

**TEACHER WELLBEING AND TRAUMA-INFORMED INTERVENTIONS IN AN  
ALTERNATIVE EDUCATION MIDDLE/HIGH PUBLIC CHARTER SCHOOL**

by

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## **DEDICATION**

I dedicate this work to all the people in my life who made this possible.

To my parents for their continuous support, encouragement, and example of what love is.

Mary and George Wolfe

To my loving husband for being an amazing partner and parent to our children.

Jim Vanderwill

To my children thank you for being patient and waiting till I finished writing a sentence before asking a question, I absolutely love the humans you are.

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Mary, Jennifer, Amy, Kristy and Jill

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## **Chapter 1: Introduction to the Three Article Dissertation**

### **Introduction Statement**

Trauma-informed school-based interventions (TISB) are designed to educate teachers, staff, and administration on the impact trauma has on the student's development, behavior, and academic life in order to improve academic success. One purpose of TISB intervention is to change perceptions and beliefs about the origin of student behaviors. Specifically, TISB challenges the traditional approach to behavior by introducing inclusionary methods of discipline, focusing on improving student/teacher relationships, and building students' coping skills. Within a trauma-informed perspective, teachers, staff, and administration are required to model trauma-informed behavior and emotional intelligence to their students. Teachers, staff, and administration must be self-aware, have necessary coping skills to maintain self-regulation, and understand not only the impact of trauma on their students but also recognize the impact of their own trauma histories on their work. All these skills rely on teacher wellbeing. A trauma-informed approach is imperative especially for those teaching in alternative and second chance academies that serve court-involved youth. The rationale for why teacher wellbeing is an important component of a TISB intervention will be examined from multiple perspectives: teacher attrition, student/teacher relationship building, student mental and emotional health, and student academic outcomes. A description of trauma-informed school-based interventions and how they intersect with teacher wellbeing and improvement of student outcomes will be outlined.

### **Alternative Education**

While there is not one unified definition of an alternative school across the United States, most agree that alternative education and second chance academies are designed to meet the needs of students who are at high risk of failure and whose needs cannot be met through traditional

educational means (Lehr, Tan, & Ysseldyke, 2009). Alternative education may be a choice, but more often they are mandatory placements for youth as a result of expulsion or problematic behavior (Lehr, Tan, Ysseldyke, 2009). A study in an alternative school reported that students who were successful in school were more likely to rate higher in the area of school and social engagement, participated in the classroom and completed tasks, and demonstrated the ability to work toward goals (Lange & Lehr, 1999). This implies that academic success is in part due to the students/teacher relationship and the students' attachment with the school.

In addition to youth characteristics that may lead to adverse educational experiences, the limited research conducted in these environments suggests that schools have a difficult time finding teachers who are trained specifically for this population. A study in Louisiana that included 78 residential treatment school educators found several barriers to quality education included "lack of support from administration, low staff morale, safety issues, unrealistic expectations for students, and low student motivation" (Development Services Group (DSG) 2019, p 7; Houchins et al., 2009). Trauma-informed training provides skills to teachers and staff to build positive relationships with their students and promote safe and secure school environments to which students can build a healthy attachment. While some studies have examined the experience of teachers and staff in residential treatment schools (DSG, 2019), there is a gap in research on preservice trauma training or training in general specific to teachers in alternative educational environments.

There is a dearth of recent research detailing the characteristics of those that attend alternative educational settings. An early study in 1996 detailed that the student population served in alternative educational settings was over-representative of adolescents of color and twice as likely to report physical abuse, familial substance use issues, and engagement in delinquent

behaviors than those in general population (Fulkerson, Harrison, & Beebe, 1997). Students who attend alternative schools are also more likely to display risky behaviors such as drug use, sexual activity resulting in pregnancy, emotional/behavior problems and/or criminal involvement (Lehr, Tan, & Ysseldyke, 2009).

Of interest is the gender differences in experience between the female and male students in alternative education and the child welfare system. Females (26%) reported experiencing sexual abuse at a higher rate than males (6%) (Fulkerson, Harrison, & Beebe, 1997). Females in alternative educational settings were one and a half times more likely to report sexual abuse than those in general education settings (Fulkerson, Harrison, & Beebe, 1997). Additionally, it was found that 17% of females in the alternative education setting experienced multiple experiences of sexual or physical abuse (Fulkerson, Harrison, & Beebe, 1997). The rate of female pregnancies in alternative education was 6 times higher than in general education (Fulkerson, Harrison, & Beebe, 1997). Additionally, exposure to violence or abuse in the home environment is a strong predictor of juvenile justice involvement in females (Conrad et al., 2014; Sherman & Balck, 2015).

### **Court-Involved Youth**

Court-involved youth include those entering the child welfare system through foster care and/or the juvenile justice system. According to statistical reports from the AFCARS 2018 report, females represent almost half (48%) of the number of children in the child welfare system (U.S. Department of Health and Human Services, 2019) and less than a third (28%) of juvenile justice cases (Ehrmann, Hyland, & Puzanchera, 2019). Research shows court-involved females have higher rates of Post-Traumatic Stress Disorder and trauma histories (Sherman & Balck, 2015; Teplin, Abram, McClelland, Dulcan, & Mericle, 2002). This experience differs from males and adds justification for examining the female experience of court-involved youth in education.

Court-involved youth are more likely to experience barriers to education such as school mobility, higher rates of disciplinary actions taken and absenteeism, higher rates of repeating a grade, and lower rates of graduation (Allen & Vacca, 2010). This includes a higher likelihood of experiencing “learning challenges and school failure” (Foley, 2001; Sedlack & Bruce, 2010; Development Services Group (DSG) 2019b). This may be in part due to frequent changes in schools, failing to build relationships and attachment within the school, and exclusionary methods of discipline used within the schools (DSG, 2015a).

### **Prevalence of Trauma**

The Adverse Childhood Experiences (ACE) survey (Felitti et al., 1998) was designed to examine the prevalence of traumatic events and the associated impact of those childhood events on adulthood. The Substance Abuse and Mental Health Services Administration (SAMHSA) defines ACE’s as “stressful and traumatic events” (SAMHSA, 2018). These include abuse, neglect, and household dysfunction (Cronholm et al., 2015). Household dysfunction refers to domestic violence, substance use, divorce or separation, and incarceration of a family/household member. Abuse may be emotional, physical, or sexual (Center for Disease Control and Prevention (CDC), 2016). Emotional abuse occurs when an adult residing with the child uses derogatory, demeaning, and/or violent language imparting fear or shame upon the child (CDC, 2016). Physical abuse occurs when an adult residing in the home physically assaults or throws objects causing harm to the child (CDC, 2016). Sexual abuse is defined as being touched, forced to touch, or attempting to engage the child “in a sexual way” from an adult who is 5 years older than the child (CDC, 2016). Neglect refers to either physical (basic needs were not met) or emotional neglect (social and emotional needs not met) (CDC, 2016). The definition of neglect is further expanded

as containing educational neglect which included “chronic truancy and failure to register/enroll” (Rebbe, 2018)

The 2016 National Survey of Children’s Health (NSCH) assessed 9 of the ACE categories: poverty, divorce/separation, death of caregiver, incarcerated caregiver, domestic violence, community-level violence exposure or victim, resided with anyone mentally ill/suicidal/depressed, resided with a substance abuser, and experienced racism or discrimination (Bethell, Davis, Gombojav, Stumbo, & Powers, 2017). NSCH (2016), found that 47% of school-age children aged 6-11 and 55.7% of adolescents aged 12-17 experienced at least 1 adverse childhood event (Bethell et al., 2017). Additional findings show 20% of children and youth reported experiencing 2 or more adverse childhood experiences (Bethell et al., 2017). Bethell et al. (2017) found that children who experience at least 1 adverse childhood event have increased difficulties demonstrating social and emotional skills when compared to children who have not experienced an adverse childhood event. It is important to note the rate of adverse childhood events in the population is not limited to one race, ethnicity, or socioeconomic status. However, a study by Slopen et al. (2016) found that Black and Hispanic youth and children in poverty experience greater exposure to adverse events compared to white youth or wealthier youth. In a 2016 ACEs study, Black (63.7%) and Hispanic (5.4%) youth reported higher rates of ACEs compared to White youth (40.9%) (Bethell, et al., 2017). Additionally, a higher percentage of Black and Hispanic youth experience 2 or more ACEs, 33.8% and 21.9% respectively, compared to white youth (21.9%) (Bethell et al., 2017). As reflected earlier with alternative educational statistics, it is estimated that the rate of traumatic events amongst females that are involved in the child welfare system is between 70% and 93% (Kerig & Ford, 2014). This rate is higher than the ACE’s rates among the general population and

of those experiencing poverty. Due to this, one must consider cultural competence when developing trauma-informed approaches.

### **Trauma in the Classroom**

The presence of trauma symptoms in the classroom is also reflected in their impact on learning. Children who experience trauma scan for danger in their environment (which includes schools) and many develop maladaptive coping mechanisms (Wadsworth, 2015). As a result of trauma, children may not be able to understand or verbally communicate their internal states, leaving the teacher to be perplexed and frustrated by the “ambivalent, unpredictable, and demanding” behavior of the youth (Cole et al., 2005 pg. 32). The inability of youth who have been traumatized to accurately assess internal and external situations may lead to a display of aggression, withdrawal, defiance, impulsivity/reactivity, or perfectionism in the classroom (Cole et al., 2005). Youth who have experienced trauma may have distorted thinking and difficulty with perspective taking (Cole et al., 2005). The distorted thinking leads to interpreting others’ reactions or responses as a threat. Another concern is the potential deficit in communication and problem-solving skills that many trauma-exposed children have (National Child Traumatic Stress Network, N.D.). The lack of skills to communicate effectively, both interpreting others and responding effectively, may lead to a defensive approach such as reactive impulsive behavior that appears to be out of proportion to an activating event. Children’s trauma-related impulsive reactive behaviors in the classroom add additional stressors for teachers and staff, especially when there is more than one child/youth in the class demonstrating these behaviors.

### **School-Based Approaches to Trauma**

Trauma-informed interventions place the responsibility on the adults in the school to make changes in order to address student behaviors (Herman, Hickmon-Rosa, & Reinke, 2018). The



primary focus of trauma-informed interventions in schools is to change teacher, administration, and staff perspectives on students' behaviors, leading to change in educational staffs' responses to students (Australian Childhood Foundation, 2010; Perry, 2009; Walkley & Cox, 2013; Wolpow et al., 2009). This is consistent with Social Learning Theory's concept of modeling (Bandura & Walters, 1977). If teachers can regulate themselves and demonstrate how to problem-solve, remain consistent, and build relationships, students will learn these skills through observation. Therefore, the first task is providing opportunities for teachers, staff, and administration to increase their own self-regulation, self-awareness of their own feelings/thoughts/responses, and understand the importance of trauma-informed practices.

There are several school-based approaches that have been developed to address trauma through school policy and practices (Crosby, 2015). Trauma-informed school interventions that have been implemented to date include Multiplying Connections, Making Space for Learning, and Compassionate Teaching (Australian Childhood Foundation, 2010; Perry, 2009; Walkley & Cox, 2013; Wolpow et al., 2009). Multiplying Connections presents five duties that staff and teachers within the school should engage in while working with traumatized youth. These require the teacher to remain calm, be aware and receptive, stay in the moment, maintain consistency and predictability, and maintain self-regulation (Crosby, et al., 2015; Perry, 2009; Walkley & Cox, 2013). Given the propensity for children who have experienced trauma to misinterpret their environment, consistency and predictability are necessary to create a predictable environment, thereby reducing the opportunity for misinterpretation. Making Space also utilizes a five-step approach; strategies that understand the development and process of brain maturation, creating predictable environments, the promotion of strategies that improve adaptability in children, emphasizes connections and relationships and enables children to create meaning of their past as

well as cognition and emotions (Australian Childhood Foundation, 2010; Crosby, 2015). Compassionate Teaching (Wolpow et al., 2009) and the Flexible Framework (Cole et al., 2005) offers trauma-informed school-based climate guidelines (Crosby, 2015). Another trauma-informed intervention, Trauma-Informed Positive Education (TIPE), utilizes positive psychology to engage teachers to enact classroom-based interventions that are developmentally appropriate and assist students in learning self-regulation (Brunzell, Stokes, & Waters, 2016). Two themes are addressed with TIPE, first involves the ability to regulate and address maladaptive regulation techniques and the second theme involves addressing attachment issues through strengthening teacher-student relationships (Brunzell et al., 2016).

The success of trauma-informed teaching rests on the teacher's ability to self-regulate and model effective socio-emotional skills, and teacher well-being is fundamental to self-regulation. The only trauma-informed training that addresses self-care is Compassionate Teaching which identifies self-care as "an ethical obligation for those who care" (Wolpow et al., 2009, p 37). Self-care has been described as a way to mitigate the effects of burnout and stress in many helping professions (Flook, Goldberg, Pinger, Bonus & Davidson, 2013; Lee & Miller 2013, Salloum, Kondrat, Johnco, & Olson, 2015). While there is no one clear definition of self-care, the self-care concept encompasses "behaviors that support health and well-being" (Lee & Miller, 2013, p 96). Mindfulness is one self-care approach to mitigate stressors that have been studied. Mindfulness brings into focus "breath, other bodily sensations, external stimuli, thoughts or emotions" (Flook et al, 2013, p 2). It is thought that practice in mindfulness will improve emotional regulation and the ability to focus (Flook et al, 2013; Lutz, Slatger, Dunne, & Davidson, 2008). A study by Hue and Lau, 2015, found mindfulness effective at increasing well-being, as did a systematic review by Lomas et al., 2017.

Trauma-informed self-care is another approach that includes awareness of trauma, understanding of emotional experiences, and building capacity in coping skills (Salloum, Kondrat, Johnco, & Olson, 2015). A study with child welfare workers showed trauma training was effective in promoting compassion satisfaction and reducing compassion fatigue (Sprang, Clark, & Whittwoosly, 2007; Salloum, Kondrat, Johnco, & Olson, 2015). It is important to note that most self-care literature is fluid and contains more concepts than a concrete prescription. This is in part due to the individual nature of self-care and what works for one does not necessarily work for all. Further, there is a gap in research examining self-care approaches during the work (school) day.

### **Teacher Well-being: Burnout, Secondary Trauma, and Compassion Fatigue**

For the purpose of this study, well-being is a complex construct comprised of multiple factors: burnout, secondary traumatic stress, and compassion satisfaction/fatigue, experienced by teachers and staff (see table 1).

Burnout is defined as the impact of long-term exposure to compassion fatigue (Marcum, Rusnak, & Koch, 2018; Sacco, Ciurzynski, Harvey, & Ingersoll, 2015) and “environmental factors” such as high caseloads or issues with administration (Hunsaker & Heaston, 2014; Flarity, Gentry, & Mesnikoff, 2013). Burnout is the feeling of exhaustion, alienation, and isolation, as well as feelings of powerlessness and meaninglessness at work (Hultell, et al., 2013). While much of the research focuses on the healthcare profession, research shows burnout occurs at a high rate in the teaching profession (Chang, 2009; Hakanen, Bakker, & Schaufeli, 2006; Maslach, Schaufeli, & Leiter, 2001). Due to the nature of the teaching profession, teachers are required to handle the needs of their students and administration on a daily basis with limited to no resources outside the classroom. Teachers reported feeling like they always have to be “on” (American Federation of Teachers, 2017). The main stressors teachers experience include coping with change, role conflict,

poor working conditions, working with unmotivated students, and maintaining discipline (Kyriacou, 2001). A study by Skaalvik & Skaalvik (2017) found a significant relationship between environmental stressors (discipline, time pressure, low student motivation) and teacher burnout (emotional exhaustion, depersonalization, and reduced personal accomplishment).

