behaviors. Hence, students were perceived as collaborators of change.

**Table 7**

*Staff Members' Descriptions of the Impact of the Implementation of Trauma-Informed Practices among Students*

Types of Changes	Descriptions
Academic	<ul style="list-style-type: none"> <li>• Most students are academically inclined</li> <li>• Willingness to try new courses</li> <li>• Increased school attendance</li> </ul>
Behavioral	<ul style="list-style-type: none"> <li>• Demonstration of positive behaviors               <ul style="list-style-type: none"> <li>○ Positive and frequent social interactions</li> <li>○ Honesty, compassion, and empathy</li> <li>○ Positive agents of change against bullying and advocating mental health</li> <li>○ Using more coping skills</li> </ul> </li> </ul>
Social interactions or relationships	<ul style="list-style-type: none"> <li>• Strong social connections</li> <li>• Healthy relationships both at school and at home</li> <li>• Dependency syndrome</li> </ul>

### **Discussion**

The current study sought to examine the degree of trauma exposure among adolescents, as research suggests that this is the peak period for risk of trauma exposure due to the developmental changes occurring simultaneously in adolescence (Nooner et al., 2012; Soleimanpour et al., 2017). The results indicated that almost half of the students in the present study have one or more ACEs with the most prevalent ACEs being emotional abuse, emotional neglect, and living with a household member engaging in substance abuse.

The current study also sought to provide a comprehensive picture of the TIPs implemented by students at their schools and their roles in the process. The results of the study indicated that after receiving training in their elective SEL course, students implemented TIPs such as Social Emotional Learning, Restorative Circles, and Self-Care. With existing studies focusing on the role of teachers in the implementation of TIPs (e.g., Baweja et al., 2016; Bridgeland et al., 2013; Jennings et al., 2017), these findings demonstrated that a collaborative effort between students, teachers, and other staff in this process is crucial for successful implementation, more so if students are provided opportunities that allow them to take ownership and lead. The findings of this study provided insight on the use of mentoring as a strategy for implementing TIPs; students used peer tutoring and cross-age tutoring when they trained younger students, same-age peers, and teachers. Differences in students' level of comfort when training these different groups were observed. Finally, this study assessed the impact of implementing TIPs in students' lives. Overall, the results indicated that TIPs promoted the behaviors, patterns of thought, and social connections conducive to optimal wellbeing among students and teachers in schools.

### **Degree of Trauma Exposure**

The results of current study showed that almost half of students in the sample (46.2%) reported at least one or more ACEs. Further, the most prevalent ACEs among these students were emotional neglect, emotional abuse, and living with household members engaging in substance abuse. More importantly, results showed a bimodal distribution of ACEs with two main groups (no trauma exposure and significant trauma exposure). Although the sample size in the current study was small ( $N = 13$ ) transferability of this largely qualitative study was possible because these results were consistent with previous research suggesting that ACE exposure does

not occur in isolation, but increases the risk of exposure to other types of ACEs (e.g., Felitti & Anda, 2010; Felitti et al., 1998; Scott et al., 2013). For example, exposure to emotional and physical neglect was linked with sexual abuse and living with a household member engaging in substance abuse (Scott et al., 2013). Students in the current study exposed to emotional abuse and/or emotional neglect were also exposed to living with household members engaging in substance use. With some studies on ACEs based on either caregiver or adult retrospective reports of the ACEs in childhood (e.g., Felitti et al., 1998; Scott et al., 2013), the results of the present study add to the understanding of self-reported ACEs among adolescents and reinforce the need to identify common risk factors among specific adverse experiences. The accurate identification of comorbid ACEs among adolescents will help mental health professionals implement effective intervention methods for better mental health and wellbeing.

More importantly, the findings of this study highlight that adolescence is a developmental period for addressing mental health (Soleimanpour et al., 2017). Both those students with ACEs and those with no ACEs reported that they had mental health concerns such as depression and anxiety. Staff members' reports also confirmed similar findings. These findings are consistent with previous research that showed that mental health challenges including depression and anxiety are more prevalent in adolescence and are frequently comorbid with other disorders (Cummings et al., 2014; Essau et al., 2014). Lee et al. (2020) also highlighted that adolescents with multiple ACEs were at great risk for depression and anxiety. These findings are consistent with those from the current sample of adolescents. Furthermore, the findings of this study provide more insight on mental health among youth in rural settings as data from the National Survey of Children's Mental Health (2020) reported that depression and anxiety were more prevalent among rural youth when compared to urban youth. Although the associations between

ACEs and mental health challenges among adolescents were not the focus of the current study, this study provided evidence that points to the need to design and implement corresponding interventions such as TIPs targeting the various mental health needs of adolescents, more so for those with ACEs (Lee et al., 2020).

### **Students and the Implementation of Trauma-Informed Practices in Schools**

The current study provides new knowledge on the impact of implementing TIPs in schools, specifically when students play an active role in this process. Existing research on the implementation of TIPs in schools focuses on staff members in schools including teachers who are trained to provide support for students (e.g., Baweja et al., 2016; Bridgeland et al., 2013; Jennings et al., 2017). While this is beneficial for students, specifically those exposed to trauma, the current study demonstrated that students may contribute in providing a safe school environment as well. The students in the current study felt a sense of ownership and responsibility to implement the different activities related to TIPs in their schools such as Social Emotional Learning, Self-Care, and Restorative Circles. Moreover, the students and staff members acknowledged that the activities were based on students' learning and emotional needs. Hence, students in the current study including those exposed to trauma were able to identify their own needs; students exposed to trauma often suffer in silence because their teachers and other staff may not easily identify them (Craig, 2015). The current study highlights the importance of including students when providing interventions that impact them directly.

Additionally, the findings of the present study showed differences in students' perceptions of their roles in implementing TIPs in their schools. Students who were older or who had been participating in the class for a longer period were viewed as the leaders of the class and viewed themselves this way. Conversely, some students assumed equal leadership in this process

of implementing TIPs in schools. Existing research suggests that high school students may develop leadership skills through cooperating with others, when making decisions, and through engagement in school activities (Wingenbach & Kahler, 1997). Reports from the staff members showed that students in the current study appeared to be actively engaging their leadership skills. Since the current study provided a range of results on perceptions of leadership, more research is warranted for an in-depth understanding.

Furthermore, results of the current study showed that students have a potential role in promoting mental health in schools. Reports from both students and staff members highlighted that some students experienced mental health challenges. It is possible that they implemented self-care strategies to enhance their own emotional and physical wellbeing (Uzuncakmak & Beser, 2017). In addition, the students in the current study were more likely to implement self-care strategies because of their desire for autonomy, which is typical in adolescence when individuals begin to take control and assume responsibility for their health (Uzuncakmak & Beser, 2017). Hence, adolescence is a critical period for providing education on self-care, which is the foundation of sustainable healthy lifestyles in adulthood (Zare et al., 2020).

The current study also demonstrated that universal Social Emotional Learning practices promote emotional and social functioning (Kopelman-Rubin et al., 2021). Reports from both students and teachers on Social Emotional Learning suggested that implementing these practices provided opportunities for positive interactions and building positive relationships. Specifically, adolescents described the importance of building trust over time, through the concept of “a marble jar type of friend” (Brown, 2015). It is possible that the students in the study found this concept of trust in peer relationships helpful because social interactions with peers and peer support facilitate their social development, which is a major developmental task to be achieved

during adolescence (Kim & Kim, 2013). When building trusting relationships, the students became aware of their own and other's actions, thus enhancing perspective taking, a sense of accountability, and empathy (Brown, 2015). Learning about trust may have been helpful for students who experienced interpersonal abuse, which may have resulted in betrayal of trust, social withdrawal, and self-blame (Alisic et al., 2014; Freyd, 1996). Hence, learning about trust helped them recognize that trust can be built again in strong healthy relationships (Brown, 2015). The findings of the current study highlight that Social and Emotional Learning fulfills the goal of TIPs in which a safe environment is created for students to discuss their emotions and behaviors while building social and emotional competencies (Le Messurier, 2020).

Finally, students mentioned that they implemented Restorative Circles in their schools. Students mentioned some of the benefits of implementing Restorative Circles in their schools including learning about vulnerability, developing empathy, strong communication skills, and feeling empowered. In instances where students experienced ACEs, implementing Restorative Circles may have provided an opportunity for them to feel heard, express their emotions, and begin the healing process (Wolpow et al., 2016). Hence, training students on TIPs allowed students to reduce the traumatic stress reactions (Rolfnes & Isdoe, 2011).

### **Mentoring as a Strategy for Implementing Trauma-Informed Practices in Schools**

This study provided a unique contribution to existing literature on mentoring programs. Students in the current study used peer-tutoring and cross-age tutoring when implementing TIPs in their schools. Since the age range of students in the current study was between 15 to 18 years, the high school students were able to reach students in both lower and upper grades when implementing TIPs. Both schools had grades from prekindergarten to 12<sup>th</sup> grade in one school campus, thus making it easier to implement these practices. This age range appeared to be the

optimal age as students in this sample were able to teach younger students, same-age peers, and their teachers. This mentoring strategy appeared to be effective because the TIPs were more accessible to everyone in the school environment. This is the goal of using a system-wide approach when providing interventions (Colorado Department of Education, 2018).

Additionally, the findings of the study provided insight on peer mentoring as a potential strategy for implementing TIPs in schools. Students in the current sample stated that they implemented peer tutoring when teaching others Restorative Circles, specifically those who had recently joined the class. These results are consistent with Cavanaugh's (2016) suggestions to use peer tutoring as a universal strategy for implementing TIPs, given that schools often provide mental health services for students. One of the benefits of having peer tutoring is that it empowers students, including those exposed to trauma, as they take active leadership roles in the implementation of TIPs in their school (Cavanaugh, 2016). Students in the current study stated that they had opportunities to engage positively with other students when they trained students from the other high school who had been in their class for a shorter period. In this process, students felt a sense of self-efficacy and success, which promotes positive development and is helpful for the recovery of students with ACEs (Benight & Bandura, 2004). Hence, the collaboration between students in the two high schools allowed them to develop decision-making and teamwork skills, which are essential leadership skills (Wingenbach & Kahler, 1997). The findings of this study highlight that system-level change is possible through a collaboration of teams of students, teachers, and other school staff members when implementing TIPs in schools (Phifer & Hull, 2016).

Further, the findings of the current study highlighted some differences in implementing TIPs using cross-age mentoring. There were differences in the levels of comfort when



implementing TIPs with the different groups of people in their schools, including younger students, peers, and teachers in their schools. Students felt more comfortable implementing TIPs among younger students. Teaching younger mentees had a positive influence because students in the present study built rapport with mentees successfully, increased their sense of self-efficacy, and provided opportunities to engage in prosocial behaviors (Bulanda et al., 2013; Quimby, 2018) In contrast, students felt nervous teaching same-age peers and their teachers. Fear of judgement and feeling incompetent were common contributing factors. However, despite feeling nervous, students had opportunities to learn more about their teachers and realized that they had shared experiences and emotions. This study provides insight on how negative emotions are common for both students and teachers, and thus provides reinforcing evidence for the need to implement TIPs in schools not only for students, but also for teachers and staff. More importantly, the school personnel suggested that support for students was crucial in the successful training of teachers. Previous research suggested that students' perceived emotional and social support from their teachers as well as the provision of autonomy contributed to students' feelings of competence to engage in activities in the school (Wang & Eccles, 2013). Although a few teachers felt uncomfortable being trained by students, the findings of the study highlight that involving students in the implementation of TIPs may be used as a buy-in strategy as more staff members were more likely to implement them when they noticed that this was important to students as well.

### **Self-Determination Theory: The Impact of Students' Role in the Implementation of Trauma-Informed Practices in Schools**

The findings of the current study showed how TIPs in schools can promote students' motivation. Self-determination theory suggests that support from teachers and other staff

members can facilitate students' motivation (Ryan & Deci, 2017). In the current study, students had opportunities to implement TIPs in their schools with the guidance and support of not only the teachers in the course, but other teachers and staff members in the school. The staff members and teachers in the current study were responsive to students' needs and considered the perspectives of this group of students implementing the TIPs in schools. Since this was a student-run class, students had multiple opportunities to make meaningful choices and engage their own interests when implementing various activities related to Self-Care, Social Emotional Learning, and Restorative Circles. Hence, students took ownership and initiative while implementing TIPs.

The current study also showed the importance of providing structure when implementing TIPs. Self-determination theory states that providing a structure for students allows them to be aware of expectations and goals, and providing constructive feedback is crucial for motivation (Ryan & Deci, 2017). While students were the key players in the implementation of TIPs, their teachers were available to guide them, specifically when they prepared them for training sessions on Restorative Circles with teachers in the school. This preparation helped reduce students' feelings of anxiety, nervousness, and inadequacy in their abilities to train their teachers. Teachers encouraged students to use self-regulated learning strategies; thus, students felt a sense of competence when training teachers on Restorative Circles.

Finally, reports from students and staff demonstrated ways in which students implementing TIPs in their schools facilitated the development of autonomy, competence, and relatedness. First, student's development of autonomy was observed when students took initiative and ownership of their emotions and actions as a result of participating in the SEL class. Staff members mentioned that students were willing to take more challenging new courses

in the school, and students themselves acknowledged that they were implementing more self-care strategies to cope with stress related to school work.

Second, students' development of competence was observed when both students and staff reported that while most of the students were academically inclined, they used more effective study skills and developed a growth mindset as they put in more effort to improve their academic performance. Students also reported increased confidence in their abilities to perform various tasks.

Third, students' development of relatedness was observed as students and staff members reported that implementing TIPs in school provided students multiple opportunities to engage in positive interactions and behaviors. Students became aware of their emotions and others; thus they developed empathy, compassion, honesty, and strong communication skills. Students also highlighted that they had healthy relationships at school and home and felt a sense of connectedness with teachers and other students as a result of participating in the class. Since relatedness also includes caring for others, students' and staff members' reports highlighted that students were positive agents of change against bullying and they advocated not only for their own mental health, but for others' as well. However, a potential dependency syndrome was observed among students as some students relied on the class to cope with stressful situations. Hence, some students experienced mental health breakdowns. This was unexpected as it was assumed that students would build resilience after participating in the class. Fortunately, staff members stated that students themselves were more proactive in implementing self-care strategies such as using meditation videos as well as seeking help from the school counselors.

Overall, the findings of this study show that there are many ways in which TIPs facilitate psychological need satisfaction in educational settings (Ryan & Deci, 2017). When students

implemented TIPs in schools, positive changes among other students in their schools were also observed. Staff members reported that a vast majority of students were involved in extracurricular activities, there was a decline discipline issues, and the number of students engaging in risky behaviors such as alcohol and drug use also declined. This shows that training students on TIPs is beneficial as they play an important role in promoting positive behaviors, thus increasing safety and wellbeing in schools.

### **Limitations and Future Directions**

There are limitations of this study to be considered. First, the sample of students in our study was homogeneous in regard to gender. Although participants were not requested to provide this information, participants (staff members and students) highlighted that students taking this SEL class were mostly female, with one high school having all females. From the researcher's observation, most students participating in this study presented as female, with one as male; in one high school all of the participants were female. Future research focusing on students' role in the implementation of TIPs in schools should consider more diverse samples. Second, cross sectional data was used. Additionally, the ACEs measure provided information on types of trauma events students experienced, but this measure did not provide information on the duration of trauma exposure; hence the frequency or intensity of traumatic exposure could not be ascertained (Crouch, 2019a). Further, there may have been selection bias and social desirability effects as students who felt comfortable sharing their experiences, including harmful events, are the ones who agreed to participate in the study. Future research should use longitudinal data to provide more comprehensive information on students' role implementing TIPs in their schools.

## **Strengths and Implications**

This study makes several contributions to literature. First, the group of participants between ages 15 and 18 years was able to reflect on their experiences on their role in implementing TIPs and provided insightful knowledge on this research. Second, this age group also demonstrated strengths of using mentoring as a potential strategy for implementing TIPs in schools, more importantly as they take the role of experts in this process. Our results showed that high school students were able to teach younger and same-age students, as well as adults on the different types of TIPs in schools. Third, although the present study was based primarily on self-report, we included the perspectives of school personnel who interact with students frequently to provide a comprehensive understanding of students' role and the impact of implementing TIPs in schools. Fourth, the findings of this study demonstrate that when trained on TIPs, students have a potential to promote positive behaviors in the school and promote safety and wellbeing in schools. The major contributing factor is that students know their own needs, specifically those who experienced ACEs in childhood or continue to experience ACEs during adolescence. Fifth, the current study also provided supporting evidence to show that adolescence is the critical period of providing interventions such as TIPs as this period is characterized by emotional, social, and physical changes, which may pose health and behavioral risks among adolescents. Providing both universal and targeted TIPs in schools will promote resilience and mitigate some of the harmful effects from progressing to adulthood. Sixth, the findings of the current study demonstrate the importance of providing support for students when they implement TIPs in schools. When students notice that their teachers and school staff support them, they are motivated to implement TIPs. Moreover, by positioning students as experts, they are able to exercise agency to become empowered. Further, teachers and other staff members in turn are

motivated to implement TIPs in schools when they notice the importance and value of doing this. Hence, involving students in the implementation of TIPs may serve as a buy-in strategy for sustainable implementation of TIPs in schools. Seventh, the results of the present study provide supporting evidence to show the effectiveness of the Social Emotional Learning, Restorative Practices, and Self-Care practices and reinforce the need to continue implementing them in schools.

### **Conclusion**

The current study provides supporting evidence that shows that when trained on TIPs, students have the ability to implement them in schools. More importantly, providing support for students in this process greatly contributes to the successful implementation of TIPs in schools. Additionally, implementing TIPs in schools not only has a potential to promote positive behaviors among students leading this process, but promotes positive behaviors and the wellbeing of everyone in the school environment. Since this is novel evidence, more research is needed to assess the role of students in the implementation of TIPs in schools.

## **STUDY 2: EXAMINING TEACHERS' ROLE IN THE IMPLEMENTATION OF TRAUMA-INFORMED PRACTICES IN SCHOOLS**

### **Introduction**

Students exposed to trauma may show signs of mental health and behavioral challenges. For example, they may be depressed, have difficulty concentrating, and show other traumatic stress symptoms (Duke et al., 2010; Fortson et al., 2016). When teachers interact and care for students exposed to trauma, this contributes to stress, emotional burden, and anxiety among teachers (Alisic et al., 2012; Caringi et al., 2015). Trauma-sensitive schools recognize the prevalence of adverse childhood experiences and aim to build resilience of school staff and students. Teachers often play a key role in the implementation of trauma-informed practices (TIPS) in schools as they are the first to respond to emotional and behavioral crises in classrooms (Hydon et al., 2015). Additionally, teachers have more opportunities to build strong relationships and safe environments for students when compared with other school staff members because they spend more time with students in classrooms (Baweja et al., 2016).

Yet teachers often feel the need for additional training and support due to lack of knowledge and skills when working with students exposed to trauma (Alisic et al., 2012). As a result, teachers may experience stress reactions related to trauma (secondary traumatic stress) and job-related chronic exhaustion (burnout) (Stamm, 2010). Despite these challenges, teachers may also experience positive feelings of helping students exposed to trauma (compassion satisfaction) (Abraham-Cook, 2012). There is a need to determine if these factors promote or hinder teachers' inclination and ability to implement TIPS in schools. Since these factors have been less studied among teachers, this study has an overarching goal of testing whether the

school environment and the teacher's reactions to student trauma may influence teachers' level of implementation of TIPs.

### **Teachers and the Implementation of Trauma-Informed Practices**

The ecological theory states that human development occurs as a result of various interacting systems (Bronfenbrenner, 1977; 1979). As individuals develop, they are influenced by biological and psychological characteristics as well as family systems, schools, communities, and larger social systems surrounding them (Bronfenbrenner, 1979). Trauma-informed practices implemented in the school environment play a role in fostering the recovery of students experiencing trauma (Guarino & Decandia, 2015). More importantly, the ecological theory demonstrates that teachers are key players in the implementation of TIPs at all levels of the school environment. In the microsystem, teachers may have direct positive interactions with students (Crosby, 2015). Teachers may create a safe and calm environment where students exposed to trauma develop a sense of ownership and control of their environment (Perry, 2009; Wolpow et al., 2016). Additionally, in the mesosystem, teachers may facilitate positive relationships and interactions in the school environment (Crosby, 2015). Positive student-peer and parent-teacher interactions promote students' wellbeing and safety, thus reducing the negative emotions associated with trauma among students and teachers (Wolpow et al., 2016). In the exosystem and macrosystem, teachers may also play a role in implementing policies related to TIPs, hence they benefit from the provision of trainings for TIPs where they gain awareness of different issues affecting students exposed to trauma as well the strategies used to help these students (Cole et al., 2005; Oehlberg, 2008). Finally, in the chronosystem teachers help students adapt to the school environment and promote students' healthy development by implementing



TIPs in the classroom, thus allowing students to adjust their behavior to succeed in the classroom (Crosby, 2015).

Trauma-informed schools play a role in addressing challenges linked with access to mental health services for all students (Baweja et al., 2016). TIPs can be implemented in schools by school counselors and trained teachers instead of using outside resources. A meta-analysis of 49 school mental health studies conducted by Franklin and colleagues (2012) reported that 18.4% of teachers were sole providers of mental health interventions while 40.8% were actively involved as partners. Results also indicated that most of the mental health interventions were universal and occurred in the classrooms (Franklin et al., 2012). Hence, the curricula of the different types of TIPs implemented in schools may be structured to fit within a class period without overburdening the teachers (Baweja et al., 2016). TIPs that fit within the framework of the school environment are beneficial for students as they gain more access to mental health services (Baweja et al., 2016). Although teachers may not be considered as professionals working therapeutically with victims of trauma (Hensel et al., 2015), the findings above clearly demonstrate that more research on teachers' role in this process of implementing TIPs in schools is needed.