Secondary Traumatic Stress (STS) occurs when one is exposed to the retelling of traumatic events when helping others (Adams & Riggs, 2008). Teachers are at an increased risk for developing STS due to hearing students retell their traumatic experiences (Hatcher, et al, 2011; National Child Traumatic Stress Network, 2011). Symptoms of STS include an “increase in arousal and avoidance reactions, changes in memory and perception, alterations in their sense of self-efficacy, depletion of personal resources, and disruption in their perceptions of safety, trust, and independence” (NCTSN, 2011, p. 1). A study conducted by VanBergeijk and Sarmiento in 2006 found that STS symptoms fit into three major categories: cognitive, emotional, and physical. Cognitive symptoms included feelings of powerlessness, failure, and self-doubt, while stress, anxiety, guilt, and uncertainty were classified as emotional symptoms (VanBergeijk & Sarmiento, 2006). Physical symptoms included loss of sleep, depression, body aches, and fatigue (VanBergeijk & Sarmiento, 2006)

Compassion fatigue was identified by Joinson (1992) who described it as “disengagement, feelings of helplessness, and anger and apathy” (Ledoux, 2015, p 2045). While research suggests that some studies use the terms compassion fatigue and STS interchangeably (Bride, Radey, Figley, 2007), I identify them as different concepts. Secondary traumatic stress may be related to compassion fatigue; however, symptoms of compassion fatigue are on the lower end of the spectrum from the more intense symptoms of secondary trauma (Ledoux, 2015). Much of the literature on compassion fatigue focuses on the nursing population.

In one such study, Sacco et al., 2015 defined compassion fatigue as a “type of burnout that occurs when healthcare professionals care for patients who experience trauma” (Marcum, Rusnak, & Koch, 2018). The experience of compassion fatigue is linked to empathy and stress from assisting people who have experienced trauma (Hunsaker & Heaston, 2014). The repeated exposure leads to self-preservation resulting in compassion fatigue (Hunsaker & Heaston, 2014; Figley, 1995). Conversely, compassion satisfaction is the opposite end of the spectrum from compassion fatigue. While compassion fatigue implies a negative experience during helping, compassion satisfaction is the result of pleasure one experiences from engaging in helping (Stamm, 2010). This includes the level of pleasure or satisfaction derived from the work environment, such as positive colleague interactions or one’s ability to influence the environment in a positive way (Stamm, 2010). Studies suggest compassion satisfaction may be mitigator of burnout (Conrad & Kellar-Guenther, 2006; Wee & Myers, 2003).

Closely related to compassion satisfaction is the concept of vitality. Vitality represents “a synergy between high satisfaction, productivity, and engagement” which enables individuals to achieve goals and reach their greatest potential (Palmer, Dankoski, Smith, Brutkiewicz, & Bogdeqic, 2011; Baruch, Grimland, & Vigoda-Gadot, 2014). Intrator and Kunzman (2006) define three categories of vitality; vocational, tuned in, and purposeful. Vocational vitality refers to the teacher’s ability to bring meaning, enthusiasm, and dedication to the work (Intrator & Kunzman, 2006). Tuned-in vitality identifies the teacher’s ability to demonstrate a “sensitivity to the needs of the student” (Intrator & Kunzman, 2006). Lastly, purposeful vitality is the ability of the teacher to take ownership of their work, be efficacious in response to adversity, and challenge the environment rather than passively accepting the current status quo (Intrator & Kunzman, 2006). The main difference between compassion satisfaction and professional vitality is that compassion

satisfaction is the result of positive working experience, while vitality is the teacher's ability to make the work environment a positive experience.

Table 1. Teacher Wellbeing and Vitality Definitions

| Teacher Wellbeing          | Definition  |
|----------------------------|---|
| Burnout                    | Long-term exposure to difficult or challenging environments with minimal success leads to burnout. Symptoms of burnout include feelings of exhaustion, alienation, and isolation, as well as feelings of powerlessness and meaninglessness (Hultell, et al., 2013). |
| Secondary Traumatic Stress | Exposure to the retelling of traumatic events when helping others (Adams & Riggs, 2008).  |
| Compassion Fatigue         | Is linked to empathy and stress from assisting people who have experienced trauma (Hunsaker & Heaston, 2014). The repeated exposure leads to self-preservation resulting in compassion fatigue (Hunsaker & Heaston, 2014; Figley, 1995).                            |
| Compassion Satisfaction    | Is the result of the pleasure one experiences from engaging in helping others, this includes positive interactions and success in helping others (Stamm, 2010).   |
| Professional Vitality      | Is the ability of the teacher to make meaning, be dedicated, take ownership of their work, be efficacious in response to adversity, and challenge the environment rather than passively accepting the current status quo (Intrator & Kunzman, 2006).                |

Well-being is important to examine as it has been identified as one significant reason for teacher attrition (Chang, 2009; Howard & Johnson, 2004; Hutell, Melin, & Gustavsson, 2013; Wang, Hall, & Rahimi, 2015). Teacher attrition is a concern because high teacher turnover rates lead to a deficit in qualified teachers and create staff shortages (Djonko-Moore, 2016). The financial implications to school districts that are experiencing shortages and the costs associated with recruiting and training new teachers are also of great concern. The estimated cost due to high teacher turnover for public school districts is approximately \$7 billion per year (Greenberg, Brown, & Abenavoli, 2016).

## **Teacher Well-being and Attrition**

The National Center for Education Statistics reports that 17.3% of teachers left the profession during the 2012-2013 school year (Gray & Taie, 2015). Even those who make it beyond the first year are not likely to stay long; about 30 percent of new teachers flee the profession after just 3 years, and more than 45% leave after five (Graziano, 2005). Inexperienced teachers (those with less than 3 years of experience on the job) are frequently placed in classrooms located in suppressed and high poverty areas with the neediest and often the most challenging students; with many students having been exposed to child abuse, neglect, and community violence. Teachers leave lower socio-economic schools at a higher rate than those who begin teaching in more affluent schools (Boyd, Lankford, Loeb, & Wyckoff, 2005; DeAngelis & Presley, 2011) with multiple studies citing burnout and teacher stress as reasons for leaving the teaching profession (Chang, 2009; Howard & Johnson, 2004; Hutell, Melin, & Gustavsson, 2013; Wang, Hall, & Rahimi, 2015). Additionally, a study by Wang et al. (2015) identified teacher self-efficacy as a “predictor of psychological and physical health in teachers, as well as intentions to quit”. This is further supported by another study that concluded that teachers who left the school demonstrated a reduction in teaching efficacy in their last year (Henry, Bastian, Fortner, 2011).

Research from the Educator Quality of Work Life Survey found that teacher reports of “not good” mental health rose from 34% in 2015 to 56% in 2017 (American Federation of Teachers, 2017). Contributing factors to the stressful teaching experience included workplace bullying, not enough time to prepare, shortages in both staff and resources (AFT, 2017), school climate, student behavior, and teacher lack of self-efficacy (Dagli, 2012). Workplace bullying was reported by teachers at a rate three times higher than other workers, even though the majority reported their

schools had policies against bullying (AFT, 2017). Additionally, Two-thirds of educators and school staff reported an “always” or “often” stressful work experience (AFT, 2017).

School climate and student characteristics have also been associated with a teacher’s decision to leave the profession or move schools (Dagli, 2012). These rates of attrition are higher for teachers who experience conditions at work that are adverse (Dagli, 2012; Kukla-Acevedo, 2009; Loeb, Darling-Hammond, & Luczak, 2005). Teachers who demonstrate self-efficacy, believe in their power to influence school policy and classroom management, and have support from the administration are more likely to remain in the school and profession (Dagli, 2012). Conversely, job satisfaction and burnout have been identified as contributing factors for teacher attrition (Dagli, 2012; Lui & Ramsey, 2008; McCarthy, Lambert, Crowe, & McCarthy, 2010).

### **Teacher Wellbeing and Student Academic Outcomes**

Teachers who are self-efficacious, cope well with stress, feel empowered in their position, perform their job better, and take fewer days off work (Arens & Morin, 2016; Herman, Hickmon-Rosa, & Reinke, 2018). Studies show teacher self-efficacy is positively associated with student achievements in math and reading (Goodard, Hoy, & Woolfolk Hoy, 2000) final examination grades (Caprara, Barbaranelli, Steca, & Malone 2006), and literacy (Guo et al, 2012). Teachers who are “burned out” experience a reduction in self-efficacy which leads to an increase in emotional exhaustion, and experience indifference toward the students they serve (Arens & Morin, 2016). A study by Arens and Morin (2016), found a teacher’s higher level of emotional exhaustion (emotional overstrain and reduced emotional resources) was associated with a lower standardized testing performance by the student.

Studies have shown that trauma impacts the academic performance of children and youth (Streek-Fischer & van der Kolk 2000; Cole et al., 2005). Trauma can impede a child’s ability to



focus, concentrate, problem solve, organize, and use memory (Wolpow, Johnson, Hertel, & Kincaid, 2009). When children are in this state, their ability to process and obtain new information is impeded as is their ability to use verbal expression (Cole et al., 2005). Teacher self-efficacy becomes paramount in actively engaging youth who are experiencing additional roadblocks to success.

### **Teacher Wellbeing, Student/Teacher Relationships**

Teacher emotional exhaustion was found to be negatively associated with student perceptions of teacher support and school satisfaction (Arens & Morin, 2012). When teachers are stressed and experiencing emotional exhaustion, their relationships with students deteriorate (Wentzel, Battle, Russel, & Looney, 2010). This is not surprising given the old adage you must take care of yourself, so you can care for others. Studies have found teacher burnout extends beyond the teacher's well-being and also impacts student well-being (Herman, Hickmon-Rosa, & Reinke, 2018). As the teacher exhibits signs of burnout (emotional exhaustion, cynicism, loss of purpose), students often respond to this with escalated behaviors (i.e. talking back, disrespecting peers, destruction of school property) (Geving, 2007; Herman, Hickmon-Rosa, & Reinke, 2018).

A study by Friedrich (2002) showed 80% of maltreated children developed insecure attachment which impairs the child's ability to regulate, cope with stress, and effectively seek help (Cook et al, 2005). When a teacher is struggling to meet their own needs and the student does not have the skills to elicit contact with that teacher, the teacher/student relationship suffers. Teacher exhibition of burnout and stress may increase the negative response of the student, especially if the student has a history of trauma and is in a state of high alert which results in feelings of irritability, anger, and difficulty managing aggression and greatly impacts the student's ability to develop and maintain relationships (Quirk & Rickwood, 2015). The teacher/student relationship

is one way of building school connectedness which has been shown to have positive impacts on student outcomes (Lange & Lehr, 1999).

Challenging or difficult student behavior is also associated with increased teacher attrition (Dagli, 2012). Positive behavior methods have been introduced across American schools as an intervention designed to increase positive student behavior (Herman, Hickmon-Rosa, & Reinke, 2018). However, fidelity to these school-wide interventions may be compromised by the teacher's ability to cope with stress (Reinke, Herman, Stormont, 2013).

### **Fidelity Monitoring**

While there are many approaches to trauma-informed practices in education, there is a dearth of literature around the effectiveness of trauma-informed practices in improving academic outcomes of youth (school connectedness, academic success, social-emotional growth). A contributing factor to examining the impact of trauma-informed practices is ensuring and tracking that the trauma-intervention was implemented as designed (implemented with fidelity). Lane et al. (2004) reports schools often focus on developing/finding an intervention, training of the intervention, who the intervention is designed to serve, selecting outcome variables to observe, and accuracy in which the data is collected, while forgetting to observe and track "treatment fidelity" (implementing the intervention as intended) (Lane et al., 2004; Gresham, 1989; Yeaton & Sechrest, 1981). Given the lack of "treatment fidelity" in current literature on school-based interventions, it appears that this has not changed.

Implementing interventions with fidelity is necessary in order to determine if an outcome is attributed to the intervention. Fidelity tools are used to ensure internal validity, meaning the intervention was applied as the design intended (Hohmann & Shear, 2002; Mowbray, Holter, Teague & Bybee, 2003). Once it has been determined that the intervention has been implemented as designed, the observed outcome can be attributed to the intervention. This process also enables

the researcher to determine what alterations to the intervention may be needed to improve the intervention or determine where the intervention failed to meet the implementation design (Mowbray, Holter, Teague & Bybee, 2003). Additionally, the degree to which an intervention is implemented with fidelity may impact the success of the intervention (Mowbray, Holter, Teague & Bybee, 2003). For example, if the intervention implementation differs from the original design, this may weaken or negatively impact outcome results (Kershner, et al., 2013). Further, it will become difficult to determine if the outcome results are from the intervention or another factor introduced into the intervention by deviating from the original design (Baer et al., 2007; Spillane et al., 2007).

Several barriers to tracking “fidelity” include lack of fidelity tools, resources, and support (Akin, Strolin-Goltzman, & Collins-Carmargo 2017). Fidelity tools are used to ensure the internal validity of intervention implementation (Hohmann & Shear, 2002; Mowbray, Holter, Teague & Bybee, 2003). Fidelity tools are a measurement that examines how closely one adheres to implementation design (Baer et al., 2007; Spillane et al., 2007). Using fidelity tools provides validation of implementation and allows the study to be replicated (Baer et al., 2007; Spillane et al., 2007). This is especially important if the intervention is seeking a promising practice or evidence-based practice designation. Utilizing a fidelity tool allows one to determine if there is a deviation from the study design and provides an opportunity to explore why a deviation may have occurred, which allows for a full understanding of the implementation process before recommending changes in implementation (Baer et al., 2007).

### **The Study Purpose**

The aims of this research are 1. To examine teacher experiences with wellbeing and self-care strategies throughout the school year, 2. To explore how the implementation of trauma-

informed intervention impacted self-care and teacher wellbeing, and 3. To develop an instrument for assessing intervention fidelity. The research site is a school that serves primarily students involved in court who report high rates of trauma exposure. The data from this study are part of an on-going study of trauma-informed practices in an alternative charter school setting. This dissertation is presented using a three-paper format in which separate but related data are presented in one manuscript. Dissertation chapters two, three, and four are comprised of three separate articles that are publication-ready, meaning each article includes a Background, Methodology, Findings, Discussion, and Reference section. Given that the data are related, some of the literature and methods described will be repeated throughout the chapters when appropriate. Chapter five will contain a conclusion summarizing the findings from the previous chapters and identifying future implications for research.

The aim of the study presented in Chapter two is to quantitatively assess the trajectory of teacher and staff wellbeing over the course of the academic year in a school that primarily serves court-involved youth with high rates of trauma. Much of what is understood about burnout, secondary trauma, and compassion fatigue is derived from the medical field. This is a gap in educational research and demonstrates a need to further explore teachers and school staff experiences with burnout, secondary trauma, and compassion fatigue specifically in alternative education environments.