Additionally, teachers have multiple roles in this process of implementing TIPs in schools. In addition to their main role of providing instruction in academics, teachers are first responders in classrooms when students are in a crisis (Denham, 2018; Hydon et al., 2015). Outside the classroom, teachers are also involved in parent education and encourage parent involvement, thus allowing parents to be meaningful partners in facilitating their children's success in education (Murphy & Tobin, 2011). With these expanding roles and demands, school-

wide systems of support such as TIPs provide a collaborative network between teachers, students, and the community.

In the current study, teachers implemented Social Emotional Learning (SEL), Restorative Practices (RPs), and Self-Care (SC) in public schools from three school districts in the Midwestern United States. SEL programs based on CASEL'S five cognitive, affective, and behavioral competencies demonstrate that effective learning occurs in supportive relationships that make learning engaging, challenging, and meaningful (Jones et al., 2013). Multiple studies also showed that SEL fosters social, emotional, and academic benefits for Kindergarten to 12<sup>th</sup> grade students, which may have a positive effect on the school environment (Durlak et al., 2011; Farrington et al., 2012; Sklad et al., 2012; Taylor et al. 2017). Further, a report from a nationally representative survey of 600 Kindergarten to 12<sup>th</sup> grade school teachers showed that more than 90% of the teachers believed that social and emotional skills are beneficial for students from all backgrounds and are teachable through explicit instruction, modeling or practice (Bridgeland et al., 2013). With a vast body of research supporting the effectiveness of SEL programs, diverse SEL approaches for supporting students are now being introduced in other areas including neuroscience, TIPs, and multicultural competence (Weissberg, 2019). Hence, CASEL's resources are widespread with 50 states using them (Weissberg, 2019).

Teachers also implement RPs in Kindergarten to 12<sup>th</sup> grade schools across the United States as alternatives to traditional discipline practices such as suspension or expulsion (Fronious et al., 2016). Teachers may incorporate peaceful and non-punitive strategies to manage conflict in the classrooms (Fronious et al., 2016). Although there is no clear definition of RPs due to the diverse experiences and backgrounds of respondents, they are broadly described as “non-punitive disciplinary methods focusing on restoring relationships, and all parties involved in the conflict

are included in the restorative processes” (Hurley et al., 2015, p.1). Teachers work with students by focusing on repairing harm and relationships instead of punishing students for misbehavior (Guckenburg et al., 2015). This conflict resolution process also values the student voice; for example, the practice of “circles” allows students and teachers to address each other directly about the harm caused and allows everyone involved to understand and hear the harm from different perspectives (Guckenburg et al., 2015). Thus, a safe environment is created for students and teachers to express themselves.

Although there are multiple reports, case studies, and articles on RPs, empirical literature on RPs in the school context in the United States is still in infancy (Fronious et al., 2019). Previous reports indicate that the implementation of RPs led to improved student achievement and connectedness, increased student support offered to students, and greater parent and community engagement (Cavanagh et al., 2014; González, 2012). Descriptive reports also highlighted a reduction in fighting, bullying, suspensions, and discipline disparities as result of implementing RP in schools (Armour, 2013; Brown, 2017). Augustine and colleagues (2018) conducted the first rigorous experimental study where they examined the outcomes of an initiative called Pursuing Equitable and Restorative Communities (PERC) implemented in the 2015/16 and 2016/17 academic years in 22 Pittsburgh Kindergarten to 12<sup>th</sup> grade urban public schools. Twenty-two additional schools were in the control group. For students in PERC, the findings showed a significant reduction in school suspensions for students and in discipline disparities based on race and socioeconomic status. There was also a significant increase in academic performance among students in 10th grade. Teachers also reported improvements in safety, professional environment, and school climate as a result of implementing PERC in schools. With limited rigorous assessments of these programs, more research is warranted to

provide stronger evidence on the impact of the successful implementation of RPs in schools (Fronious et al., 2019).

Teachers implement SC strategies in schools to enhance their professional quality of life. Self-Care is defined as the daily process of being aware of and attending to one's basic emotional and physiological needs, including shaping one's daily routine, relationships, and environment (Boogren, 2018). Some techniques used for self-care include getting adequate nutrition, exercise, and sleep, and connecting with loved ones (Shepell, 2019). Teachers may experience stress when caring for students exposed to trauma, more so when these traumatic experiences are cumulative (Maslach & Leiter, 2016). Teachers often carry this emotional burden home, which may compromise their emotional wellbeing (Alisic et al., 2012). Other examples of stressors for teachers that contribute to burnout may include challenging behaviors of students, the high number of students in a class, lack of teaching resources, and little involvement of student families (Kazee et al., 2020). In these instances, the provision of self-care becomes increasingly important at individual and organizational levels in schools (Kazee et al., 2020).

There is a growing body of research on the importance of self-care promotion for teachers and other school staff. For example, the Cultivating Awareness and Resilience in Education (CARE) for Teachers program targets mindful awareness and stress reduction, listening techniques, and emotional skills instruction among teachers (Garrison Institute, n.d.). The goal of this program is to build resilience in teachers experiencing high levels of secondary traumatic stress and burnout (Garrison Institute, n.d.). A randomized experimental study was conducted to examine the impact of CARE for Teachers in 36 urban elementary schools with kindergarten to fifth-grade teachers (Jennings et al., 2017). The findings showed that participation in this program resulted in significant positive effects on the mindfulness, emotion

regulation, and teaching efficacy of teachers. Teachers also reported a significant reduction of physical and psychological distress after participating in the program. As a result, teachers were more sensitive to students' needs, hence there was a positive impact on emotional support in the classroom (Jennings et al., 2017).

Finally, SEL, RPs, and SC implemented together in schools have the potential to improve the school climate and relationships among school staff including teachers and students in schools (Guckenburg, 2015). This is the goal of promoting trauma-sensitive schools. Further, implementing these three types of practices in schools demonstrates that teachers and other school staff can use more than one approach to build students' resilience against trauma (Respectful Ways, 2019). Hence, the current study aimed to assess the extent to which teachers implemented SEL, RPs and SC in three school districts in Midwestern United States. Since SEL practices are implemented more widely in the United States, it was expected that teachers would implement them more than other types of TIPS.

### **Teachers' Professional Quality of Life and the Implementation of Trauma-Informed Practices**

Traumatic events experienced by students may influence teachers' professional quality of life (Abraham-Cook, 2012; Haider et al., 2017; Stamm, 2010). Professional quality of life refers to the value individuals feel in relationship to their role in a helping profession (Stamm, 2010). Negative and positive aspects of one's work as a helper can influence professional quality of life (Stamm, 2010). The teachers' perceived quality of life as professionals may impact how well they implement TIPS and how well they assist students who have experienced trauma. Hence, the purpose of the current study was to examine the impact of teachers' perception of their professional quality of life on TIPS implemented at their schools.

A negative aspect of professional quality of life referred to as compassion fatigue or secondary traumatic stress can be experienced by helpers, including teachers (Stamm, 2010). Symptoms of secondary traumatic stress, which is “a negative feeling driven by fear and work-related trauma” (Stamm, 2010, p.12), can develop after an exposure to the trauma of another person (Figley, 2005). According to the Compassion Stress and Fatigue model, compassion stress is created through a helper’s compassion for the traumatized individual’s state of mind (Dunn, 2018; Ihlström et al., 2017; Leppink, et al., 2016). Research suggests that when compassion stress is not regulated appropriately, this can lead to compassion fatigue (Abraham-Cook, 2012). When teachers interact with students experiencing trauma, they may experience secondary traumatic stress as they assume students’ suffering and internalize the emotional energy from each encounter (Ludick & Figley, 2017). Symptoms of secondary traumatic stress such as hypervigilance, intrusion, and avoidance are aligned with symptoms of Post-traumatic stress disorder (PTSD; Gentry et al., 2002; Newell & MacNeil, 2010). For instance, a teacher may experience intrusive cognitions related to the student’s traumatic experience and may avoid reminders of the student and their trauma (Abraham-Cook, 2012). Additionally, teachers may exhibit symptoms of hyperarousal including increased irritability, sleeping challenges, and difficulty concentrating (Figley, 1995). Further, teachers with a history of trauma are at great risk for secondary traumatic stress (Rojas-Flores et al., 2015). Teachers with a history of trauma have been found to show higher levels of PTSD symptoms when compared with those without trauma history (Rojas-Flores et al., 2015). Hence, if teachers are affected by the symptoms of compassion fatigue, successful implementation of TIPs may be hindered. Fortunately, secondary traumatic stress has a rapid recovery rate if detected and managed early, and it is often not necessary for individuals to leave their work environment (Figley, 2002). If compassion fatigue

continues, it can lead to other negative psychological states including burnout (Maytum et al., 2004).

Burnout is a chronic state of exhaustion as a result of long-term interpersonal stress (Stamm, 2010). Public school teachers encounter students experiencing trauma more frequently and in turn experience higher levels of stress and burnout when compared to professionals in other human service occupations (Abraham-Cook, 2012; Mojsa-Kaja et al., 2015; Spittle et al., 2015; Stamm, 2010). However, stressors associated with burnout are not often as a result of trauma but occur as a result of prolonged exposure to organizational issues, for example, time management, discipline, and workload in the classroom (Kokkinos, 2007; Tonder & Williams, 2009). Three major symptoms of burnout include depersonalization, emotional exhaustion, and the loss of one's sense of accomplishment (Maslach et al., 2001). These symptoms are often accompanied by other symptoms such as anxiety, depression, and somatic complaints (Maslach et al., 2001). In contrast to compassion fatigue, burnout is serious as the symptoms are usually difficult to treat and may require individuals to leave their career (Figley, 2002). In teaching, burnout is strongly linked with job attrition (Sutcher et al., 2019; Weisberg & Sagie, 1999). Teachers who remain in their professions with unresolved symptoms of burnout may have a negative impact on their students (Hock, 1988). These teachers often interpret the behaviors of students exposed to trauma as disruptive, which may escalate teacher-student conflict and negative emotions such as anger and frustration, contributing to burnout for teachers with difficulty in emotion regulation (Durr et al., 2014). Teachers experiencing burnout may appear detached and behave in a callous manner, making them insensitive to their students' needs (Tatar & Yahav, 1999). This further hinders the successful implementation of TIPs in the school environment.

In some circumstances, working with students exposed to trauma can positively affect the psychological wellbeing of teachers. The pleasure derived from helping others, referred to as compassion satisfaction, is usually higher among teachers when compared to other caregiving professionals such as mental and physical health workers (Stamm, 2010). Examples of experiences demonstrating compassion satisfaction include being a positive role model to students and teaching life skills (Abraham-Cook, 2012). Compassion satisfaction is linked with self-efficacy and the belief that one can contribute positively to the world, and it provides a sense of invigoration (Stamm, 2002). While trauma of most students often progresses unnoticed into adulthood, teachers have an important role to build rapport with students exposed to trauma and assist these students to heal the negative experiences that have impacted their lives (Orbele & Schonert-Reichl, 2016).