The following research questions were developed to assess teacher and wellbeing: 1. How do staff and teachers' wellbeing change over the course of the school year; and 2. What is the relationship between wellbeing changes over time and changes in professional vitality (job satisfaction) scores from baseline to the end of the school year? I hypothesized that teacher and staff burnout, secondary trauma, and compassion fatigue would be highest prior to winter break in

December and at the end of the school year. Additionally, I expected that greater professional vitality would be associated with lower burnout and traumatic stress symptoms.

The aim of the study presented in chapter three was to examine the implementation of self-care practices during the school day in response to a trauma-informed intervention, and the impact of self-care on teacher and staff wellbeing. Burnout and stress have been identified as reasons that teachers leave the profession (Chang, 2009; Howard & Johnson, 2004; Wang, Hall, & Rahimi, 2015; Hutell, Melin, & Gustavsson, 2013). Self-care has been identified as a method to mitigate the effects of burnout and stress in helping professions (Flook, Goldberg, Pinger, Bonus & Davidson, 2013; Lee & Miller 2013, Salloum, Kondrat, Johnco, & Olson, 2015). This study used mixed methods to examine the following research questions: 1. What is the relationship between wellbeing changes over time and changes in self-care strategies used during the school day for educators who engaged in a trauma-informed intervention during the school year? and 2. What were participants' experiences of the intervention and its impact on their use of self-care strategies? I hypothesized that the use of self-care strategies would increase in frequency following the trauma-informed intervention and that the use of self-care strategies would be associated with better wellbeing for teachers and staff.

The study presented in Chapter four was comprised of two aims: 1. to develop an observation tool to assess teacher compliance with trauma-informed teaching strategies, and 2. to evaluate the usefulness of the observation tools in coaching teachers on trauma-informed teaching implementation. There is a gap in the research on the effectiveness of trauma-informed interventions in schools. In order to assess the effectiveness of an intervention, one must be certain the intervention is implemented with consistency and validity (Baer et al., 2007) as well as determine if the intervention was implemented as designed (Spillane et al., 2007). Fidelity allows

for an accurate understanding and reporting of outcomes (Bellg et al., 2004). This study used a mixed-method approach to answer two research questions: 1. Is the fidelity tool developed effective in tracking observed trauma-informed teaching practices? and 2. What were the teachers' experience with the fidelity tool?

Research has yet to evaluate the impact of trauma-informed teaching on teacher and staff wellbeing in schools that serve primarily court-involve youth with high rates of trauma exposure. The overarching purpose of these studies was to fill this gap by researching teacher wellbeing, professional vitality, and self-care as potential pathways to mitigate burnout and stress. This research sought to put teacher wellbeing at the forefront given that teachers and staff are responsible for implementing school-based interventions with students. Ideally, school districts and administrators could use this knowledge to enhance teacher/staff wellbeing, decrease teacher attrition, and enhance teacher responses to students whose trauma symptoms interfere with their social, emotional, and academic functioning in school. In addition, teacher well-being promotes student academic wellbeing which includes school connectedness, attendance, and academic achievement.

## **Chapter 2: Teacher well-being in alternative education settings: Changes in burnout, secondary trauma, and compassion fatigue over the school year and their associations with professional vitality.**

### **Introduction and Background**

Teacher wellbeing (burnout, secondary trauma, compassion satisfaction) is linked to teacher attrition. The National Center for Education Statistics reports that 17.3% of teachers left the profession during the 2012-2013 school year (Gray & Taie, 2015). Even those who make it beyond the first year are not likely to stay long; about 30 percent of new teachers flee the profession after just 3 years, and more than 45% leave after five (Graziano, 2005).

Teachers leave lower socio-economic schools at a higher rate than those that start off in an affluent school (Boyd, Lankford, Loeb, & Wyckoff, 2005; DeAngelis & Presley, 2011) with multiple studies citing burnout and teacher stress as reasons for leaving the teaching profession (Chang, 2009; Howard & Johnson, 2004; Hutell, Melin, & Gustavsson, 2013; Wang, Hall, & Rahimi, 2015). High teacher turnover prevents necessary relationship-building to assist high need youth in achieving academic success and serves as a disruption to their educational experience (Djonko-Moore, 2016) and is associated with lower student achievement (Greenberg, Brown, & Abenavoli, 2016; Ronfeldt, Loeb, & Wyckoff, 2013). Increased turnover leads to high costs for public school districts with an estimated cost of \$7 billion per year (Greenberg, Brown, & Abenavoli, 2016). Additionally, high teacher turnover rates lead to a deficit in the number of qualified teachers and create massive staff shortages (Djonko-Moore, 2016).

This high turnover is especially impactful in alternative educational environments that serve court-involved youth. Alternative education is designed to meet the needs of students who are at a high risk of failure and whose needs cannot be met through traditional educational means (Lehr, Tan, & Ysseldyke, 2009). Alternative education students are more likely to have trauma

histories, involvement with the courts, and have experienced instability in their home life (Fulkerson, Harrison, & Beebe, 1997). Court-involved youth include those entering the child welfare system through foster care and/or the juvenile justice system. There have been noted differences between the experiences of males and females in the child welfare system. Specifically, females have higher rates of Post-Traumatic Stress Disorder and sexual abuse histories (Sherman & Balck, 2015; Teplin, Abram, McClelland, Dulcan, & Mericle, 2002). These unique experiences add justification for examining school environments who serve an all-female student population.

### **Teacher Wellbeing**

The Educator Quality of Work Life Survey found that teacher reports of “not good” mental health rose from 34% in 2015 to 56% in 2017 (American Federation of Teachers, 2017). Contributing factors to the stressful teaching experience include workplace bullying, not enough time to prepare, and shortages in both staff and resources (AFT, 2017). Workplace bullying was described as harassment or threatened violence at work (AFT, 2017). Of the educators that reported experiencing bullying, 35% identified the principal or staff person as the bully, 23% identified a coworker, 50% identified a student, and 31% identified a student’s parent (AFT, 2017). Sixty-one percent of both educators and school staff reported an “always” or “often” stressful work experience (AFT, 2017). There is a paucity of research detailing workplace bullying in alternative educational settings, however, due to the high number of at-risk youths, the percentage of workplace bullying may be higher than in general education settings.

In addition to the policies, practices, and experiences of general education, teachers who serve court-involved youth have additional stressors. Given the overrepresentation of court-involved youth in alternative education settings, it is important to note the rate of exposure to traumatic events. The rate of exposure amongst females that are involved in the juvenile justice system is between 70% and 93% (Kerig & Ford, 2014), which is greater than the general



population estimates of 45% to 56% (Bethell et al., 2017). The prevalence of trauma amongst court-involved youth puts alternative education teachers at a higher risk for developing burnout, secondary trauma, and compassion fatigue.

For the purpose of this study, teacher well-being is defined as burnout, secondary trauma, and compassion satisfaction/fatigue. Burnout is defined as the impact of long-term exposure to compassion fatigue (Sacco et al., 2015; Marcum, Rusnak, & Koch, 2018) and “environmental factors” such as high caseloads or issues with administration (Hunsaker & Heaston, 2014; Flarity, Gentry, & Mesnikoff, 2013). While much of the research focuses on the healthcare profession, research shows burnout occurs at a high rate in the teaching profession (Hakanen et al 2006; Maslach et al., 2001; Chang, 2009). Burnout creates feelings of exhaustion, alienation, and isolation, as well as feelings of powerlessness and meaninglessness (Hultell, et al., 2013). The main stressors teachers experience include coping with change, role conflict, poor working conditions, working with unmotivated students, and maintaining discipline (Kyriacou, 2001). A study by Skaalvik & Skaalvik (2017) found a significant relationship between environmental stressors (discipline, time pressure, low student motivation) and teacher burnout (emotional exhaustion, depersonalization, and reduced personal accomplishment).

Due to the nature of the teaching profession, teachers are required to handle the needs of their students daily with limited to no resources outside the classroom. Much like the literature on nurses feeling overworked, teachers reported feeling that they always have to be “on” (AFT, 2017). A survey of 830 teachers reported working overtime during two-thirds of the month (AFT 2017). This adds to the understanding that in addition to the stressors of helping students who are impacted by trauma, teachers are also working at a deficit trying to meet the demands at the administrative, community, and state levels.

Secondary Traumatic Stress (STS) occurs when one is exposed to the retelling of traumatic events when helping others (Adams & Riggs, 2008). Teachers are at an increased risk for developing STS due to hearing students retell their traumatic experiences (Hatcher, et al, 2011; National Child Traumatic Stress Network 2011). Symptoms of STS include an “increase in arousal and avoidance reactions, changes in memory and perception, alterations in their sense of self-efficacy, depletion of personal resources, and disruption in their perceptions of safety, trust, and independence” (NCTSN, 2011, p 1). A study conducted by VanBergeijk and Sarmiento in 2006 found that STS symptoms fit into three major categories: cognitive, emotional, and physical. Cognitive symptoms included feelings of powerlessness, failure, and self-doubt, while stress, anxiety, guilt, and uncertainty were classified as emotional symptoms (VanBergeijk & Sarmiento, 2006). Physical symptoms included loss of sleep, depression, body aches, and fatigue (VanBergeijk & Sarmiento, 2006)

Compassion fatigue was identified by Joinson (1992) who described it as “disengagement, feelings of helplessness, and anger and apathy” (Ledoux, 2015, p 2045). While research suggests some studies use the terms compassion fatigue and STS interchangeably (Bride, Radey, Figley, 2007), I identify them as different concepts. Secondary traumatic stress may be related to compassion fatigue; however, symptoms of compassion fatigue are on the lower end of the spectrum from the more intense symptoms of secondary trauma (Ledoux, 2015). Much of the literature on compassion fatigue focuses on the nursing population. The experience of compassion fatigue is linked to empathy and stress from assisting people who have experienced trauma (Hunsaker & Heaston, 2014). The repeated exposure leads to self-preservation resulting in compassion fatigue (Hunsaker & Heaston, 2014; Figley, 1995).

While compassion fatigue implies a negative experience during helping, compassion satisfaction is the result of pleasure one experiences from engaging in helping (Stamm, 2010). This includes the level of pleasure or satisfaction derived from the work environment, such as positive colleague interactions or your ability to influence the environment in a positive way (Stamm, 2010). Studies suggest compassion satisfaction may be a mitigator of burnout (Conrad & Kellar-Guenther, 2006; Wee & Myers, 2003).

Closely related to compassion satisfaction is the concept of vitality. Vitality represents “a synergy between high satisfaction, productivity, and engagement” which enables individuals to achieve goals and reach their greatest potential (Palmer, Dankoski, Smith, Brutkiewicz, & Bogdeqic, 2011; Baruch, Grimland, & Vigoda-Gadot, 2014). Intrator and Kunzman (2006) define three categories of vitality; vocational, tuned in, and purposeful. Vocational vitality refers to the teacher’s ability to bring meaning, enthusiasm, and dedication to the work (Intrator & Kunzman, 2006). Tuned-in vitality identifies the teacher’s ability to demonstrate a “sensitivity to the needs of the student” (Intrator & Kunzman, 2006). Lastly, professional vitality is the ability of the teacher to take ownership of their work, be efficacious in response to adversity, and challenge the environment rather than passively accepting the current status quo (Intrator & Kunzman, 2006).

While both compassion satisfaction and professional vitality include a positive work environment, they differ in that professional vitality also includes a teacher’s ability to make meaning and take ownership of the work and actively pursue change to create a positive working environment. One could say compassion satisfaction is the result of a positive working experience and vitality is the teacher’s ability to make the work environment a positive experience.

## Theoretical Framework

This study is informed by the Ecological Systems Framework. In addition to biological and physical influences, an individual is influenced by the social systems that surround them (Bronfenbrenner, 1977). Before discussing the various systems that influence the teacher's wellbeing (burnout, secondary traumatic stress, and compassion fatigue/satisfaction), let us first examine the intrinsic characteristic of vitality. Vitality is our independent variable and describes what characteristics the teacher/staff bring to the interactions with various systems that may promote or inhibit wellbeing. The dependent variables of burnout, secondary traumatic stress, and compassion fatigue are the result of the interaction between the various social systems and the ability of the independent variable (vitality) to mitigate the impacts of those systems (see figure 1).

The Ecological Systems Framework consists of five systems: microsystem, mesosystem, exosystem, macrosystem, and chronosystem. Each system describes the type of interaction the individual has with the system, moving from direct relationships outward to indirect relationships. Microsystems refer to the direct environment in which an individual interacts, resulting in the individual being both a product and designer of the environment. Direct interactions include family, friends, community members, colleagues, students and supervisors. The mesosystem refers to the relationships between those in the individual's direct environment. Basically, the relationships in an individual's life are influenced by the experience within that system as well as the experiences of the individual within the other systems. The exosystem describes the context that may influence the interactions between the microsystems. Macrosystems refer to the external systems that influence the individual's experience such as culture, socioeconomic status, resources, and policies. Lastly, chronosystem includes shifts over time which allows current and

historical context to be used to understand the current situation. As stated above each individual is influenced by the systems in which they reside and interact, by examining each system a teacher is interacting with, we can better understand potential influences on their wellbeing over time. (Bronfenbrenner, 1977)

There are several systems that are the focus of this study; the immediate school system, external systems that interact with the school system, policy system (city, state, and federal), and the impact of time that interact with the functionality of the school as a whole and the teachers/staff within. At the microsystem-level, the school is comprised of several systems. The teacher and staff are at the center as they are the focus for this study, however there is also the school environment which is made up of students, administration, and colleagues.

At the mesosystem-level the interactions between the microsystems are explored. The immediate school system includes daily interactions with students, colleagues, and administration. These daily interactions are not only influenced by the people within, but they are also influenced by the availability of resources. For example, if a teacher is experiencing dysregulation and the school is short-staffed, the ability to send a person to take over the class while the teacher regulates is not possible. This will impact the interaction between the teacher and the students in the class as well as the teacher's ability to perform at an optimal level. All of this contributes to how the teacher perceives (positive or negative) their experiences in the school environment.

At the exosystem-level are the external systems interacting with the school include the community, parents, child welfare workers, therapists, and school board. Teachers/staff are required to update progress reports to parents, child welfare workers, and therapists on an ongoing basis. These interactions could be direct, such as sharing information through virtual systems or face to face meetings or through indirect means such as a student displaying dysregulated behavior

due to an upcoming court appearance. Additionally, teachers/staff may find that these systems do not always interact efficiently or may feel a lack of response. For example, teachers are required to update behavior charts in an online system that the therapist can see. Teachers may provide direct notes to a therapist but never receive a confirmation that the therapist received and read the note.

At a macrosystem-level, the policies set forth at the city, state, and federal levels impact all levels of school functioning. This includes the required certifications, curriculum, disciplinary processes, professional development, and so on. Each of these components impacts the daily experience of the teachers/staff of the school. Lastly, the idea of chronosystems allows for changes to occur in these systems over time. This is a longitudinal study which is examining the impact of those changes of time (see figure 2).

Figure 1. Pathway of Teacher Wellbeing

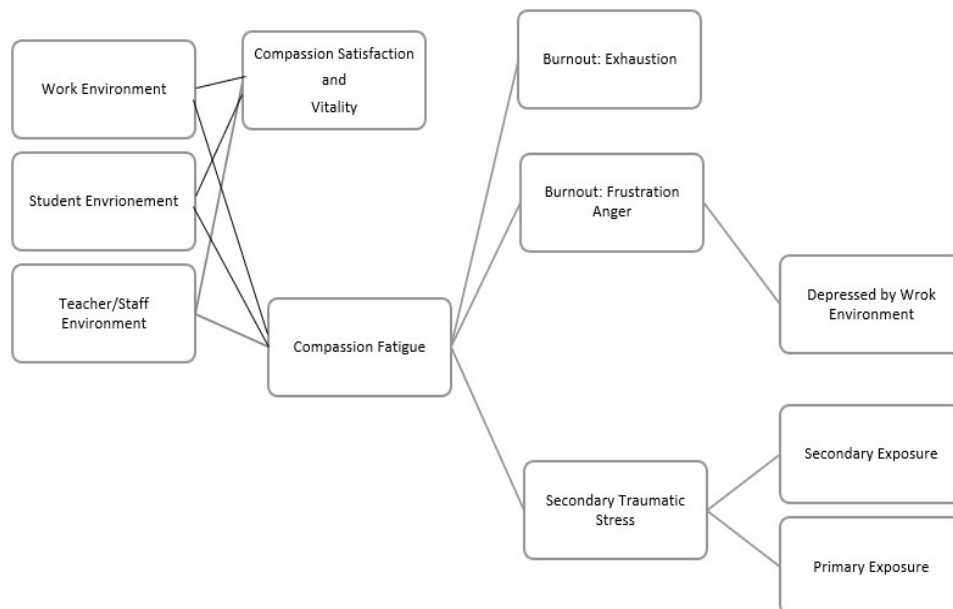
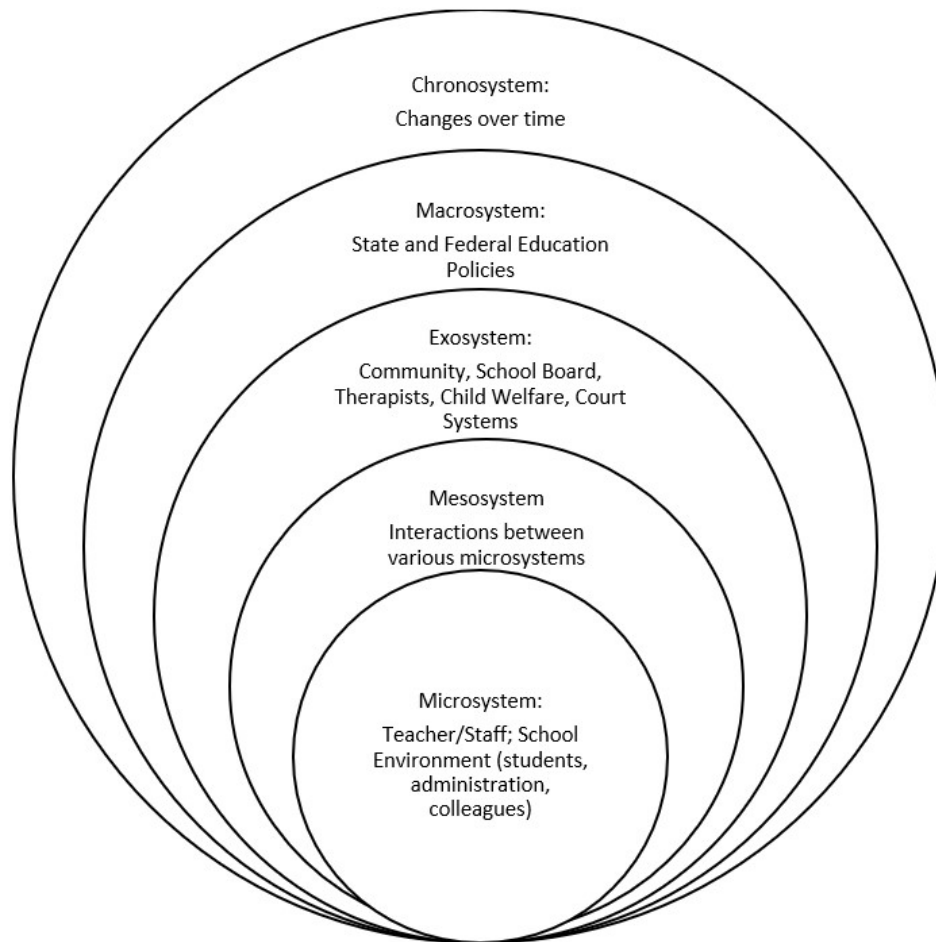


Figure 2. Ecological Systems Framework in Alternative Educational Settings



### **Present Study**

While there is much research regarding burnout, secondary traumatic stress, and compassion fatigue (Bride, Radey, Figley, 2007; Hatcher, et al, 2011; Kyriacou, 2001; Ledoux, 2015; National Child Traumatic Stress Network, 2011; VanBergeijk & Sarmiento, 2006), most studies are focused on medical and mental health professionals. More research is needed to explore the impact of secondary trauma on teachers, especially those working with court-involved youth in alternative educational settings. This study seeks to fill that gap by examining teacher burnout, secondary trauma, and compassion fatigue at four time-points over the school year to determine

when interventions to enhance teacher wellbeing are most needed. The aim of the study was to assess the trajectory of teacher wellbeing, specifically burnout, secondary trauma, and compassion fatigue over the course of the academic year and what may contribute to that trajectory

The following two research questions were developed to address these aims: 1. How do staff and teachers' wellbeing (burnout, secondary traumatic stress, and compassion fatigue) change over the course of the school year; 2. What is the relationship between wellbeing changes over time and changes in professional vitality scores from baseline (beginning of the school year) to the end of the school year? I hypothesized that teacher and staff burnout, secondary trauma, and compassion fatigue would be highest before winter break in December and at the end of the school year. Additionally, I expected that greater professional vitality would be associated with lower burnout and traumatic stress symptoms.

## **Method**

### **Sample**

Participants in the study included 27 teachers and other school support staff who were employed during the 2018/2019 school year at an alternative education public charter middle/high school located in the Midwest. The school serves female court-involved youth from a lower socioeconomic status from the surrounding community who have experienced traumatic events. There were various sample rates across the timepoints: September (N=20), December (N=25), February (N=24), and June (N=21). Completion rates varied between timepoints: T1 to T2/T3 (65%), T1 to T4 (55%), T2 to T3 (76%), T2 to T4 (72%), and T3 to T4 (83%). Teachers had a higher drop-out rate as the year went on (5 teachers versus 3 staff).



Table 1. Sample Characteristics (N=27)

| <i>Characteristics</i>  |                   | <i>N</i> | <i>%</i> |
|-------------------------|-------------------|----------|----------|
| Gender                  | Male              | 4        | 14.8     |
|                         | Female            | 23       | 62.2     |
| Race                    | White             | 19       | 79.2     |
|                         | Black             | 4        | 16.7     |
|                         | Bi-racial         | 1        | 4.2      |
| Role Type               | Classroom Teacher | 12       | 44.4     |
|                         | Other Staff       | 15       | 55.6     |
| Years of Teaching       | Less than 2 years | 2        | 8        |
|                         | 3-5 years         | 6        | 23       |
|                         | Over 5 years      | 18       | 69       |
| Years in Current School | Less than 2 years | 15       | 58       |
|                         | 3-5 years         | 4        | 15       |
|                         | Over 5 years      | 7        | 27       |

## Procedure

This study is a secondary analysis of school data gathered using a repeated-measures within-subjects design. The Institutional Review Board (IRB) at Wayne State University approved the current study. The school administrators recruited all teachers and staff in the school to participate in the study. The school administrators obtained informed consent/assent from the teachers and staff during orientation prior to the school year beginning. The Professional Quality of Life Measure (Stamm, 2010) was completed at four different time points in the school year, September, December, March, and June. The Skovholt Practitioner Professional Resiliency and Self-Care Inventory (Skovholt, 2010) was completed at two time-points in the school year (September and June). Cases were excluded case-wise, so only teachers and staff who had completed those time points were included. A review of the demographics of those that did not complete all four-time points were reviewed for differences between those that completed and those who did not.

In addition to the quantitative surveys, qualitative data collection occurred at two-time points, June 2019 and in August of 2019. At a June teacher and staff meeting, 21 participants were asked what the most stressful points in the school year were and what were the causes. In August, teachers and staff were presented with the findings and had the opportunity to provide feedback. Data source triangulation included notes from debriefing and member checking (Corbin & Strauss, 2008).

### **Measures**

In order to assess the relationship between changes in wellbeing and changes in professional vitality scores over time, I examined associations between the independent variables (professional vitality and professional stress) and the dependent variable (burnout, secondary traumatic stress, and compassion fatigue).

The Professional Quality of Life Measure (ProQOL 3, Stamm, 2010) was used to evaluate teacher and staff levels of burnout, secondary traumatic stress, compassion fatigue, and compassion satisfaction. The ProQOL is a 30-item self-report measure that has ten questions for each of the three sub-categories: burnout, secondary trauma, and compassion satisfaction. Stamm (2010) defines burnout as being overwhelmed, feeling ineffective, and hopeless in your work. The burnout subscale includes questions such as “I am not as productive at work because I am losing sleep over traumatic experiences of a person I [help]”. Secondary trauma is defined as exposure to other’s traumatic or stressful events while at work which causes fear, sleeplessness, reoccurring thoughts about the traumatic event, and avoidance (Stamm, 2010). A sample item of the secondary trauma subscale is “I jump or am startled by unexpected sounds”. Compassion satisfaction is defined as the joy of doing a job well done and the pleasure you feel while assisting others in your work (Stamm, 2010). “I feel invigorated after working with those I [help]” is a sample item from

the compassion satisfaction subscale. Each subscale is comprised of a 5-point Likert scale ranging from never to very often. Each subscale score is summed and converted to T scores. A t-score with scores below 43 indicates low levels, 43-56 indicate average levels, and scores above 57 indicate high levels of burnout, secondary trauma, and compassion satisfaction. The Professional Quality of Life measure has demonstrated reliability using Cronbach's Alpha: compassion satisfaction ( $\alpha=.88$ ), burnout ( $\alpha=.75$ ), secondary traumatic stress ( $\alpha=.81$ ) (Stamm, 2010). Cronbach's Alpha was run for this study and again demonstrated good reliability: burnout ( $\alpha=.70$ ), secondary traumatic stress ( $\alpha=.79$ ), and compassion satisfaction ( $\alpha=.92$ ). Scores for the PROQOL were computed by turning raw scores into t-scores and then summing each category (Stamm, 2010). Scores are then interpreted with high, average and low categories with high = a t-score above 57, average = a t-score between 44 and 56, and low = a t-score under 43. See Stamm (2010) for a full scoring guide.

The Skovholt Practitioner Professional Resiliency and Self-Care Inventory (PRSCI) is comprised of four topic areas: professional vitality, personal vitality, professional stress, and personal stress (Skovholt, 2010). This self-report tool was designed as a self-reflection tool for professionals in "helping professions, [such as] teaching and health care". This is not a standardized measure and there are no definitions of ranges that are considered to be "best" or "healthy". While this is not a standardized scale, I chose to use only the professional vitality inventory and standardize it as a scale. A Cronbach's alpha was conducted on professional vitality to determine internal consistency (alpha .79). Professional vitality (8 items) is rated on a 5-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree. The researcher modified wording to be specific to teachers. Examples of professional vitality questions include "I find my work as a teacher to be meaningful", "On the dimension of control of my work, I am closer to high

control than low control”, and “On the dimension of demands at my work, I have reasonable demands rather than excessive demands from others”.

### **Data Analysis**

Descriptive statistics were examined on all variables (race/ethnicity, sex, years working at this school, years working in schools, and participant job role) were entered in SPSS Version 26 and examined using descriptive statistics, including mean, median, mode, range, and standard deviation.

In order to answer Research Question 1, a paired sample t-test was used to identify changes in the subcategories of the PROQOL (burnout, secondary trauma, and compassion satisfaction) over the four-time points (September, December, February, and June). Twelve separate paired sample t-tests were run to examine changes in each of the three subscales across the four-time points.

To answer Research Question 2, a paired-sample t-test was used to examine the change in scores of the PRSCI (professional vitality) from Time 1 (beginning of school year) to Time 2 (end of the school year). A Pearson Correlation was used to assess the relationship between the PRSCI subscale (professional vitality) and the three PROQOL subscales (burnout, secondary traumatic stress, compassion satisfaction) at two-time points (time 1 and time 2).

### **Missing Data**

The present study utilized data from the teachers and staff who completed the T1 (September), T2 (December), T3 (February), and T4 (June) PROQOL surveys as well as T1 (September) and T4 (June) of the PRSCI. The percent of missing data was below 3% and appeared to be missing completely at random, which is in compliance with the thresholds set by Kline (1998). Mean imputation was used to address missing data. Mean imputation is a method that uses

the overall sample mean value for each item to replace the missing data within that item (Musil, Warner, Yobas, & Jones, 2002). Each item value was calculated by running the descriptive statistics to identify the mean and the mean used to replace the missing value. This was only done for participants who met the below 3% threshold for missing data; if they were above 3%, they were excluded from the study.

### Findings

When examining the PROQOL over the four timepoints, frequencies were utilized to determine the number of high ( $t > 57$ ), average ( $t 44-56$ ), and low ( $t < 43$ ) categories of burnout, secondary traumatic stress, and compassion satisfaction across timepoints (see table 2).