To the author's knowledge only one empirical study has examined teachers' professional quality of life with the implementation of TIPs as an outcome. Christian-Brandt et al. (2020) examined professional quality of life among teachers and their perceptions of TIPs effectiveness in elementary schools in low-income communities in the Pacific Northwest. At least 67% of students were English-language learners and Latinx students. They also investigated professional quality of life among teachers and the intent to leave the teaching profession. The results of the study indicated that low burnout, high compassion satisfaction, and secondary traumatic stress were linked with teachers' perceptions that TIPs were effective. Low compassion satisfaction, high burnout, and being an older teacher also increased teachers' intentions to leave education (Christian-Brandt et al., 2020). The current study was conducted in a predominantly White rural state in three school districts in Midwestern United States. This study aimed to address gaps in literature with a different sample of teachers working with a different student population. Hence,



it was hypothesized that teachers experiencing high levels of compassion fatigue implemented TIPs to a lesser degree when compared to teachers experiencing high levels of compassion satisfaction.

### **Teaching Experience and Implementation of Trauma-Informed Practices in Schools**

When examining professional quality of life and teachers' implementation of TIPs in schools, the current study considered the potential moderating effect of teaching experience in this relationship. While previous studies in helping professions report that years of work experience contribute to the development of compassion fatigue (e.g., Cunningham, 2003; Way et al., 2004), Abraham-Cook's (2012) study detected no relationship between years of experience and compassion fatigue among teachers working in high-poverty urban public schools.

Abraham-Cook (2012) stated that teachers' reports of perceived social support and compassion satisfaction buffered against the potential effects of less teaching experience. Additionally, age, which is often associated with years of working experience (Maslach et al., 2001) was associated with less burnout symptoms among teachers. Abraham-Cook (2012) stated that older teachers may have developed more effective coping skills, self-efficacy, and resources to prevent the escalation of burnout as the ones who did not develop these skills may have already left the profession at a younger age.

A recent study by Christian-Brandt et al. (2020) also revealed specific characteristics of teachers who intended to leave the teaching profession. These included older age, high levels of burnout, and low compassion satisfaction (Christian-Brandt et al., 2020). These findings suggest that compassion satisfaction is an important factor when making decisions to leave the teaching profession. These findings provide support for the importance of expanding research on promoting protective factors such as compassion satisfaction among teachers. Hence, in the

current study, it was expected that teachers with more teaching experience were more likely to implement TIPs because of high levels of compassion satisfaction.

### **Trauma-Sensitive Training on Teachers' Implementation of Trauma-Informed Practices in Schools**

Studies demonstrated that teachers are invested in students' mental health, including students exposed to trauma, hence the need for trauma-sensitive training (Alisic et al., 2012; Graham et al., 2011). For example, a study by Alisic and colleagues (2012) found that elementary school teachers reported that they required additional support for students exposed to trauma and felt limited by their lack of relevant knowledge on mental health. Hence, it is clear that teachers recognize that students may experience mental health issues and providing trauma-sensitive training can help teachers identify students exposed to trauma earlier.

Teachers also acknowledge and learn about the impact of secondary traumatic stress on themselves during trauma-sensitive training (Atallah et al., 2019). Additionally, training not only provides awareness of secondary traumatic stress and other stressors but is negatively associated with secondary traumatic stress (Alisic et al., 2012). Teachers may also benefit from learning about self-care strategies and begin to address their own needs (Kazee et al., 2020). The findings above support the need for continuous training to be provided in schools, more so for public schools (Denham, 2018).

Additionally, for successful implementation of TIPs in schools, Schonert-Reichl (2017) suggests that providing knowledge on how to teach TIPs is not enough, but teachers also require training on developing their own social and emotional competence. For example, Jennings and Greenberg (2009), highlight that teachers with high social and emotional competence recognize and understand not only their own emotions, but others' emotions as well. Further, they have the

ability to use their emotions positively to motivate others to learn, they demonstrate prosocial values, and they have strong self-management skills. This allows teachers to provide emotional and instructional support for students more effectively (Schonert-Reichl, 2017). Hence, it is important to consider teachers' own wellbeing and social and emotional competence when providing trauma-sensitive training for teachers.

Finally, trauma-sensitive training can facilitate teacher buy-in on implementing TIPs in schools. For example, McIntyre and colleagues (2019) found that after two days of receiving training, teachers' growth of knowledge was linked with their higher acceptability ratings for TIPs. Further, it is important to have administrative support for the successful implementation of TIPs (Roberts, 2018). For example, as a collaborative effort, administrators can identify teachers within schools to actively promote the use of SEL curricula in classrooms (Zolkoski et al., 2021). The selected teachers would help administrators in building support for SEL programs among other teachers throughout the districts. The selected teachers may also provide feedback and recommendations that would benefit the implementation of the SEL program in the following year (Zolkoski et al., 2021). Hence, teacher support is instrumental in the adoption and sustainability of TIPs in schools. In the present study, it was expected that teachers implemented specific types of TIPs after receiving training in SEL, RPs, and SC.

### **The Current Study**

In the present study, teachers implemented SEL, RPs, and SC in public schools from three school districts in Midwestern United States. When implemented together in schools, these practices have the potential to improve the school climate and relationships (Guckenburg, 2015). There is growing research showing the effectiveness of each of these types of practices when

implemented in schools (e.g., Augustine et al., 2018; Jennings et al., 2017; Taylor et al., 2017), but more research is needed for a comprehensive understanding of teachers' role in this process.

Additionally, traumatic events experienced by students may also influence teachers' professional quality of life (Abraham-Cook, 2012; Stamm, 2010). Overall, existing research suggests that compassion satisfaction appears to play a protective role while compassion fatigue is prevalent and negatively impacts teachers in urban high-poverty public schools (Abraham-Cook, 2012; Christian-Brandt et al., 2020). Abraham-Cook's study also detected no relationship between years of experience and compassion fatigue among teachers, and suggests that compassion satisfaction and social support buffered the effects of teachers' lack of experience in the field. To the author's knowledge, there is only one study (Christian-Brandt et al., 2020) that examines professional quality of life and TIPs among teachers in public schools in the United States. Our current study sought to fill gaps in literature, given that our sample of teachers is from a predominantly rural state in the Midwest, by providing insight on teacher characteristics that promote or hinder the implementation of TIPs in schools in public schools in a different geographical region of the United States. The present study answers the following research questions: First, to what extent are teachers implementing TIPs in their schools? Second, does the teacher's quality of life play a role in their implementation of TIPs? Third, does teaching experience moderate the relationship between teacher's quality of life and implementation of TIPs? Fourth, does teachers' participation in trauma-sensitive training play a role in their implementation of TIPs in their schools?

## Methods

### Participants and Setting

Schools in three school districts in the Midwestern United States participated in a trauma-sensitive training series for at least three years. The trauma-sensitive training series provided in this program promoted a trauma-sensitive environment in schools for all staff and students. Hence, school building teams comprised of teachers, counselors, and administrators were trained on Social Emotional Learning, Restorative Practices, and Self-Care. After the training, school teams shared what was learned with the remainder of the building staff and implemented TIPs in their schools. Hence, the data was originally collected for an evaluation.

Since the data for the present study was drawn from a larger evaluation project, data from 324 teachers was selected from schools that had teams participating in this trauma-sensitive training series, but these teachers may or may not have been in the training themselves. Hence, the team in their building that had been trained may have trained these teachers. Participants ranged in age from 22 to 70 ( $M = 38.96$ ,  $SD = 10.84$ ). In addition, 82.8% were women while 16.8% and 0.4% identified as male and other, respectively. Most of the participants identified as White (92.6%) and 7.4% included other races/ethnicities such as Asian/Pacific Islander, Black/African American, Latino (a)/Hispanic, Native American/Alaska Native, and other.

### Procedure

Coordinators of the program recruited participants for the evaluation via email sent to teaching staff in each building that had a team participating in the training. Participants completed an online survey (see Appendix D) for the evaluation after the team from their building had been trained and had a chance to bring the training back to their schools. The self-

report surveys were completed anonymously online. Approval for the evaluation was obtained from the university's Institutional Review Board (IRB).

## Measures

**Demographic Characteristics.** Participants in the trauma-sensitive training program reported their age in years, gender, and race/ethnicity.

**Implementation of Trauma-Informed Practices.** A three-item scale created for this study was used to assess the extent to which teachers implemented TIPs in their classrooms, for example, "To what extent are you applying Social Emotional Learning into your practice?" The self-reported responses were rated on a 1 (*not at all*) to 4 (*almost always*) Likert-type scale. The average of the items was used with higher scores indicating more frequent implementation of TIPs.

**Professional Quality of Life.** The 30-item Professional Quality of Life Scale (ProQOL, Stamm, 2010) was adapted and used to assess the positive and negative effects of working with students who experience or have experienced traumatic events. This scale had two dimensions. The positive aspect, compassion satisfaction, had 10 items, for example, "I get satisfaction from being able to teach people." The negative aspect, compassion fatigue, had 20 items, for example, "I feel depressed because of the traumatic experiences of the people I teach." Some items are reverse scored to show that higher scores in each dimension correspond to greater agreement with the statements. Teachers provided responses on a 1 (*never*) to 5 (*very often*) Likert-type scale. The sum of items for each dimension was used with higher scores indicating greater agreement with statements in each dimension. High scores on compassion satisfaction reflect high levels of satisfaction related to the teacher's ability to be an effective helper while high scores on compassion fatigue reflect problematic levels of stress and frustration related to the

teacher's ability to be an effective helper. The reliabilities (Cronbach's  $\alpha$ ) for the compassion satisfaction and compassion fatigue dimensions in the current sample were .91 and .88 respectively. The ProQOL has shown acceptable validity and has been used in numerous studies with various target populations (Stamm, 2010).

**Teaching Experience.** A single item created for this study was used to assess participants' self-reported teaching experience. A dummy variable was created based on this item in which response options of "Less than 1 year" and "1 to 5 years" were coded as 0, "Less Experience", whereas response options of "6 to 10 years" and "More than 10 years" were coded as 1, "More Experience."

**Trauma-Sensitive Training.** Three items created for this study were used to assess whether teachers received training at their school on Social Emotional Learning, Restorative Practices, and Self-Care. Although teams from each school that received the original training were expected to then go back to their schools and train the rest of the school staff, they may or may not have done so. Teachers responded to questions such as, "Has your school provided training on Social Emotional Learning?" with a "Yes" or "No". The three items were treated separately without creating an overall measure; thus, a dummy variable was used for each item in which a response option of "No" was coded as 0 and "Yes" was coded as 1.

### **Data Analysis**

All data was analyzed using IBM SPSS Statistics version 27. Descriptive statistics were used to report teachers' demographic characteristics and the extent to which they implemented the different types of TIPs in their schools.

Additionally, a one-way between-subjects Analysis of variance (ANOVA) was conducted to determine if there were differences in teachers' implementation of TIPs in groups of

elementary, middle, and high schools from the three participating school districts. Low sample sizes within each school building precluded the use of school as the group variable. Hence, data from all teachers in schools of the same level (elementary, middle, or high schools) within each district were treated as a cluster based on the professional experiences and expectations shared by teachers of the same level schools in the same district. For example, professional development opportunities for teachers are usually provided at the district level.

To address the research questions, hierarchical multiple regression was used to examine professional quality of life as a predictor of the implementation of TIPs among teachers. The researcher considered age as a relevant control variable because previous research by Abraham-Cook (2012) demonstrated that variables such as age, years in the field, and perception of the working environment may contribute to compassion satisfaction and compassion fatigue. Thus, age was controlled to eliminate alternative explanations and to show the unique relationship between teachers' quality of life and their implementation of TIPs in their schools (Bernerth & Anguinis, 2016).

For the research question examining whether teachers' quality of life plays a role in their implementation of TIPs, each dimension of professional quality of life (compassion satisfaction and compassion fatigue) together with age and teaching experience was tested separately as a predictor, and the implementation of TIPs was the dependent variable. To assess the role of teaching experience as a moderator of the effect of teacher's professional quality of life on their implementation of TIPs, the following steps were taken to reduce multicollinearity between main effects and interaction terms. Variables of each dimension of professional quality of life (compassion satisfaction and compassion fatigue), age, and teaching experience were centered by subtracting the mean score from the original score. Interaction terms were then created by



multiplying the centered scores for teaching experience and each of the professional quality of life dimensions.

A third model was tested to examine whether teachers’ participation in trauma-sensitive training played a role in their implementation of TIPs in their schools. The dependent variable was implementation of TIPs and the predictors included the types of the trauma-sensitive training the teachers received (Social Emotional Learning, Restorative Practices, and Self-Care).

## Results

### Teachers’ Implementation of Trauma-Informed Practices in Schools

**Table 8**

*Frequency Data for the Implementation of Trauma Informed Practices among Teachers*

Category of Trauma-Informed Practices	<i>N</i>	%
Social Emotional Learning	291	89.8
Self-Care	288	88.9
Restorative Practices	286	88.3

*Note.* The total number of teachers in this sample was 324.

As indicated in Table 8, descriptive statistics showed that teachers in the three participating school districts reported that they implemented TIPs in their schools to a great extent. This is reflected by the percentages in the high eighties for each type of trauma-informed practice that was implemented by teachers in schools.

Additionally, a one-way between-subjects ANOVA was conducted to ascertain differences in the implementation of TIPs among teachers in groups of elementary, middle, and high schools from the three school districts. There were no significant differences in the implementation of TIPs among teachers across these groups,  $F(4,400) = 1.02, p = .40$ . This was clustered data, and if there were differences between schools then it would have been necessary

to use multilevel modeling. Hence, multilevel modeling was not used because no differences were found. Instead, hierarchical multiple regression analysis was an appropriate method of analysis for the current study.

### Main Effects of Professional Quality of Life among Teachers

**Table 9**

*Regression Analysis of Compassion Satisfaction Predicting the Implementation of Trauma-Informed Practices among Teachers*

Predictors	$\beta$	$sr^2$
Age	-.04	-.08
Compassion satisfaction	.32***	.09
More teaching experience	.13*	.01
Interaction between teaching experience and compassion satisfaction	.06	.00

Note.  $N = 295$ . Standardized betas are shown;  $sr^2$  is the squared semipartial correlation coefficient, the percentage of variance accounted for uniquely by the parameter. Teaching experience was coded as 0 = Less experience, 1 = More experience and then centered. \* $p < .05$ ; \*\*\* $p < .001$ .

Hierarchical multiple regression was used to examine professional quality of life as a predictor of the implementation of TIPs among teachers. When controlling for age, results demonstrated that professional quality of life was a significant predictor of teachers' implementation of TIPs in their schools. Table 9 shows that compassion satisfaction positively predicted teachers' implementation of TIPs in their schools. On the other hand, compassion fatigue negatively predicted teachers' implementation of TIPs in their schools (see Table 10). In both models, the implementation of TIPs increased with more teaching experience. Finally, age was not a significant predictor of teachers' implementation of TIPs.

**Table 10**

*Regression Analysis of Compassion Fatigue Predicting the Implementation of Trauma-Informed Practices among Teachers*

Predictors	$\beta$	$sr^2$
Age	-.04	-.08
Compassion fatigue	-.14*	.02
More teaching experience	.14*	.02
Interaction between teaching experience and compassion fatigue	-.12*	.01

Note.  $N = 295$ . Standardized betas are shown;  $sr^2$  is the squared semipartial correlation coefficient, the percentage of variance accounted for uniquely by the parameter. Teaching experience was coded as 0 = Less experience, 1 = More experience and then centered.

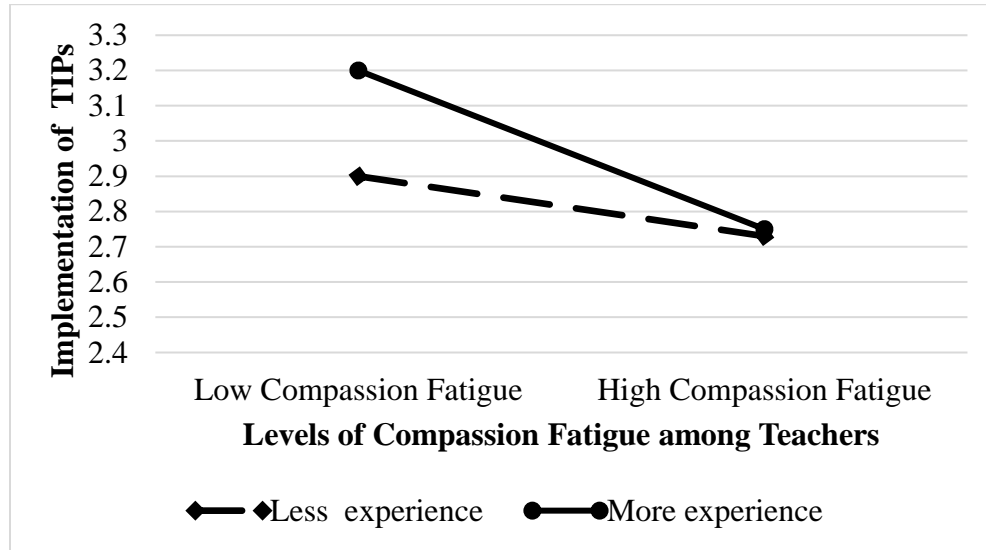
\* $p < .05$ .

### **Testing Teaching Experience as a Moderator**

Hierarchical multiple regression was used to examine whether teaching experience moderates the relationship between professional quality of life (compassion satisfaction and compassion fatigue) and the implementation of TIPs in schools among teachers. In the model with compassion satisfaction, teaching experience was not a significant moderator of this relationship. When interaction terms were added to this model, which included compassion satisfaction and teaching experience, there was an increase in  $R^2$ , but it was not significant. On the other hand, in the model with compassion fatigue, teaching experience was a significant moderator of this relationship. A significant increase in  $R^2$  was found when interaction terms were added to the model with compassion fatigue ( $R^2$  change = .01,  $p = .05$ ). Hence, teaching experience had a significant negative moderation effect on the relationship between compassion fatigue and the implementation of TIPs (refer to Table 10).

**Figure 2**

*Effects of Compassion Fatigue and Teaching Experience on Implementation of Trauma-Informed Practices*



Additionally, the post hoc simple slope analysis in Figure 2 shows that for teachers experiencing low levels of compassion fatigue, teachers with more experience appeared to implement more TIPs in their schools when compared to teachers with less experience. Finally, for teachers experiencing high compassion fatigue, both groups appeared to implement fewer TIPs in their schools when compared to teachers experiencing low compassion fatigue. Hence, when experiencing high compassion fatigue, teachers with more experience and teachers with less experience appeared to implement TIPs in their schools at about the same rates.

An independent-samples t-test was further conducted to compare levels of compassion fatigue for teachers with less experience with those with more experience. There were no significant differences in the levels of compassion fatigue for teachers with less experience ( $M = 49.24, SD = 10.00$ ) and teachers with more experience ( $M = 49.55, SD = 10.56$ );  $t(311) = -0.35, p = 0.81$ . Similarly, an independent-samples t-test was conducted to ascertain differences in the implementation of TIPs for teachers with less experiences and those with more experience. There

were marginally significant levels of differences in the implementation of TIPs for teachers with less experience ( $M = 2.72, SD = 0.54$ ) and teachers with more experience ( $M = 2.84, SD = 0.59$ );  $t(206) = -1.89, p = 0.06$ . The results suggested that compassion fatigue does not appear to become more prevalent with teaching experience, but its negative effects on TIPs implementation are greater for more experienced than less experienced teachers.

Finally, to determine whether there might be a nonlinear relationship between teaching experience and TIPs implementation, teaching experience was recoded into three groups. “Less than 1 year” and “1 to 5 years” were coded as 0, “Less Experience”, whereas response options of “6 to 10 years” were coded as 1, “Moderate Experience”, and “More than 10 years” were coded as 2, “More Experience.” Results of a one-way ANOVA indicated that there were no significant differences in the implementation of TIPs across these three teacher experience groups,  $F(2,321) = 2.39, p = .09$ , although the means of TIPs implementation did increase with experience.

Hierarchical multiple regression was used to examine whether less and more teaching experience, as opposed to moderate experience, moderated the relationship between professional quality of life (compassion satisfaction and compassion fatigue) and the implementation of TIPs. Results showed that no significant effects involving teaching experience coded in this way.

Overall, these results indicated that there were no nonlinear trends between teaching experience and the implementation of TIPs.

## Trauma-Sensitive Training and Implementation of Trauma-Informed Practices

**Table 11**

*Regression Analysis of Trauma-Sensitive Training Predicting the Implementation of Trauma-Informed Practices among Teachers*

Predictors	$\beta$	$sr^2$
Social emotional learning	.07	.00
Restorative practices	.33***	.09
Self-care	.25***	.05

*Note.*  $N = 295$ . Standardized betas are shown;  $sr^2$  is the squared semipartial correlation coefficient, the percentage of variance accounted for uniquely by the parameter.

\*\*\* $p < .001$ .

Hierarchical multiple regression was used to investigate whether teachers' participation in a series of trauma-sensitive training predicted their implementation of TIPs in schools. Table 11 reflected that teachers trained in Restorative Practices and Self-Care were more likely to implement these or other TIPs in their schools. In contrast, training in Social Emotional Learning did not significantly predict teachers' implementation of TIPs in schools.