Table 2. Burnout, Secondary Traumatic Stress, and Compassion Satisfaction Across Four-time Points

|                            |         | T1<br>September |      | T2<br>December |      | T3<br>February |      | T4<br>June |      |
|----------------------------|---------|-----------------|------|----------------|------|----------------|------|------------|------|
|                            |         | <i>N</i>        | %    | <i>N</i>       | %    | <i>N</i>       | %    | <i>N</i>   | %    |
| Burnout                    | High    | 5               | 27.8 | 5              | 20   | 6              | 28.6 | 6          | 28.6 |
|                            | Average | 9               | 50   | 14             | 56   | 10             | 47.6 | 10         | 47.6 |
|                            | Low     | 4               | 22.2 | 6              | 24   | 5              | 23.8 | 5          | 23.8 |
| Secondary Traumatic Stress | High    | 4               | 25   | 6              | 27.3 | 7              | 31.8 | 7          | 31.8 |
|                            | Average | 10              | 50   | 10             | 45.5 | 8              | 36.8 | 8          | 36.4 |
|                            | Low     | 6               | 25   | 6              | 27.3 | 7              | 31.8 | 7          | 31.8 |
| Compassion Satisfaction    | High    | 5               | 20   | 6              | 26.1 | 7              | 30.4 | 7          | 30.4 |
|                            | Average | 10              | 50   | 10             | 43.5 | 10             | 43.5 | 10         | 43.5 |
|                            | Low     | 5               | 30   | 7              | 30.4 | 6              | 26.1 | 6          | 26.1 |

A paired sample t-test was conducted to determine if there was a statistically significant change between each of the time points and the three subcategories of the PROQOL (burnout, secondary traumatic stress, and compassion satisfaction). On average, teachers and school staff experienced a decrease in burnout between December (M=21.52; SD=6.31) and February (M=20.16; SD=5.88). This difference, 1.37, BCa 95% CI [.003, 2.73], was significant  $t(18)=2.106$ ,  $p=.05$ , and represented a medium-sized effect,  $d=.44$ . On average teachers and staff experienced an increase in burnout from February (M=19.9; SD=5.56) to June (M=21.1; SD=3.3). This difference, 1.2, BCa 95% [-2.32, -.08], was significant  $t(19)=-2.239$ ,  $p=.037$ , and represented a medium-sized effect,  $d=.46$ . On average teachers and staff experienced a decrease in secondary traumatic stress from December (M=22.66; SD=7.84) to February (M=20.67; SD=6.93). This difference, 1.99, BCa 95% [.5, 3.48], was significant  $t(18)=2.809$ ,  $p=.012$ , and represented a medium-sized effect,  $d=.55$  (see table 4). Lastly, on average teachers and school staff experienced a decrease in compassion satisfaction from September (M=43.07; SD=4.75) to December (M=40; SD=4.94). This difference, 3.08, BCa 95% [.26, 5.89], was significant  $t(12)=2.379$ ,  $p=.035$ , and represented a medium-sized effect,  $d=.57$  (see table 3). This was repeated from February to June, on average teachers and school staff experienced a decrease in compassion satisfaction from February (M= 41.85; SD= 5.79) to June (M= 39.62; SD= 7.90). This difference, 2.23, BCa 95% [1.88, 4.27], was significant  $t(19)=2.286$ ,  $p=.034$ , and represented a medium-sized effect,  $d=.46$ . When examining Vitality, there were no statistically significant changes in scores between September and June (see table 3-4). To see the visual effect of the pattern across the year for each subcategory, see figures 3-5.

Table 3. Paired-T test PROQOL and Vitality (N=20)

|     | S     |      | D     |      | N (13)      |       | S    |       | F    |      | N (13) |      | S     |      | J     |  | N (11) |  |
|-----|-------|------|-------|------|-------------|-------|------|-------|------|------|--------|------|-------|------|-------|--|--------|--|
|     | M     | SD   | M     | SD   | t           | M     | SD   | M     | SD   | t    | M      | SD   | M     | SD   | t     |  |        |  |
| BO  | 20.62 | 4.19 | 22    | 5.23 | -1.56       | 20.92 | 4.21 | 20.77 | 6.08 | .15  | 20.45  | 3.96 | 21.55 | 5.43 | -1.04 |  |        |  |
| STS | 20.03 | 4.4  | 22.38 | 6.14 | -1.74       | 19.33 | 3.69 | 20.21 | 6.23 | -.79 | 18.85  | 3.38 | 21.17 | 6.13 | -1.43 |  |        |  |
| CS  | 43.08 | 4.75 | 40    | 4.95 | <b>2.38</b> | 42.08 | 4.77 | 41.62 | 5.07 | .45  | 42.73  | 4.67 | 41    | 4.94 | 1.45  |  |        |  |
| VT  | 31.27 | 4.38 |       |      |             |       |      |       |      |      |        |      | 29.43 | 4.48 | 2.09  |  |        |  |

S=September, D=December, F=February, J=June, BO=burnout, STS=Secondary Traumatic Stress, CS=Compassion Satisfaction, VT=Vitality; bold=statistically significant at a p<.05

Table 4. Paired Sample T-test PROQOL and Vitality (N=20)

|     | D     |      | F     |      | N (19)      |       | D    |       | J    |     | N (18) |      | F     |      | J            |  | N (20) |  |
|-----|-------|------|-------|------|-------------|-------|------|-------|------|-----|--------|------|-------|------|--------------|--|--------|--|
|     | M     | SD   | M     | SD   | t           | M     | SD   | M     | SD   | t   | M      | SD   | M     | SD   | t            |  |        |  |
| BO  | 21.53 | 6.31 | 20.16 | 5.88 | <b>2.11</b> | 20.61 | 6.75 | 19.89 | 6.26 | .96 | 19.9   | 5.56 | 21.1  | 20   | <b>-2.24</b> |  |        |  |
| STS | 22.66 | 7.84 | 20.67 | 6.94 | <b>2.81</b> | 23.03 | 7.6  | 21.53 | 8.41 | 1.7 | 21.54  | 6.58 | 22.38 | 7.63 | -.81         |  |        |  |
| CS  | 40.6  | 5.32 | 41.22 | 6.02 | -.81        | 41.69 | 5.53 | 40.91 | 8.75 | .7  | 41.85  | 5.79 | 39.62 | 7.90 | <b>2.29</b>  |  |        |  |
| VT  | 31.27 | 4.38 |       |      |             |       |      |       |      |     |        |      | 29.43 | 4.48 | 2.09         |  |        |  |

S=September, D=December, F=February, J=June, BO=burnout, STS=Secondary Traumatic Stress, CS=Compassion Satisfaction, VT=Vitality; bold=statistically significant at a p<.05

Figure 3. Estimated Marginal Means of Burnout at 4 Timepoints

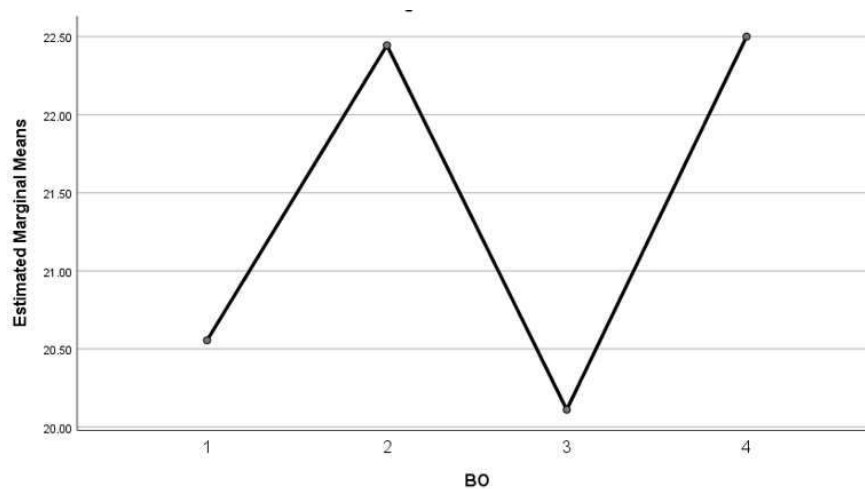


Figure 4. Estimated Marginal Means of Secondary Traumatic Stress at 4 Timepoints

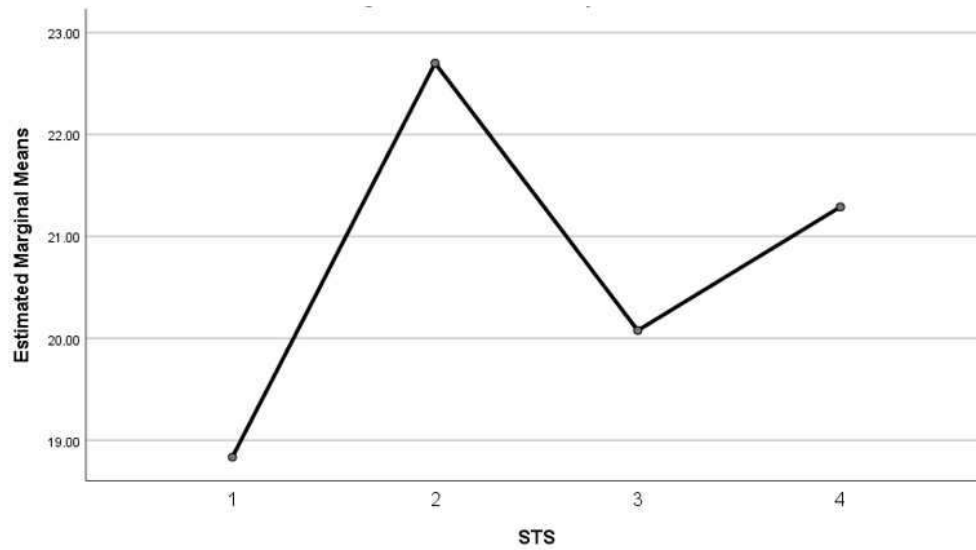
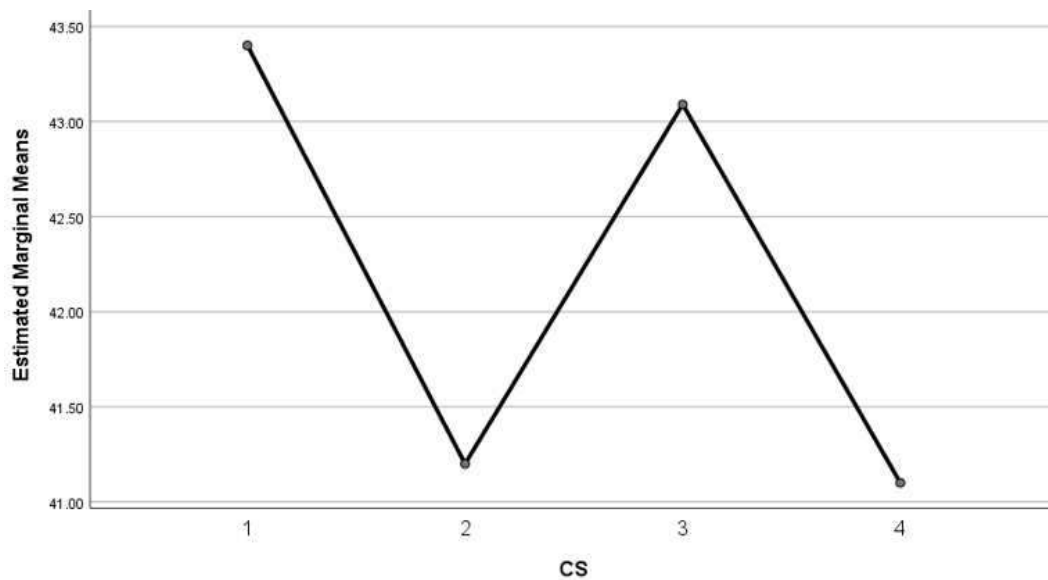


Figure 5. Estimated Marginal Means of Compassion Satisfaction at 4 Timepoints



In order to determine if there was a statistically significant relationship between the three subcategories (burnout, secondary trauma, and compassion satisfaction) and vitality, a Pearson  $r$  was calculated for each subcategory at Time 1 and Time 4. The findings indicate a moderate



negative correlation between Burnout and Vitality at time 1  $r(20)=-.54, p=.014$ ) and a strong negative correlation at Time 4  $r(23)= -.724, p= .01$ ). There was a statistically significant strong negative correlation between secondary trauma and vitality at Time 4  $r(23)=-.623, p=.002$ ), there were no significant findings at Time 1. Lastly, a strong positive correlation between compassion satisfaction and vitality was found at Time 1  $r(20)=.646, p=.002$ ) and at Time 4  $r(23)=.738, p=.01$ ).

Table 5. Pearson Correlation of Vitality and PROQOL Subscales

|             | T1_Vitality | T4_Vitality | T1_BO   | T1_STS | T1_CS | T4_BO   | T4_STS  | T4_CS |
|-------------|-------------|-------------|---------|--------|-------|---------|---------|-------|
| T1_Vitality |             |             |         |        |       |         |         |       |
| T4_Vitality | .782**      |             |         |        |       |         |         |       |
| T1_BO       | -.540*      | -.381       |         |        |       |         |         |       |
| T1_STS      | .106        | -.038       | .390    |        |       |         |         |       |
| T1_CS       | .646**      | .460        | -.662** | -.154  |       |         |         |       |
| T4_BO       | -.465       | -.724**     | .769**  | .145   | -.435 |         |         |       |
| T4_STS      | -.015       | -.623**     | -.073   | .482   | .357  | .686**  |         |       |
| T4_CS       | .651*       | .738**      | -.138   | .570   | .663* | -.708** | -.723** |       |
| N           | 11          | 23          | 11      | 11     | 11    | 23      | 23      | 23    |

BO=burnout, STS=Secondary Traumatic Stress, CS=Compassion Satisfaction,

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

During the staff meetings in June and August, teachers and staff identified three-time points in the school year that they felt they needed additional supports. Directly before the December holiday break, Mother's Day in May, and during April testing. Teachers and staff demonstrated consensus around these timepoints.

Teachers and staff reported that their stress level increases when the student behavior escalates. The timepoints that they identified as stressful and needing additional supports were directly related to the behavior of the kids. Teachers and staff reported that students experienced difficulty navigating the holidays since it is a family time and some of the girls are not able to be with family due to residing in a residential facility or poor family relationships.

“Mother’s Day is the hardest holiday for the girls, so I think maybe as a school if we could do something more to help them [students] that would be really good”

“Holidays, that’s the family time of the year”

Teachers and staff also identified testing as a stressful time and that the changes in schedule and high demand of testing is stressful to the kids. The teacher also reported that during this time many of the support staff are conducting the testing, so there is a reduction in staff available to assist the students if they are struggling. The lack of support staff and the constant movement of students or disruptions also add to teacher stress.

“They [teachers] spend three days where they’re not teaching their content, so it’s like hopefully we either finish something or we can start doing this to fill in the gaps”

“[Spring] there aren’t as many breaks...I know teachers get burnout ...I think more support during the second quarter would helpful”.

“April testing....it’s changing their [students] schedules around and then they have to adjust to that change”

### **Discussion**

Teacher wellbeing has been shown to have an impact on student academic performance and engagement (Goodard, Hoy, & Woolfolk Hoy, 2000; Caprara, Barbaranelli, Steca, & Malone 2006; Guo et al, 2012; Arens & Morin, 2016). The findings indicate teacher and staff levels of burnout, secondary traumatic stress, and compassion satisfaction are not static. Rather there is a pattern of change across the school year. With the concern over teacher attrition rates, and burnout cited as a contributing factor, there are certain time- points of the year in which teachers may need additional support to reduce burnout and secondary traumatic stress in order to reduce attrition rates.

The findings from the t-test indicate that burnout scores were higher in December and reduced in February and then increased from February to June. This trajectory is supported by the

qualitative data in which participants identified the December holidays and spring holidays/testing as stressful timepoints. Additionally, compassion satisfaction showed a trend of decreasing from September to December and again from February to June. This indicates a movement toward compassion fatigue.

It is important to note that teachers and staff may experience a negative feedback loop around these more stressful times. Teachers who experience burnout may feel powerless and engage in quick responses to student behavior that may not provide an opportunity for the student to correct the behavior (Pace, Boykins, & Davis, 2014). Due to this, the student's behavior does not deescalate, and the teachers and staff may escalate in response. Teachers and staff reported that right before the December holiday was a stressful time, not because of work, but because the students were usually escalated in their behavior. Teachers and staff identified that students had varying levels of engagement with family due to residing in a residential, lockdown facility. Due to this, the reactions from the students range from excitement to reexperiencing loss and past trauma. As noted above, compassion satisfaction significantly dropped from September to December. This drop-in satisfaction may increase risk for compassion fatigue which again can lead to "disengagement, feelings of helplessness, anger, and apathy" (Ledoux, 2015, p 2045).