### Discussion

The current study sought to determine whether compassion satisfaction, compassion fatigue, teaching experience, and training provided in schools influenced teachers' levels of implementation of TIPs. Studies focusing on teacher wellness are limited and existing studies mainly focus on urban public schools (Abraham-Cook, 2012; Christian-Brandt et al., 2020; Denham, 2018). Overall, the results indicated that teachers in three school districts in a predominantly rural state in the Midwest implemented TIPs to a great extent. Further, results suggested that teachers' professional quality of life should be considered as a contributing factor in promoting the implementation of TIPs in schools. Specifically, teachers experiencing high levels of compassion satisfaction were more likely to implement TIPs while those experiencing

compassion fatigue were less likely to do so. Teachers with more experience were also more likely to implement TIPs. Teaching experience also moderated the relationship between compassion fatigue and the implementation of TIPs among teachers, such that it had a more detrimental effect on teachers with more experience.

Finally, this study examined whether teachers' participation in trauma-sensitive training played a role in their implementation of TIPs in schools. Results demonstrated that training teachers provides opportunities for teachers to identify and address not only students' needs, but their own needs as well, thus improving their professional quality of life and the school environment. Teachers in the current study trained in RPs and SC were more likely to implement these or other TIPs in their schools.

### **Teachers and the Implementation of Trauma-Informed Practices**

The results of the current study demonstrated that the vast majority of teachers implemented SEL, SC, and RPs in their school districts (see Table 8). When a team was trained from each school building within the three school districts, a large majority of the teachers implemented one or more TIPs. Hence, this strategy appeared to be effective in facilitating the implementation of TIPs in all three school districts.

Further, certain attributes related to each type of practice may have played a role in teachers' motivation to implement TIPs in their classrooms, specifically when working with students exposed to trauma. First, teachers implemented SEL practices using a framework that included targeted and universal strategies to facilitate the instruction of SEL in their classrooms because it was accessible to teachers at the state level (North Dakota Multi-Tier System of Support, 2018). Using this framework allowed teachers to provide the appropriate resources for students in the classroom or provide caregivers with appropriate referrals to mental health

services (Cole et al., 2005; Wolpow et al., 2016). Second, teachers implemented SC strategies to address their own needs as previous research suggested that teacher stress may negatively impact the quality of education in schools (Greenberg et al., 2016). The current study provides reinforcing evidence to suggest that SC strategies implemented in schools may help reduce teachers' stress related to teaching and promote learning in the classroom. Finally, teachers implemented RPs to fulfill the goal of providing an environment where students are calm and focused to increase student learning (Perry, 2009). Hence, it is possible that teachers in the current study integrated non-punitive strategies to manage conflict in the classrooms and focused on repairing and maintaining positive relationships (Fronious et al., 2016). Overall, the current findings contribute to literature on SEL, SC, and RPs implemented in trauma-informed public schools, specifically in a predominantly rural state in the Midwest.

Finally, the current study demonstrates the importance of providing support to teachers for the successful adoption and facilitation of the implementation of TIPs in schools (Robert, 2018). Results indicated that teachers in elementary, middle, and high schools from the three school districts appeared to implement TIPs at about the same rates, thus no differences were detected. Additionally, as shown in Table 8, the percentages were in the high eighties for each type of trauma-informed practice that was implemented by teachers in the three school districts. Roberts (2018) suggested that for the implementation of programs such as SEL, SC, and RPs to be successful, it is important for administrators to identify teachers within school districts to actively promote it in their classrooms. Teachers in the current sample played a similar role and the findings demonstrated that they actively promoted the use of these practices in their classrooms. Further, teachers in the current sample also helped build support for the implementation of SEL, SC, and RPs among teachers in the three school districts. Hence, the



findings provide an in-depth understanding of the benefits of teacher buy-in as a contributing factor to the adoption and sustainability of the implementation of TIPs in schools (Christian-Brandt et al., 2020).

### **Teachers' Professional Quality of Life and the Implementation of Trauma-Informed Practices**

As was hypothesized, professional quality of life predicted teachers' implementation of TIPs in their schools. Teachers experiencing compassion satisfaction were more likely to implement TIPs in their schools. This finding is consistent with previous research that demonstrates that compassion satisfaction plays a protective role in teacher wellbeing (Abraham-Cook, 2012; Caringi et al., 2015; Christian-Brandt et al., 2020). For example, teachers experiencing compassion satisfaction were less likely to feel burnout and felt a sense of self-efficacy when working with students exposed to trauma; hence, compassion satisfaction was also a potential protective factor for secondary traumatic stress among teachers (Abraham-Cook, 2012; Caringi et al., 2015). Further, Christian-Brandt et al. (2020) found that teachers with high levels of compassion satisfaction had more positive beliefs towards the effectiveness of TIPs. In our current study, it is possible that teachers experiencing compassion satisfaction had positive beliefs towards the effectiveness of TIPs and were highly motivated to implement TIPs in their schools. Teachers in the current study experiencing compassion satisfaction may have also felt more invigorated in helping students exposed to trauma that they felt less burnout or secondary traumatic stress in the process, thus they implemented more TIPs in their classrooms. Since compassion satisfaction among teachers is understudied, this study provides supporting evidence to demonstrate the need to promote compassion satisfaction among teachers. This can be an effective way of helping disrupt the negative trajectory of trauma in students as well as teachers.

The current findings also demonstrated that compassion fatigue negatively predicts teachers' implementation of TIPs in schools. Teachers experiencing compassion fatigue were less likely to implement TIPs in their schools. These results are consistent with previous research suggesting that teachers experiencing compassion fatigue may experience occupational stress including burnout and secondary traumatic stress, which may contribute to their low self-efficacy in helping students, including those exposed to trauma (Abraham-Cook, 2012; Borntrager et al., 2012). This may justify why teachers experiencing compassion fatigue were less likely to implement TIPs in their schools. However, these results are contrary to Christian-Brandt and colleagues' study (2020) indicating that teachers experiencing secondary traumatic stress, which constitutes an element of compassion fatigue for the present study, had more positive beliefs towards the effectiveness of TIPs. Christian-Brandt and colleagues (2020) suggested that teachers experiencing secondary traumatic stress may be more receptive towards trauma informed care in schools. With these findings, teachers experiencing compassion fatigue would be expected to implement more TIPs in their schools. Hence, more research in this area is needed to provide a more comprehensive understanding.

### **Teaching Experience and Implementation of Trauma-Informed Practices in Schools**

Results of this study also highlighted that the implementation of TIPs increased with more teaching experience. It is possible that teachers gained more opportunities to receive trauma-sensitive trainings with each additional year gained in the field of teaching. This was possible because teachers in schools within each district had professional development opportunities provided at the district level. Hence, teachers in the three school districts shared professional experiences and expectations for implementing TIPs.

Contrary to the hypothesis, teaching experience had no moderation effect on the relationship between compassion satisfaction and the implementation of TIPs among teachers. Instead, teaching experience significantly moderated the relations between compassion fatigue and teachers' implementation of TIPs. Other findings in the current study are consistent with existing research conducted by Abraham-Cook (2012) suggesting that there was no relationship between teaching experience and compassion fatigue. It was expected that teachers with more experience and compassion satisfaction would have more opportunities to develop coping skills and self-efficacy to prevent the escalation of burnout or secondary traumatic stress (Abraham-Cook, 2012). However, the current results are not consistent with the findings of Christian-Brandt and colleagues (2020) that suggested that teachers experiencing secondary traumatic stress may be eager and more receptive towards trauma informed care in schools. The findings of the current study may justify the moderation effect between teaching experience and compassion fatigue among teachers in the current sample.

For teachers experiencing low levels of compassion fatigue, results suggested that teachers with more experience implemented more TIPs when compared to teachers with less experience. It is possible that teachers with more experience had more training opportunities in the past and in this process they gained awareness of symptoms of secondary traumatic stress and burnout and used more effective coping strategies (Atallah et al., 2019; Kazee et al., 2020). On the other hand, due to the nature of burnout, which typically develops over months or years unlike secondary traumatic stress that occurs after one encounter, teachers with less experience had poor coping skills, low self-efficacy, and felt inadequate in their ability to control their environment in order to effectively meet their students' needs (Hoffman et al., 2007). As a result, teachers with more teaching experience were in a better position to empathetically engage and

empower their students and because they had developed better coping skills over the years in teaching, they were also open to empathy or empowerment from their colleagues or students (Jordan, 2010). Hence, the mutual relational benefit between teachers with more experience and their students or colleagues allowed them to implement more TIPs in their schools.

For teachers experiencing high compassion fatigue, results also indicated that teachers with more experience and teachers with less experience appeared to implement TIPs in their schools at about the same rates. Further, results from the t-tests that detected no differences in the levels of compassion fatigue and marginally significant levels of differences in the implementation of TIPs suggested that compassion fatigue does not appear to become more prevalent with teaching experience, but its negative effects on TIPs implementation are greater for more experienced than less experienced teachers. Hence, teachers experiencing high compassion fatigue appear to implement fewer TIPs in schools as a result. Since the current study did not assess burnout and secondary traumatic stress separately but examined these two components as one combined negative aspect of professional quality of life, the results should be interpreted with caution. The current study included both negative aspects (burnout and secondary traumatic stress) because work related-trauma may be a combination of both aspects as they have feelings of distress in common (Stamm, 2010). More research on teachers' professional quality of life is warranted.

### **Trauma-Sensitive Training on Teachers' Implementation of Trauma-Informed Practices in Schools**

Teachers are in an optimal position to teach coping skills, model emotional processing and problem-solving, and establish psychological safety by providing consistent expectations and routines in the classroom (Baum et al., 2009). This can only be achieved if teachers receive

adequate support and training as well (Alisic et al., 2012). The results of the present study showed that teachers trained in RPs were more likely to implement these or other TIPs in their schools. Training in RPs provided both teachers and students opportunities to self-regulate their emotions; this is a critical element in the trauma recovery process (van der Kolk, 2003). For example, both teachers and students may have used self-regulation skills such as active listening where both the teacher and student could label feelings and engage in reflective problem-solving during conflict resolution processes (Hurley et al., 2015; van der Kolk, 2003). Therefore, RPs provided opportunities for students exposed to trauma to co-regulate their emotions with their teachers and as a result, teachers did not have to rely on punishment for misbehavior in the classroom (Bath, 2008). These findings provided evidence highlighting that healing from trauma may occur in non-clinical settings such as the school with teachers providing an environment that enables students to heal and experience growth (Bath, 2008).

Trauma-sensitive training is beneficial for teachers as they can address their own physical and emotional needs (Kazee et al., 2020). The results of the current study highlight that teachers trained in SC were more likely to implement these or other TIPs in their schools. During training, teachers may have gained knowledge and skills on how to recognize and respond to various stressors in the school environment such as burnout and secondary traumatic stress (e.g., Atallah et al., 2019; Maslach & Leiter, 2016; Schepers, 2017). Further, teachers also implemented self-care strategies to enhance not only their professional quality of life, but also their personal wellbeing (Boogren, 2018; Fisher, 2015; Shepell, 2019). Teachers in the current sample may have engaged in mindfulness and stress reduction techniques to improve their wellbeing (Jennings et al., 2017). Like RPs, SC strategies allowed teachers to develop their own social and

emotional competence, which greatly contributes to teachers' provision of effective emotional and instructional support in the classroom (Jennings et al., 2009; Schonert-Reichl, 2017).

Overall, the findings from the current study highlight the importance of providing training for teachers. Although there is no widely accepted model of RPs (Hurley et al., 2015), the current study provides evidence to show that teachers are using these practices in schools, likely because they recognize that there are multiple positive effects related to discipline and the school climate. Additionally, training teachers on SC builds resilience for both teachers and students, hence this supports the need to provide self-care at individual and organizational levels (Kazee et al., 2020). Results indicate that teachers are more likely to implement practices that directly benefit them as demonstrated by the self-care strategies and restorative processes. Teachers can readily observe changes in themselves and others while implementing these practices. In this instance, TIPs are effective when both teachers and students are part of the process. Hence, a collaborative effort strengthens the student-teacher relationship while increasing emotional and physical safety in the school environment.

### **Limitations and Future Directions**

There are limitations of this study to be considered. First, the sample of teachers in our study was homogeneous in regard to race/ethnicity. Most of the participants identified as White (92.6%), hence racial and ethnic differences could not be ascertained fully. Since research focusing on TIPs and quality of life among teachers is limited, future research should continue to consider diverse samples. Second, all measures used for this study were self-reported, and the data was collected at a single time point. Although this study was anonymous, there may have been selection bias and social desirability with an increased chance that teachers who were open to sharing their perspectives regarding their professional quality of life and implementation of

TIPs in their schools are the ones who agreed to complete the surveys online. Third, the results of the current study should be interpreted with caution because burnout and secondary traumatic stress were not assessed separately, but these were examined as one combined negative aspect of professional quality of life. Future research should focus on the negative aspects of professional quality of life separately, and longitudinal data will also make research in this area more comprehensive. Future research should also test whether the adverse childhood experiences of teachers has an effect on their implementation of TIPs. Finally, future research should examine whether training may have an effect on compassion satisfaction and compassion fatigue among teachers, which in turn may have an effect on their implementation of TIPs.

### **Strengths and Implications**

This study makes several contributions to literature. The implementation of TIPs was considered in the present study to be an important aspect of promoting emotional and academic wellbeing of students and the role that teachers play in this process. The findings are consistent with the Ecological Model (Bronfenbrenner, 1977;1979) that demonstrates that teachers are well represented at all levels, that is, individual, interpersonal, and community systems. Teachers directly interact with students and spend more time with them when compared to other school staff members; teachers facilitate relationships and interactions in school (e.g., student-peer and parent-teacher interactions); teachers can be a part of the school and state policies that can influence the implementation of TIPs in schools; and teachers' implementation of TIPs can positively impact the wellbeing of students, including those exposed to trauma. Hence, teachers' efforts and contributions are greatly valued.

Moreover, the findings of this study demonstrate that teachers continue to play a pivotal role in the successful implementation of TIPs in their schools, but only if their professional

quality of life is considered. With limited research focusing on teachers' wellbeing, the findings provided reinforcing evidence to show that professional quality of life can be promoted if teachers receive adequate support and training to prevent the escalation of compassion fatigue. When teachers' emotional and physical needs are met, there is an increased chance that they will implement TIPs effectively in their schools. More so, if the TIPs implemented allow both students and teachers to be part of the process. Hence, including RPs and SC together with other TIPs will be beneficial for teachers as well as students. Overall, this study captures a wide range of teachers' experiences related to their implementation of TIPs and professional quality of life and provides information that could guide school leaders as well as mental health professionals to provide TIPs that will meet the needs of everyone in the school environment.

## **Conclusion**

The current study provides supporting evidence that shows that teachers implement TIPs in their schools to a great extent. Additionally, the provision of training and the teachers' professional quality of life greatly influence teachers' level of implementation of TIPs. Finally, this study clearly demonstrates the need for more research to assess TIPs that enhance not only students' wellbeing but their teachers' as well.



## **GENERAL DISCUSSION**

The current research sought to examine the concept of prevescalation through the lens of trauma by exploring the implementation of TIPs in schools as a potential prevescalation strategy. Two separate studies examined the role of students and teachers in the implementation of TIPs. The findings of the current research highlight that training students and teachers in TIPs promotes emotional and physical safety in schools and helps adolescents exposed to trauma build resilience, thus hindering the progression of the effects of trauma. Moreover, the findings from the current research demonstrate that students and teachers can train others in the school environment by using mentoring strategies such as peer tutoring and cross-age tutoring. These strategies make TIPs more accessible for everyone in the school environment, so that students, teachers, and other school staff can adopt TIPs across the entire school system. These findings provide supporting evidence highlighting that TIPs are not only beneficial for students, but are beneficial for everyone in the school environment. Hence, everyone builds resilience and prevents the escalation of trauma effects in the school environment.

### **Prevescalation in the Context of Trauma**

The current research highlighted the importance of implementing prevescalation strategies such as TIPs in adolescence because this is the critical period for addressing mental health (Soleimanpour et al., 2017). Results of study one indicated that 38.5% of adolescents in the sample had multiple ACEs, including emotional abuse, emotional neglect, and living with a household member engaging in substance abuse. Results of this study further demonstrated that some students with no ACEs reported mental health challenges such as depression and anxiety. Nonetheless, students in this study were proactive in implementing self-care strategies to promote their emotional wellbeing (Uzuncakmak & Beser, 2017). These findings provide

supporting evidence that adolescence may be the optimal time to educate individuals on strategies that promote better health and wellbeing as adolescents begin to understand and take control of their health, leading to more sustainable self-care routines that may continue in adulthood (Zare et al., 2020).

The current research also suggests that while providing TIPs in schools promotes students' wellbeing, it is important to consider the wellbeing of some of the key players in the implementation of TIPs such as teachers (Christian-Brandt et al., 2020). The results of the study on teachers showed that their professional quality of life and the type of training received played a role in the extent to which they implemented TIPs in their schools. For example, teachers experiencing compassion satisfaction were more likely to implement TIPs when compared to teachers experiencing compassion fatigue. These results also indicated that when trained, teachers were likely to implement Self-Care and Restorative Circles. Training and implementation of TIPs allows teachers to gain awareness of the symptoms associated with compassion fatigue, thus they implemented these practices in their schools. Providing support and training for teachers, specifically those experiencing compassion fatigue, is crucial. Our findings suggest that teachers effectively implement TIPs in their schools when their emotional and physical needs are met, which may help disrupt the negative trajectory of trauma in teachers as well as students.

### **Preescalation in the Context of Trauma: A Framework of Self-Determination Theory**

The current research provided a unique contribution in the field of prevention science in relation to the concept of preescalation, which to the researcher's knowledge has only been established in preventive interventions for substance abuse among emerging adults (e.g., Bernal, 2019; Cheng & Anthony, 2018; Villanti et al., 2019). The findings of the study focusing on

students demonstrated that self-determination theory provides an important framework for exploring the concept of preescalation in the context of trauma. Self-determination theory attributes healthy development to the fulfillment of the three basic psychological needs, which are autonomy, competence, and relatedness (Ryan & Deci, 2017). The degree of support individuals receive that facilitates their fulfillment of these needs is crucial in the healthy development of individuals, more so for individuals who did not receive adequate support during childhood or continue to experience adversity in adolescence (Soleimanpour et al., 2017).

Trauma-informed schools provide a support system that facilitates healthy development among students exposed to trauma. The educational wellbeing of students exposed to trauma may be improved by having caring adults in the school provide support and guidance for them (Greeson et al., 2010). For example, the study on students showed that teachers and school counselors may be in a better position to provide social support to students exposed to trauma because they are usually the first responders to emotional and behavioral crises and have more opportunities to build strong relationships with these students when compared to other staff members (Hydon et al., 2015). As a result, relatedness among students exposed to trauma is enhanced through positive interactions with teachers, school counselors, and with peers.

Additionally, TIPs are provided in a safe structured environment that promotes students' development of competence. The study on students indicated that teachers may provide opportunities for students to make choices. Furthermore, teachers may encourage students to take an active role in class, provide positive feedback, and design enticing and appropriately challenging activities that students want to participate in. Hence, school engagement among students exposed to trauma is improved (Cole et al., 2005).

Finally, the implementation of TIPs in schools may facilitate students' development of autonomy. Given that the findings of the study on students suggested that students exposed to trauma in adolescence are at risk for exposure to multiple ACEs, TIPs include strategies that can help them regulate negative emotions (Cook et al., 2003). For example, Restorative Circles allow students exposed to trauma to co-regulate their emotions with their teachers as they use self-regulation strategies such as active listening and reflective problem solving in conflict resolution processes (van der Kolk, 2003). Students develop autonomy as they take ownership of their actions and feelings resulting in peaceful resolution. Additionally, the findings of the study on students demonstrated teachers provided guidance and support when they allowed students to select and plan activities such as mental health weeks before implementing them in their schools. Hence, teachers create an environment of shared control, which gives students exposed to trauma a sense of ownership and control of their environment (Wolpow et al., 2009). As illustrated in the current research, self-determination theory is well suited for addressing the educational, social, and emotional needs of students exposed to trauma by using prevescalation strategies such as TIPs in their schools.

### **The Role of Students and Teachers in the Implementation of Trauma-Informed Practices in Schools**

The current research reinforces the need to promote collaboration in the implementation of TIPs (Phifer & Hull, 2016). Both studies highlighted that involving students and teachers appeared to be an effective way of disseminating knowledge and skills in trauma-informed schools. In the study on students, it was beneficial to have a group of students implementing TIPs because they were aware of their own needs as students; hence, the activities related to TIPs were tailored to meet these needs. For example, this group of students used mental health weeks

to share information related to mental health with other students during the busiest time of the semester because they were aware that it was a time when most students experienced stress due to the heavy schoolwork load. This study also showed that students had more influence on promoting positive behaviors in the school when compared to adults as demonstrated by the reduction of discipline issues and more engagement in extracurricular activities among other students in the schools. Teachers in the second study had more opportunities to implement TIPs because they had direct interactions with students when compared to other staff members, making it easier for teachers to provide support necessary for students in the classroom or identify students in need of intensive support and refer them to appropriate services. While each study captures students' and teachers' experiences related to their roles in the implementation of TIPs separately, this research shows that it is possible to train both teachers and students in the same environment to increase their knowledge of TIPs and to reinforce skill building to cope with current ACE symptoms and respond to future stress in the school environment. Moreover, collaboration between students and teachers may be possible because TIPs such as Social Emotional Learning and Restorative Circles emphasize relationship building with teachers and others in the school environment. As such, student-teacher relationships may be strengthened in this process. Given that trauma-informed schools play a role in addressing challenges related to access to mental health services for students (Baweja et al., 2016), collaboration is essential for the successful implementation of TIPs in schools.