Secondary traumatic stress showed a decrease from December to February. This suggests that while teachers are experiencing high stress, the holiday break and subsequent start of the new year were helpful in reducing the secondary traumatic stress scores. While this may not be a surprise, the fact that the scores are elevated in December suggests that teachers and staff may need extra supports in December. This assumption is further supported by the findings of compassion satisfaction that decreased significantly from the start of the school year to just prior to the December break.

Teachers reported that their own stress levels increased when they recognized the behavioral shifts in the students. As teachers express this stress and burnout in the classroom, students often respond with escalating behavior (Geving, 2007; Herman, Hickmon-Rosa, & Reinke, 2018). This is an example of the reciprocal nature of systems interacting. Teachers are impacted by students, who are then impacted by teachers. Therefore, teacher responses to student behavior and student responses to teachers lowered wellbeing creates a negative feedback cycle. Recognizing the trends of teacher and staff wellbeing provides a template for targeted intervention at specific time points during the school year. Additionally, given the reciprocal nature described by teachers, student escalation leads to teacher escalation, these targeted interventions should include a student-specific component to address additional stressors experienced by the student.

This study supports previous findings that compassion satisfaction is a mitigator of burnout (Conrad & Kellar-Guenther, 2006; Wee & Myers, 2003) and present professional vitality is a mitigator of burnout, secondary trauma, and compassion fatigue. The negative correlations demonstrated as vitality increased, burnout decreased at both time points and secondary trauma decreased significantly at the end of the school year. These findings suggest the importance of meaning-making, ownership, and self-efficacy in mitigating burnout and secondary traumatic stress. Meaning making is the thoughtful process in which teachers and staff acknowledge or assigning purpose or importance to their work and their experiences within the school environment (Intrator & Kunzman, 2006).

Conversely, as vitality increased so did compassion satisfaction. This strong positive correlation between professional vitality and compassion satisfaction suggests that they may be similar concepts. Both compassion satisfaction (Stamm, 2010) and professional vitality (Palmer, Dankoski, Smith, Brutkiewicz, & Bogdeqic, 2011; Baruch, Grimland, & Vigoda-Gadot, 2014)

identify self-efficacy as a contributing factor. Vitality differs in that it focuses on the individual's ability to make the work environment positive. The concept of vitality is broken down by Intrator & Kunzman (2006) and provides insight into what may lead to compassion satisfaction. These insights place a focus on finding meaning in your work, ability to recognize student needs, taking ownership of work, and having the skills to effectively respond to challenges (Intator & Kunzman) that influence a positive working experience.

### **Strengths and Limitations**

The strengths of this study included the innovative longitudinal design to assess multiple time points throughout the year as well as the use of member checking that provided additional checks for reliability and validity of results. The design of this study provides a template for assessing teacher wellbeing in schools. Further, this topic of teacher wellbeing in alternative educational settings is largely absent in the literature.

A limitation of this study was the small sample size which makes generalizing findings not possible. The small sample size also limited the types of analysis that could be run and the ability to examine covariates. Additionally, the ProQOL5 has been shown to have some problems with construct validity (Hemsworth et al., 2018). Utilizing techniques such as Confirmatory Factor Analysis may mediate some concerns around psychometric problems; however, in this case, I was unable to use such techniques as they require a much higher sample size than what could be obtained in the current study.

### **Practice and Policy Implications**

The results of this study support the need to develop professional development training and targeted interventions throughout the school year to address peaks in teacher and student stress. Professional development topics that would be beneficial include meaning-making, self-efficacy,

and ownership. Additionally, training teachers in how to recognize burnout, secondary trauma, and compassion fatigue in themselves and colleagues may be beneficial. Targeted interventions should focus on building teachers' supports as well as addressing trends in problematic student behaviors. Adding training and supports may positively impact teacher vitality and reduce burnout and secondary traumatic stress thereby reducing teacher attrition. Additionally, schools may invest in self-care during the school day and providing opportunities for teachers and staff to feel in control of their workspace/day (Day, Vanderwill, Crosby & Baroni, 2020).

Implications for policy and research include examining the testing schedule and how that impacts students and teachers. Understanding phenomenon in more depth will help develop protocols and or policies that may reduce teacher stress and burnout during those times. This is specifically important to the protocols regarding how tests are delivered as well as the expected timelines for testing in alternative educational environments.

Replication of this study is welcomed to determine if the results are generalizable. The Support for Patients and Communities Act (H.R.6.) 2016, provides \$50,000 in grants specifically for educational setting for fiscal years ranging from 2019-2023. These funds can be used in various ways including increasing awareness of youth trauma among populations that interact with children and youth on a regular basis. This funding provides an opportunity for administrators to provide teachers with additional training that supports youth who have experienced trauma (Day, Vanderwill, Crosby, Baroni, 2020).

### **Conclusion**

Teacher wellbeing is linked to teacher attrition. Teacher attrition and teacher wellbeing have been found to impact students' academic wellbeing (school connectedness, academic success, etc.). Throughout the school year, teachers and staff demonstrated a pattern of burnout, secondary

traumatic stress and compassion satisfaction that moved up and down indicating there are peak times where teachers and staff are experiencing more stress. Professional vitality may work as a mitigator to burnout and secondary traumatic stress. As such, school administrators may focus on self-care, ownership, and meaning making for teachers as a way to promote wellbeing and reduce burnout symptoms. Improving the wellbeing of teachers and staff in the school may assist with a reduction in teacher attrition.

### **Chapter 3: Implementing self-care during the school day: An intervention to reduce teacher dysregulation in alternative education settings**

#### **Introduction**

Teacher wellbeing (burnout, secondary trauma, compassion satisfaction) (is associated with teacher attrition (Chang, 2009; Howard & Johnson, 2004; Hutell, Melin, & Gustavsson, 2013; Wang, Hall, & Rahimi, 2015) and student academic outcomes (school connectedness and academic achievement) (Arens & Morin, 2016; Caprara, Barbaranelli, Steca, & Malone 2006; Guo et al, 2012). According to the National Center for Education Statistics, 17.3% of teachers left the profession during the 2012-2013 school year (Gray & Taie, 2015). Teachers in lower socio-economic schools leave at a higher rate than those employed in more affluent schools (Boyd, Lankford, Loeb, & Wyckoff, 2005; DeAngelis & Presley, 2011). Teacher burnout and stress have been identified as reasons teachers leave the profession (Chang, 2009; Howard & Johnson, 2004; Hutell, Melin, & Gustavsson, 2013; Wang, Hall, & Rahimi, 2015).

High teacher turnover comes with a cost to both the student and the district. High teacher attrition is associated with lower student achievement (Greenberg, Brown, & Abenavoli, 2016; Ronfeldt, Loeb, & Wyckoff, 2013) and prevents necessary relationship building that leads to school connectedness for students (Djonko-Moore, 2016). Additionally, a high attrition rate leads to a deficit in the number of qualified teachers, creating massive staff shortages (Djonko-Moore, 2016) and costs public school districts about \$7 billion per year (Greenberg, Brown, & Abenavoli, 2016).

Reports of “not good” mental health rose from 34% in 2015 to 56% in 2017 according to the Educator Quality of Work Life Survey (American Federation of Teachers, 2017). Workplace bullying, lack of preparation time, and shortages in staff and resources have been identified as



contributing factors to stressful teaching experiences (AFT, 2017). Teachers reported workplace bullying at a rate three times higher than other workers and 61% of educators and staff reported “always” or “often” feeling stressed at work (AFT, 2017).

In addition to the policies, practices, and experiences of general education, teachers who serve in an alternative education setting are exposed to additional stressors. Alternative education serves high-risk youth whose needs cannot be met through traditional education (Lehr, Tan, & Ysseldyke, 2009). Youth enrolled in alternative educational settings are more likely to have histories of trauma, involvement with the courts, and experience home instability (Fulkerson, Harrison, & Beebe, 1997). Court-involved youth are identified as those entering the child welfare system through foster care and/or the juvenile justice system. There are notable differences between the experiences of males and females in the child welfare system. Reports estimate that the rate of traumatic events experienced by females in the juvenile justice system is between 70% and 93% (Kerig & Ford, 2014), which is greater than the general population estimates of 47-55% (Bethell et al., 2017). Additionally, females have higher rates of Post-Traumatic Stress Disorder and sexual abuse histories (Sherman & Balck, 2015; Teplin, Abram, McClelland, Dulcan, & Mericle, 2002). The prevalence of trauma exposure amongst court-involved youth puts alternative education teachers at a higher risk for developing secondary traumatic stress, compassion fatigue, and burnout, especially those that serve in all-female settings.

### **Teacher Wellbeing**

This study defines teacher well-being as burnout, secondary trauma, and compassion satisfaction/fatigue. The term “burnout” describes the result of long-term exposure to compassion fatigue (Sacco et al., 2015; Marcum, Rusnak, & Koch, 2018) as well as overloaded work tasks and conflicts with administration (Hunsaker & Heaston, 2014; Flarity, Gentry, & Mesnikoff, 2013).

The majority of research on burnout has focused on the medical profession, however, research identified burnout as occurring at a high rate in the teaching profession (Hakanen et al 2006; Maslach et al., 2001; Chang, 2009). Burnout is associated with feelings of exhaustion, withdrawal, lacking in power, and no meaning attributed to the work environment (Hultell et al., 2013). A study by Kyriacou (2001) identified stressors that teachers experience throughout the school day, these stressors include coping with change, role conflict, poor working conditions, engaging with unmotivated students, and problematic behavior and implementation of disciplinary measures. In a recent study a significant relationship between environmental stressors (discipline, time pressure, low student motivation) and teacher burnout (emotional exhaustion, depersonalization, and reduced personal accomplishment) was identified (Skaalvik & Skaalvik 2017).

Secondary Traumatic Stress (STS) is the exposure to the retelling of traumatic events while in a position of helping (Adams & Riggs, 2008). Due to the daily interaction with students which includes sharing details of traumatic events, teachers are at an increased risk of developing STS (Hatcher, et al, 2011; National Child Traumatic Stress Network 2011). There are several symptoms associated with STS which include “increase in arousal and avoidance reactions, changes in memory and perception, alterations in their sense of self-efficacy, depletion of personal resources, and disruption in their perceptions of safety, trust, and independence” (NCTSN, 2011, p 1). There are three main categories of STS: cognitive, emotional, and physical (VanBergeijk & Sarmiento, 2006). Cognitive symptoms include low self-efficacy, a sense of failure, and self-doubt; emotional symptoms include feelings of guilt, anxiety, and stress; and physical symptoms include loss of sleep, depression, and fatigue (VanBergeijk & Sarmiento, 2006).

Compassion fatigue was identified by Joinson (1992) who described it as “disengagement, feelings of helplessness, and anger and apathy” (Ledoux, 2015, p 2045). While research suggests

that some studies use the terms compassion fatigue and STS interchangeably (Bride, Radey, Figley, 2007), I identify them as different concepts. Secondary traumatic stress may be related to compassion fatigue. However, symptoms of compassion fatigue are on the lower end of the spectrum from the more intense symptoms of secondary trauma (Ledoux, 2015). Much of the literature on compassion fatigue focuses on the nursing population. The experience of compassion fatigue is linked to empathy and stress from assisting people who have experienced trauma (Hunsaker & Heaston, 2014). The repeated exposure leads to self-preservation resulting in compassion fatigue (Hunsaker & Heaston, 2014; Figley, 1995).

While compassion fatigue implies a negative experience during helping, compassion satisfaction is the resulting pleasure one experiences from engaging in helping (Stamm, 2010). This includes the level of pleasure or satisfaction derived from the work environment, such as positive colleague interactions or your ability to influence the environment in a positive way (Stamm, 2010). Studies suggest compassion satisfaction may be mitigator of burnout (Conrad & Kellar-Guenther, 2006; Wee & Myers, 2003).

### **Trauma-Informed School Interventions**

Trauma-informed practices in education are designed to address the student trauma. However, self-care for teachers is becoming more prevalent in the discussion. There are multiple guidelines available to incorporate trauma-informed methods into schools' policies and practices (Crosby, 2015). Some of the trauma-informed school interventions that have been implemented to date include Multiplying Connections, Making Space for Learning, and Compassionate Teaching (Australian Childhood Foundation, 2010; Perry, 2009; Walkley & Cox, 2013; Wolpow et al., 2009). Commonalities among trauma-informed school interventions include teacher regulation and teacher predictability and consistency, (Crosby, et al., 2015; Perry, 2009; Walkley & Cox,

2013) understanding development and brain maturation processes, building coping strategies, and emphasize relationships (Australian Childhood Foundation, 2010; Crosby, et al., 2015). Of the trauma-informed frameworks for education, self-care is identified in *Compassionate Teaching* as an important part of the curriculum (Wolpow et al., 2009). There is an absence of literature assessing the effectiveness of trauma-informed self-care school interventions in improving teacher wellbeing of those working with vulnerable populations.

### **Self-Care**

Self-care has been identified as a method to mitigate the effects of burnout and stress, (Flook, Goldberg, Pinger, Bonus & Davidson, 2013; Lee & Miller 2013, Salloum, Kondrat, Johnco, & Olson, 2015) secondary traumatic stress (Hydon, Wong, Langley, Stien, & Katoaka 2015) and compassion fatigue (Abernathy & Martin, 2019) in many helping professions. While there is no one clear definition of self-care, the self-care concept encompasses “behaviors that support health and well-being” (Lee & Miller, 2013, p 96). Mindfulness is one approach to mitigate stressors that have been studied. Mindfulness brings into focus “breath, other bodily sensations, external stimuli, thoughts or emotions” (Flook et al, 2013, p 2). It is thought that practice in mindfulness will improve emotional regulation and the ability to focus (Flook et al, 2013; Lutz, Slatger, Dunne, & Davidson, 2008). A study by Hue and Lau, (2015), found mindfulness effective at increasing well-being, as did a systematic review by Lomas et al., (2017).

The U.S. Department of Education created a model for training on secondary traumatic stress which identifies self-care as a method to decrease the impact of secondary traumatic stress (Hydon, Wong, Langley, Stien, & Katoaka 2015). In this model, self-care is described as “activities performed with the intention of improving or restoring health and well-being” (Hydon, Wong, Langley, Stien, & Katoaka, 2015, p 327; Stromberg, Jaarsma, & Riegel, 2012). The model

acknowledges that self-care strategies must be tailored to the individual and requires participants to develop explicit self-care plans that address several self-care categories: social, physical, intellectual, financial, spiritual, and environmental self-care categories (Hydon, Wong, Langley, Stien, & Kataoka, 2015). A study by Abernathy & Martin (2019), found self-care with mindfulness reduced burnout, self-care, and increased compassion satisfaction among nurses.

Trauma-informed self-care is another approach that includes awareness of trauma, understanding of emotional experiences, and building capacity in coping skills (Salloum, Kondrat, Johnco, & Olson, 2015). A study with child welfare workers showed that trauma training was effective in promoting compassion satisfaction and reducing compassion fatigue (Salloum, Kondrat, Johnco, & Olson, 2015; Sprang, Clark, & Whitt-Woosley, 2007). It is important to note that most self-care literature is fluid and contains more concepts than a concrete prescription. This is in part due to the individual nature of self-care and the concept that what works for one does not necessarily work for all. Further, there is a gap in research examining self-care approaches specific to teachers during the work (school) day. Additionally, much of the literature around self-care focuses on what to do outside of the school day. Again, much of the research on this topic derives from the medical field. Two studies in the medical field found that training on the implementation of self-care strategies led to significant improvements in burnout and secondary traumatic stress and an increase in compassion satisfaction (Dreher, Hughes, Handley, & Tavakoli, 2019; Orellana et al., 2017). There is a gap in literature specific to education and specific to the use of self-care strategies during the school day.

### **Trauma-Informed School Interventions**

There are multiple guidelines available to incorporate trauma-informed methods into schools' policies and practices (Crosby, 2015). Some of the trauma-informed school interventions that have been implemented to date include Multiplying Connections, Making Space for Learning,

and Compassionate Teaching (Australian Childhood Foundation, 2010; Perry, 2009; Walkley & Cox, 2013; Wolpow et al., 2009). Commonalities among trauma-informed school interventions include teacher regulation and teacher predictability and consistency, (Crosby, et al., 2015; Perry, 2009; Walkley & Cox, 2013) understanding development and brain maturation processes, building coping strategies, and emphasize relationships (Australian Childhood Foundation, 2010; Crosby, et al., 2015). Of the trauma-informed frameworks for education, self-care is identified in Compassionate Teaching as an important part of the curriculum (Wolpow et al., 2009).

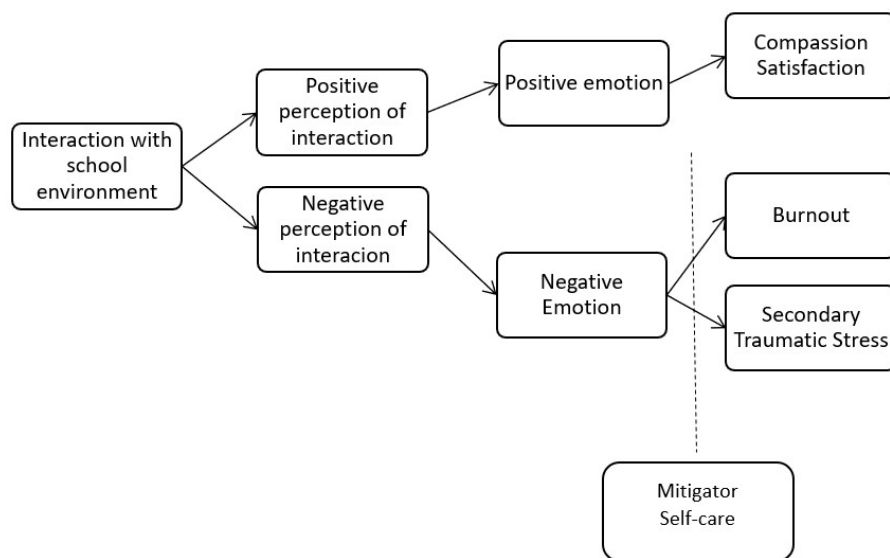
There are frameworks available that could be utilized to increase the knowledge, skills, and abilities of teachers to engage in trauma-informed practices in schools through participation in professional development mechanisms. However, it is up to the discretion of school administrators to enact trauma-informed practices within their school districts. There is an absence of literature assessing the effectiveness of trauma-informed school interventions in improving teacher wellbeing of those working with vulnerable populations.

### **Stress and Coping Theory**

This study is informed by Stress and Coping theory. Stress is part of the complex interaction between the individual and their environment that occurs when the particular demands of the environment are appraised by the individual to exceed their coping resources. Stress is considered to impact the individual negatively and lead to a myriad of biopsychosocial problems (Lazarus & Folkman, 1984). The transactional model of stress and coping theory (Glanz, et. al., 2002) was used in this study to examine the outcome of the individual's interaction with the stressor and their sense of the controllability of the stressor (factors contributing to teacher wellbeing), and actions utilized to mitigate the impact of the stressor and/or increase the ability to cope (self-care).

Stress and coping theory posit that the experience of the individual is influenced by their current interaction with the environment as well as their perception or interpretation of their capacity to cope with these interactions are (Lazarus & Folkman, 1984). For example, a teacher or staff member may encounter an escalated student (stressor). How the teacher internalizes or makes meaning of the interaction will depend on their perception/interpretation of the student's behavior, the environment in which the interaction is embedded, the individual's current mood, and their perception of their ability to be effective in response to the student's behavior (Split, Koomen, & Thijs, 2011). In the school setting staff and teachers' prolonged exposure to environmental stressors, without interventions to improve their appraisal, mood, or perception of their ability to be effective, has the potential to increase the likelihood of burnout, secondary trauma, and compassion fatigue. Therefore, this study examined teacher and staff use of self-care strategies to mitigates the impact of potential stressors in the school environment on burnout, secondary trauma, and compassion fatigue (see figure 1).

Figure 1. Stress and Coping Theory Pathway



## **Present Study**

While there is much research regarding burnout, secondary traumatic stress, and compassion fatigue (Bride, Radey, Figley, 2007; Hatcher, et al, 2011; Kyriacou, 2001; Ledoux, 2015; National Child Traumatic Stress Network, 2011; VanBergeijk & Sarmiento, 2006), most studies are focused on medical and mental health professionals' interventions. More research is needed to explore the implementation of and barriers to self-care during the school day. Additionally, the paucity of self-care interventions in primary and secondary education institutions demonstrates a need to continue research on this topic. To that end, the aim of this study was to examine the implementation of self-care practices during the school day, and the impact of an intervention on the use of self-care practices during the school day. I examined the following three research questions: 1. How does the frequency of self-care strategies used and the type of self-care strategies used change over the school year following a trauma-informed intervention for teachers and staff?; 2. What is the relationship between the frequency of self-care strategies used and teacher well-being as measured by the Professional Quality of Life subscales-Burnout, Compassion Fatigue, and Secondary Traumatic Stress?; and 3. What were participants' experiences of the intervention and its impact on their use of self-care strategies? I hypothesized that the use of self-care strategies would increase in frequency following the trauma-informed intervention, and be negatively associated with burnout, compassion fatigue, and secondary traumatic stress.

## **Method**

### **Sample**

Participants in the study included 27 teachers and other school support staff who were employed during the 2018/2019 school year at an alternative public charter middle/high school located in the Midwest (see table 1). The school serves female court-involved youth who have



been placed in a residential treatment facility as a result of a Child Abuse and Neglect petition or because of juvenile court adjudication. The vast majority of youth served in this environment are African American, from a lower socio-economic status, and who have experienced traumatic events. It is important to note the teachers do not reflect the same race. (see table 1 for more details)

Table 1. Sample Characteristics (N=27)

| Characteristics         |                   | N  | %    |
|-------------------------|-------------------|----|------|
| Sex                     | Male              | 4  | 14.8 |
|                         | Female            | 23 | 62.2 |
| Race                    | White             | 19 | 79.2 |
|                         | Black             | 4  | 16.7 |
|                         | Bi-racial         | 1  | 4.2  |
| Role Type               | Classroom Teacher | 12 | 44.4 |
|                         | Other Staff       | 15 | 55.6 |
| Years of Teaching       | Less than 2 years | 2  | 8    |
|                         | 3-5 years         | 6  | 23   |
|                         | Over 5 years      | 18 | 69   |
| Years in Current School | Less than 2 years | 15 | 58   |
|                         | 3-5 years         | 4  | 15   |
|                         | Over 5 years      | 7  | 27   |

### Intervention Description

Since the pilot year 2012, the school had been receiving trauma training in the form of an adapted version of The Heart of Learning and Teaching: Compassion, Resiliency, and Academic Success (HLT) curriculum (Day et al., 2015). The curriculum is an integration of research, theory, and clinical practice and based on attachment and ecological theories (Day et al. 2015). Sensory integration modifications were introduced to the curriculum in the 2014 year (Dorman, Lindsey, Woodin, Cohen, Schweitzer, Tona, 2009) and trauma-informed self-care (training on self-care strategies during the school day, intervention supports, mindfulness) was introduced in 2018.

Teachers were provided with a website that included each module of the curriculum for reference as either booster training or if hired on or after August 2018, was their primary source of introduction to the trauma-informed training curriculum (Clara B Ford Academy, 2015).

Additional professional development training included a 3-hour training in August of 2018 that reviewed secondary trauma impact, self-care methods, and discussed how self-care could be implemented during the school day. This training was conducted by a trauma and mental health specialist consultant. Teachers received an additional 1-hour of professional development training specific to trauma-informed self-care at the beginning of the school year. In addition, the school sponsored self-care activities that ranged from chair massages (provided by a professional masseuse) and a group painting activity. Self-care activities occurred every month during the school year and were planned and implemented by the school administrator.

### **Data Collection**

This mixed-methods study was a secondary analysis of focus group and survey data collected by the school during the 2018-19 school year. The Institutional Review Board (IRB) at Wayne State University approved the current study. The school administrators obtained informed consent/assent from the teachers and staff during orientation prior to the beginning of the school year. Surveys were distributed and collected by school staff at four different time points in the school year, September, December, March, and June. A review of the demographics of those that did not complete were reviewed for differences from those who did complete.

### **Measures**

The independent variables in this study were the types and numbers of self-care practices used during the school day; and the dependent variables were burnout, secondary traumatic stress (STS), and compassion fatigue (CS). This study examined the independent variables (use of self-

care) impact on the dependent variable (burnout, STS, and CS) over four time-points while controlling for years of teaching experience and years teaching in the school.

*An adapted version of the National Alliance on Mental Illness (NAMI) Self-Care Inventory*

The primary independent variable was measured using the School Day Self-Care Index, which is a 22 item self-assessment designed to have participants identify what they use for self-care throughout the school day. The items in the index are independent of each other, meaning that participants would not necessarily score a series of items similarly as it would depend upon their perception of helpfulness of each item. Due to this, there was an item by item analysis. The School Day Self-Care Index uses the Workplace 10 item inventory from the NAMI Self-Care Inventory (NAMI, N.D.) with an additional 12 questions designed by the authors of the current study specifically for the school environment. The Workplace subscale includes items such as “Allow for breaks during the work-day”, “Balance workload”, and “Set limits/boundaries with students and colleagues”. The added 13 questions include items such as “Use sensory tools when needed”, “Engage in deep breathing exercises to help ground you”, and “I am able to set boundaries and say no to extra responsibilities”. The School Day Self-Care Inventory is scored using a 5-point Likert scale that assesses the frequency of use. The responses include “0=It never occurred to me (used 0 times per week)” “0=Never (used 0 times per week)”, “1=Rarely(used 1 time per week)”, “2=Occasionally (used 2 to 3 times per week)”, “3=Frequently (used 4 to 5 times per week)”. The School Day Self-Care Inventory was administered at 4 time-points throughout the school year (September, December, February, and May). Four new variables were created by summing each item for that timepoint. The larger the number the more frequently self-care strategies were used, with a maximum number of 110 for each time point. See Appendix A for the full version of the School Day Self-Care Inventory.

The Professional Quality of Life Measure (ProQOL 3, Stamm, 2010) was used to evaluate teacher and staff levels of burnout, secondary traumatic stress, compassion fatigue, and compassion satisfaction. The ProQOL is a 30-item self-report measure that has 10 questions for each of the three sub-categories: burnout, secondary trauma, and compassion satisfaction. Stamm (2010) defines burnout as being overwhelmed, feeling ineffective, and hopeless in your work. The burnout subscale includes questions such as “I am not as productive at work because I am losing sleep over traumatic experiences of a person I [help]”. Secondary trauma is defined as exposure to other’s traumatic or stressful events while at work which causes fear, sleeplessness, reoccurring thoughts about the traumatic event, and avoidance (Stamm, 2010). A sample item of the secondary trauma subscale is “I jump or am startled by unexpected sounds”. Compassion satisfaction is defined as the joy of doing a job well done and the pleasure you feel while assisting others in your work (Stamm, 2010). “I feel invigorated after working with those I [help]” is a sample item from the compassion satisfaction subscale. Each subscale is comprised of a 5-point Likert scale ranging from never to very often. Each subscale score is summed and converted to T scores. A t-score with scores below 43 indicates low levels, 43-56 indicate average levels, and scores above 57 indicate high levels of burnout, secondary trauma, and compassion satisfaction. The Professional Quality of Life Measure has demonstrated acceptable reliability using Cronbach’s Alpha: compassion satisfaction ( $\alpha=.88$ ), burnout ( $\alpha=.75$ ), secondary traumatic stress ( $\alpha=.81$ ) (Stamm, 2010). Cronbach’s Alpha was run for this study and again demonstrated good reliability: burnout ( $\alpha=.70$ ), secondary traumatic stress ( $\alpha=.79$ ), and compassion satisfaction ( $\alpha=.92$ ). Scores for the PROQOL were computed by turning raw scores into t-scores and then summing each category (Stamm, 2010). Scores are then interpreted with high, average and low categories with high = a t-score

above 57, average= a t-score between 44 and 56, and low = a t-score under 43. See Stamm (2010) for the full scoring guide.

In addition to quantitative analysis, focus groups were conducted in the Spring of 2019. Two focus groups were facilitated with a total of 21 teachers and staff who were separated into two groups, each focus group lasted approximately 1 hour. During the focus group, teachers and staff were asked the following questions: 1) What did you find the most helpful or impactful in the professional development training/associated activities/ and supports from the administration around self-care?; 2) What was least helpful?; and 3) Did the focus on self-care help you cope with work stressors? Focus groups were conducted within the school building, audio-recorded and transcribed verbatim. In addition, member checking (Corbin & Strauss, 2008) occurred in August of 2019. In August, teachers and staff were presented with the findings and had the opportunity to provide feedback.

### **Analysis**

Descriptive statistics were examined on all variables of interest (race/ethnicity, sex, years working at this school, years working in schools, and participant job role) in SPSS Version 26 using descriptive and bivariate statistics, including mean, median, mode, range, and standard deviation.

In order to answer Research Question 1, a paired sample t-test was used to identify changes in the frequency of use of the 22 self-care strategies captured in the School Day Self-Care Inventory over four-time points (September 2018, December, February, June 2019). For each self-care question, 6 paired sample t-tests were run to examine changes in self-care strategies between each of the four-time points.

In order to answer Research Question 2, two new variables were created, frequency of self-care skills used at Time 1 (September), and frequency of self-care strategies used at Time 4 (June) for each participant. These variables were generated by summing the frequency of skills used at Time 1 and again at Time 4 as measured by the School Day Self-Care Inventory. A Pearson Correlation was used to identify the relationship between frequency of self-care skills used and the PROQOL subcategories (Burnout, Secondary Traumatic Stress, Compassion Fatigue) for each of the two-time points (September 2018 and June 2019).

To answer Research Question 3, transcripts were analyzed for themes using a critical hermeneutics process to examine line by line the experiential claims, perspectives, and understandings of the teachers' and staffs' experiences with the self-care intervention (Kinsella, 2006). In order to prevent bias, two researchers reviewed the transcripts to ensure interrater reliability. Member checking was also used to confirm findings and further promote the reliability of findings.