Moreover, the current research highlighted that using mentoring as a strategy for implementing TIPs may lead to improvements in behavior not only for individual students, but also for everyone in the school system. The schools involved in both studies use mentoring as a strategy for training others on TIPs related to Social Emotional Learning, Self-Care, and

Restorative Practices. The teachers' study highlighted aspects of peer tutoring where teachers participating in a trauma-sensitive training series shared TIPs with the remainder of the building staff. The study on students demonstrated peer tutoring and cross-age tutoring when a group of students trained younger and same age students, as well as teachers on similar TIPs described in the teachers' study. This mentoring strategy appeared to be effective in facilitating the implementation of TIPs in schools. Since the adoption of TIPs involves system-level changes (Colorado Department of Education, 2018), the findings from both studies showed that these aspects of mentoring (peer tutoring and cross-age) improved the accessibility of TIPs to everyone in the school environment. Improved accessibility also helped to mobilize support among students and other staff members, which in turn helped to create positive change in the schools. Since the implementation of TIPs in the schools in both studies was ongoing, system-wide change was also in the process.

Finally, the findings of the current research showed that trauma-sensitive training may facilitate buy-in on the implementation of TIPs in schools. In both studies, specific groups including students and teachers actively promoted the implementation of Social Emotional Learning, Self-Care, and Restorative Circles in their schools. Groups of students and teachers also helped build support for the implementation of these practices among students and teachers. Specifically, the findings from the study on students showed that teachers were motivated to implement TIPs in their classes when they noticed that students perceived this to be important. Hence, the findings of the present research provide supporting evidence that students and teachers greatly contribute to the adoption and sustainability of TIPs in schools.

### **Limitations and Future Directions**

There are limitations of this research to be considered. First, cross-sectional data was used to examine the concept of preescalation of trauma. For more in-depth understanding, future studies should consider examining the same individuals from adolescence to adulthood to ascertain whether training adolescents and allowing them to implement TIPs disrupts the negative trajectory of ACEs in adulthood. Potential longitudinal studies may examine students from high school to college to ascertain the impact of implementing TIPs in their lives. Second, all measures used were self-reported; hence, there may have been selection bias and social desirability effects. Third, the samples in the two studies were homogeneous. For example, in both studies the majority of participants identified as White. This reflective of this geographical area of the United States as both samples were from a predominantly rural state in the Midwestern United States (United States Census Bureau, n.d.). Future research should consider diverse samples in different regions of the United States to ascertain differences in the implementation of TIPs among students and teachers.

### **Strengths and Implications**

This research contributes by demonstrating that students and teachers play a role in promoting emotional and physical wellbeing in the school environment. Furthermore, the findings demonstrated the importance of the provision of support for teachers and students in this process as they implement preescalation strategies such as TIPs in schools. The current research also demonstrated that mentoring may be used to promote the accessibility and buy-in of TIPs in schools as demonstrated when teachers and students used peer tutoring and cross-age mentoring to train students and teachers in their schools. These findings reinforce the need to continue providing TIPs in schools because TIPs not only directly benefit the students and teachers

training others, but TIPs promote the safety and wellbeing of everyone. Finally, the current research acknowledges the strengths of using mixed-methods procedures to provide a comprehensive understanding of the concept of preescalation related to trauma (Creswell & Creswell, 2017). Hence, quantitative and qualitative data collection methods were conducted separately with different research questions and target populations (high school students and teachers) in the school environment with the intention of providing insight on the concept of preescalation and trauma (Creswell & Creswell, 2017).

### **Conclusion**

The current research demonstrated that TIPs have the potential to promote positive experiences in the school environment. The findings showed the need to continue providing preescalation strategies such as TIPs with students and teachers playing an active role. Further, providing support for both students and teachers is vital for the successful implementation of TIPs. Hence, the current research clearly demonstrates that trauma-informed schools promote emotional, social, and physical safety while enhancing the wellbeing of everyone in the school environment.



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## APPENDIX A. THE ADVERSE CHILDHOOD EXPERIENCES QUESTIONNAIRE

**While you were growing up, during your first 18 years of life:**

Did a parent or other adult in the household **often** ...

Swear at you, insult you, put you down, or humiliate you?

**or**

Act in a way that made you afraid that you might be physically hurt?

Yes    No

Did a parent or other adult in the household **often** ...

Push, grab, slap, or throw something at you?

**or**

**Ever** hit you so hard that you had marks or were injured?

Yes    No

Did an adult or person at least 5 years older than you **ever**...

Touch or fondle you or have you touch their body in a sexual way?

**or**

Try to or actually have oral, anal, or vaginal sex with you?

Yes    No

Did you **often** feel that ...

No one in your family loved you or thought you were important or special?

**or**

Your family didn't look out for each other, feel close to each other, or support each other?

Yes    No

Did you **often** feel that ...

You didn't have enough to eat, had to wear dirty clothes, and had no one to protect you?

**or**

Your parents were too drunk or high to take care of you or take you to the doctor if you needed it?

Yes No

Were your parents **ever** separated or divorced?

Yes No

Was your mother or stepmother:

**Often** pushed, grabbed, slapped, or had something thrown at her?

**or**

**Sometimes or often** kicked, bitten, hit with a fist, or hit with something hard?

**or**

**Ever** repeatedly hit over at least a few minutes or threatened with a gun or knife?

Yes No

Did you live with anyone who was a problem drinker or alcoholic or who used street drugs?

Yes No

Was a household member depressed or mentally ill or did a household member attempt suicide?

Yes No

Did a household member go to prison?

Yes No

## **APPENDIX B. INTERVIEW QUESTIONS FOR ADOLESCENTS**

### **1. Tell me about yourself.**

- How old are you?
- What grade are you?

### **2. Adolescent's experiences**

- How would you describe the Social Emotional Learning elective class you were taking?
- Why did you decide to take this class?
- Did you have a leadership role? Please describe.
- What did you learn?
- What was the best part of the class?
- What else would you like to learn?

### **3. How has the implementation of trauma-informed practices affected the adolescents in the short and long range?**

Did you learn anything about yourself or your capabilities? Please share your experiences from before and after the class when answering each of the following questions:

- Please describe any academic changes that occurred as a result of the practices implemented at your school (please provide specific examples).
- Please describe any behavioral changes that occurred as a result of the practices implemented at your school (please provide specific examples).
- Please describe any relationship and social interactions that occurred as a result of the practices implemented at your school (please provide specific examples).

### **4. Any additional comments or thoughts?**



## **APPENDIX C. INTERVIEW QUESTIONS FOR THE SCHOOL STAFF**

1. How would you describe the trauma-informed practices implemented at your school?
  - What changes (if any) have you observed for both teachers and student as a result of the implementation of trauma-informed practices at your school?

### **School staff's experiences (The superintendent, school counselors, and teachers).**

2. What impact have the trauma-informed practices had on adolescents' behavior and learning outcomes?
  - Please describe the academic changes you observed after students took the class.
  - Please describe the behavioral changes you observed after students took the class.
  - Please describe relationship and social interactions you observed after students took the class.
3. How would you describe your experience being trained by students?
  - What benefits did you observe when students trained teachers?
  - What challenges did you observe when students trained teachers?
4. Any additional comments or thoughts?

## **APPENDIX D. BUILDING COMPASSIONATE SCHOOLS SURVEY**

### **SECTION I**

Please state your role within your school

1. Administrator
2. Teacher
3. Paraprofessional
4. Counselor/Behavioral Health
5. Other. Please specify\_\_\_\_\_

How long have you been in your role?

1. Less than 1 year
2. 1 to 5 years
3. 6 to 10 years
4. More than 10 years

Has your school provided training on Social Emotional Learning?

1. No
2. Yes

To what extent are you applying Social Emotional Learning into your practice?

1. Not at all
2. Rarely
3. Sometimes
4. Almost always

Has your school provided training on Restorative Practices?

1. No

2. Yes

To what extent are you applying Restorative Practices into your practice?

1. Not at all
2. Rarely
3. Sometimes
4. Almost always

Has your school provided training on Self Care?

1. No
2. Yes

To what extent are you applying Self Care into your practice?

1. Not at all
2. Rarely
3. Sometimes
4. Almost always

## **SECTION II**

When you [*help*] people you have direct contact with their lives. As you may have found, your compassion for those you [*help*] can affect you in positive and negative ways. Below are some questions about your experiences, both positive and negative, as a [*helper*].

Consider each of the following questions about you and your current work situation. Select the number that honestly reflects how frequently you experienced these things in the *last 30 days*.

**1=Never 2=Rarely 3=Sometimes 4=Often 5=Very Often**

\*Please note that the word *help* may be replaced with *teach* and the word *helper* may be replaced with *teacher* or *school professional* to suit the roles of participants.

I am happy.

I am preoccupied with more than one person I [*teach*].

I get satisfaction from being able to [*teach*] people.

I feel connected to others.

I jump or am startled by unexpected sounds.

I feel invigorated after working with those I [*teach*].

I find it difficult to separate my personal life from my life as a [*teach*].

I am not as productive at work because I am losing sleep over traumatic experiences of a person I [*teach*].

I think that I might have been affected by the traumatic stress of those I [*teach*].

I feel trapped by my job as a [*teach*].

Because of my [*teaching*], I have felt "on edge" about various things.

I like my work as a [*teacher*].

I feel depressed because of the traumatic experiences of the people I [*teach*].

I feel as though I am experiencing the trauma of someone I have [*taught*].

I have beliefs that sustain me.

I am pleased with how I am able to keep up with [*teaching*] techniques and protocols.

I am the person I always wanted to be.

My work makes me feel satisfied.

I feel worn out because of my work as a [*teacher*].

I have happy thoughts and feelings about those I [*teach*] and how I could help them.

I feel overwhelmed because my case [work] load seems endless.

I believe I can make a difference through my work.

I avoid certain activities or situations because they remind me of frightening experiences of the people I [*teach*].

I am proud of what I can do to [*teach*].

As a result of my [*teaching*], I have intrusive, frightening thoughts.

I feel "bogged down" by the system.

I have thoughts that I am a "success" as a [*teacher*].

I can't recall important parts of my work with trauma victims.

I am a very caring person.

I am happy that I chose to do this work.

### **SECTION III**

How do you describe yourself?

1. Female
2. Male
3. Other. Please specify: \_\_\_\_\_

Please describe the race / ethnicity you most closely identify with

1. White
2. Asian / Pacific Islander
3. Latino(a) / Hispanic
4. Native American/Alaska Native
5. African American.
6. Other. Please specify\_\_\_\_\_

Please state your age \_\_\_\_\_

Please state your school district \_\_\_\_\_

Please state your school building \_\_\_\_\_

**Please click the arrow at the bottom of this box to submit your responses successfully.**

**Thank you for completing the survey!**