### **Missing Data**

The present study utilized data from the teachers and staff who completed the T1 (September), T2 (December), T3 (February), and T4 (June) PROQOL and School Day Self-Care Inventory. The percent of missing data appeared random and was below 3%, which is in compliance with the thresholds set by Kline (1998). Mean imputation was used to address missing data. Mean imputation is a method that uses the overall sample mean value for each item to replace the missing data within that item (Musil, Warner, Yobas, & Jones, 2002). Each item value was calculated by running the descriptive statistics to identify the mean and that mean was used to replace the missing value. This was only done for participants who met the below 3% threshold for missing data, if they were above 3%, they were excluded from the study. There were no

differences between those excluded in the study. However, of the teachers and staff that completed the September surveys, teachers were more likely (N=5) to be excluded at the 4<sup>th</sup> timepoint than Staff (N=3) due to non-completion of survey.

### Findings

A paired sample t-test was conducted to determine if there was a statistically significant change between each of the time points and the 22 self-care types. Of the 22 self-care questions, two were statistically significant. On average teachers and staff experienced an increase in the frequency of use of “negotiating needs (benefits, bonuses, raises, etc.)” between December (M=2.47; SD=1.23) and June (M=3.27; SD=1.03). This difference, -.80, BCa 95% [-1.41, -.19], was significant  $t(16)=.2771$ ,  $p=.014$ , and represented a medium-sized effect,  $d=.57$ . On average, teachers and staff experienced an increase in the frequency of use of “participation in peer support group” between February (M=2.82; SD=1.24) and June (M=3.65; SD=1.37). This difference, -.82, BCa 95% [-1.31, -.33], was significant  $t(16)=-3.570$ ,  $p=.003$ , and represented a medium-sized effect,  $d=.67$ .

Subsequently, there were 4 questions that were trending towards significance. On average teachers and staff reported an increase in the frequency of use of, “engage with coworkers” between December (M=4.22; SD=.73) and February (M=4.56; SD=.70). This difference, -.33, BCa 95% [-.67, .01] was trending towards significance,  $t(17)=-.2062$ ,  $p=.055$ , and represented a medium-sized effect,  $d=.45$ . On average teachers and staff reported an increase in the frequency of use of “participate in peer support group” between December (M=2.53; SD=1.12) to February (M=3.12; SD=1.17). This difference, -.59, BCa 95% [-1.19, .81] was trending towards significance,  $t(16)=-2.063$ ,  $p=.056$ , and represented a medium-sized effect,  $d=.46$ . On average teachers reported an increase in the frequency of “wear comfortable clothes” between September (M=4.27; SD=.79) and June (M=4.73; SD=.65). This difference, -.45, BCa 95% [-.92, .001] was

trending towards significance  $t(10)=-2.19$ ,  $p=.053$ , and represented a medium-sized effect,  $d= .57$ . On average teachers and staff reported an increased frequency in “allow space for expressing emotions” between December ( $M=3.72$ ;  $SD=.96$ ) February ( $M=4.06$ ;  $SD=.94$ ). This difference,  $-.33$ , BCa 95%  $[-.67, .01]$  was trending towards significance  $t(17)=-2.06$ ,  $p=.055$ , and represented a medium-sized effect,  $d= .45$ . (see table 2-4)



Table 2. Paired T-test T1 (September) compared to T2 (December), T3 (February), and T4 (June)

| Self-Care   | September |      |       | December |      |       | September |      |      | February |       |      | September |      |      | June |      |      |      |
|-------------|-----------|------|-------|----------|------|-------|-----------|------|------|----------|-------|------|-----------|------|------|------|------|------|------|
|             | M         | SD   | t     | M        | SD   | t     | M         | SD   | t    | M        | SD    | t    | M         | SD   | t    | M    | SD   | t    |      |
| Break       | 3.83      | .39  | -0.36 | 3.92     | .79  | 0.36  | 3.67      | .65  | 3.83 | .72      | 0.36  | 3.82 | .40       | 3.73 | .90  | 3.82 | .40  | 3.73 | .90  |
| Engage      | 4.61      | .51  | .69   | 4.46     | .66  | .69   | 4.58      | .51  | 4.83 | .39      | 1.92  | 4.55 | .52       | 4.73 | .47  | 4.55 | .52  | 4.73 | .47  |
| Quiet       | 4.00      | .85  | .46   | 3.83     | 1.03 | .46   | 3.75      | .96  | 3.83 | .937     | -.364 | 4.00 | .89       | 4.09 | .83  | 4.00 | .89  | 4.09 | .83  |
| Enjoy       | 4.15      | .69  | 1.39  | 3.92     | .76  | 1.39  | 4.17      | .72  | 4.00 | .60      | .8    | 4.18 | .75       | 4.09 | .54  | 4.18 | .75  | 4.09 | .54  |
| Boundary    | 4.54      | .66  | 1.59  | 4.15     | .89  | 1.59  | 4.50      | .67  | 4.58 | .67      | -.32  | 4.55 | .69       | 4.18 | .75  | 4.55 | .69  | 4.18 | .75  |
| Balance     | 4.15      | .55  | 1.32  | 3.69     | 1.03 | 1.32  | 4.25      | .62  | 4.08 | .79      | .80   | 4.36 | .50       | 4.09 | .70  | 4.36 | .50  | 4.09 | .70  |
| Arrange     | 4.69      | .48  | .62   | 4.54     | .78  | .62   | 4.67      | .49  | 4.33 | 1.15     | 1.08  | 4.73 | .47       | 4.55 | .69  | 4.73 | .47  | 4.55 | .69  |
| Supervision | 4.08      | 1.19 | .33   | 3.92     | .95  | .33   | 4.17      | 1.19 | 4.00 | 1.21     | .38   | 4.09 | 1.22      | 4.00 | 1.10 | 4.09 | 1.22 | 4.00 | 1.10 |
| Negotiate   | 2.92      | .86  | .76   | 2.69     | 1.03 | .76   | 3.00      | .85  | 3.17 | 1.27     | -.43  | 2.73 | .79       | 2.82 | .60  | 2.73 | .79  | 2.82 | .60  |
| Support     | 3.00      | 1.53 | .61   | 2.77     | 1.17 | .61   | 2.75      | 1.36 | 2.83 | 1.03     | -.29  | 2.82 | 1.40      | 3.00 | 1.26 | 2.82 | 1.40 | 3.00 | 1.26 |
| Sensory     | 3.85      | .80  | -1    | 4.00     | 1.00 | -1    | 3.82      | .87  | 3.82 | .87      | 0     | 3.82 | .75       | 3.64 | 1.17 | 3.82 | .75  | 3.64 | 1.17 |
| Affirmation | 4.00      | 1.29 | -0.27 | 4.08     | 1.04 | -0.27 | 3.83      | 1.27 | 3.83 | 1.27     | 0     | 4.00 | 1.18      | 3.82 | .98  | 4.00 | 1.18 | 3.82 | .98  |
| Breath      | 3.92      | 1.04 | -.43  | 4.00     | 1.15 | -.43  | 3.92      | .99  | 3.92 | .99      | 0     | 4.00 | 1.00      | 4.00 | 1.10 | 4.00 | 1.00 | 4.00 | 1.10 |
| Comfort     | 4.23      | .73  | -1    | 4.46     | .88  | -1    | 4.25      | .75  | 4.5  | .67      | -1.15 | 4.27 | .79       | 4.72 | .79  | 4.27 | .79  | 4.72 | .79  |
| Walk        | 4.17      | .58  | .69   | 4.00     | .85  | .69   | 4.00      | .85  | 4.08 | .90      | -.43  | 4.09 | .54       | 3.82 | .60  | 4.09 | .54  | 3.82 | .60  |
| Limits      | 3.69      | .75  | 1.3   | 3.38     | 1.19 | 1.3   | 3.67      | .78  | 3.58 | .90      | .43   | 3.45 | .69       | 3.45 | .69  | 3.45 | .69  | 3.45 | .69  |
| Praise      | 4         | .41  | -.81  | 4.15     | .80  | -.81  | 4.08      | .51  | 3.92 | .67      | 1     | 4.09 | .54       | 3.54 | .54  | 4.09 | .54  | 3.54 | .54  |
| Peer        | 2.86      | 1.61 | -1.58 | 3.69     | 1.18 | -1.58 | 3.27      | 1.46 | 3.70 | .94      | -1.32 | 3.14 | 1.45      | 2.75 | 1.51 | 3.14 | 1.45 | 2.75 | 1.51 |
| Health      | 4.08      | .76  | .29   | 4        | 1.08 | .29   | 4.08      | .67  | 4.25 | .87      | -.8   | 4.27 | .65       | 4.27 | .90  | 4.27 | .65  | 4.27 | .90  |
| Reflect     | 4         | 1    | .43   | 3.92     | .95  | .43   | 3.92      | .99  | 4    | .85      | -.36  | 4.18 | .98       | 4    | .89  | 4.18 | .98  | 4    | .89  |
| Help        | 4.23      | .73  | -.37  | 4.31     | .63  | -.37  | 4.08      | .67  | 4.33 | .65      | -1.39 | 4.18 | .75       | 4.18 | .75  | 4.18 | .75  | 4.18 | .75  |
| Emotion     | 3.54      | 1.13 | -1.33 | 3.92     | 1.04 | -1.33 | 3.42      | 1.08 | 3.75 | 1.14     | -1.3  | 3.27 | 1.01      | 3.73 | 1.19 | 3.27 | 1.01 | 3.73 | 1.19 |

Break=allow for breaks; Engage=engage with co-workers; Quiet=provide self a quiet time/space to complete tasks; Enjoy=participate in projects or tasks that are exciting; Boundary=set limits/boundaries with students and colleagues; Balance=balance workload; Arrange=arrange work space for comfort; Supervision=maintain regular supervision; Negotiate=negotiate needs; Support=participate in peer support; Sensory=used sensory tools when needed; Affirmation=read affirmations or positive notes from others; Breathe=engage in deep breathing; Comfort=wear comfortable clothes; Walk=able to walk hallway; Limits=say no to extra responsibilities; Praise=I get self-affirmation and praise at work; Peer=I have opportunity to maintain contact; Health=eat a healthy lunch; Reflect=make time to reflect; Emotion=allow space for expressing emotions.

**Bold**=statistically significant; *Italicized*=trending towards significance

Table 3. Paired T-test T2 (December) compared to T3 (February), T4 (June)

|             | December |      |      | February |      |        | December |       |      | June |      |               |
|-------------|----------|------|------|----------|------|--------|----------|-------|------|------|------|---------------|
|             | M        | SD   | t    | M        | SD   | t      | M        | SD    | t    | M    | SD   | t             |
| Self-Care   | 3.89     | .93  | 3.88 | 3.88     | .93  | 0      | 3.83     | .92   | 3.89 | 1.02 | 1.02 | -.37          |
| Self-Care   | 4.22     | .73  | 4.56 | 4.56     | .70  | -2.06  | 4.22     | .73   | 4.44 | .86  | .86  | 0             |
| Break       | 3.76     | 1.03 | 3.88 | 3.88     | .99  | -.52   | 3.76     | 1.03  | 4.22 | .94  | .94  | -.9           |
| Engage      | 3.78     | .73  | 3.89 | 3.89     | .68  | -.81   | 3.78     | .73   | 4.06 | .73  | .73  | -.24          |
| Enjoy       | 4.28     | .89  | 4.61 | 4.61     | .61  | -1.46  | 4.28     | .89   | 4.35 | .70  | .70  | -.37          |
| Boundary    | 4.06     | .99  | 4.28 | 4.28     | .75  | -1.07  | 4.00     | 1.06  | 4.41 | .71  | .71  | -1.81         |
| Balance     | 4.22     | 1.06 | 4.44 | 4.44     | .98  | -.70   | 4.35     | .93   | 4.65 | .70  | .70  | -1.16         |
| Arrange     | 3.67     | 1.14 | 4.17 | 4.17     | 1.04 | -1.45  | 3.94     | 1.03  | 4.15 | .95  | .95  | -.66          |
| Supervision | 2.72     | 1.23 | 3.33 | 3.33     | 1.19 | -1.57  | 2.47     | 1.23  | 3.27 | 1.03 | 1.03 | <b>-2.771</b> |
| Negotiate   | 2.53     | 1.12 | 3.12 | 3.12     | 1.17 | -2.063 | 2.82     | 1.24  | 3.65 | 1.37 | 1.37 | <b>-3.570</b> |
| Support     | 3.65     | 1.17 | 3.35 | 3.35     | 1.11 | 1.23   | 3.71     | 1.263 | 3.94 | 1.03 | 1.03 | -.94          |
| Sensory     | 3.78     | 1.00 | 3.83 | 3.83     | 1.10 | -.22   | 4.00     | .94   | 4.12 | .99  | .99  | -.57          |
| Affirmation | 3.89     | 1.08 | 4.06 | 4.06     | .87  | -.62   | 3.87     | 1.11  | 4.24 | .97  | .97  | -1.61         |
| Breath      | 4.50     | .79  | 4.61 | 4.61     | .61  | -.57   | 4.41     | .80   | 4.71 | .59  | .59  | -1.32         |
| Comfort     | 3.76     | .90  | 3.94 | 3.94     | .97  | -.82   | 3.71     | .99   | 3.82 | .73  | .73  | -.57          |
| Walk        | 3.50     | 1.29 | 3.66 | 3.66     | 1.02 | -.56   | 3.47     | 1.28  | 3.69 | .75  | .75  | -.95          |
| Limits      | 3.89     | 1.08 | 4.06 | 4.06     | .73  | -.64   | 4.12     | 1.11  | 3.76 | 1.34 | 1.34 | .89           |
| Praise      | 3.44     | 1.29 | 3.73 | 3.73     | 1.04 | -.84   | 3.71     | 1.31  | 3.32 | 1.58 | 1.58 | .93           |
| Peer        | 4.11     | 1.08 | 4.17 | 4.17     | .86  | -.27   | 4.41     | .94   | 4.35 | .79  | .79  | .32           |
| Health      | 3.83     | .86  | 4.11 | 4.11     | .83  | -1.57  | 4.11     | .93   | 4.12 | .86  | .86  | 0             |
| Reflect     | 4.22     | .73  | 4.33 | 4.33     | .59  | -.7    | 4.24     | .75   | 4.35 | .70  | .70  | -.62          |
| Help        | 3.72     | .96  | 4.06 | 4.06     | .94  | -2.06  | 3.88     | 1.05  | 4.06 | 1.09 | 1.09 | -.64          |

Break=allow for breaks; Engage=engage with co-workers; Quiet=provide self a quiet time/space to complete tasks; Enjoy=participate in projects or tasks that are exciting; Boundary=set limits/boundaries with students and colleagues; Balance=balance workload; Arrange=arrange work space for comfort; Supervision=maintain regular supervision; Negotiate=negotiate needs; Support=participate in peer support; Sensory=used sensory tools when needed; Affirmation=read affirmations or positive notes from others; Breathe=engage in deep breathing; Comfort=wear comfortable clothes; Walk=able to walk hallway; Limits=say no to extra responsibilities; Praise=I get self-affirmation and praise at work; Peer=I have opportunity to maintain contact; Health=eat a healthy lunch; Reflect=make time to reflect; Emotion=allow space for expressing emotions.

**Bold**=statistically significant; *Italicized*=trending towards significance

Table 4. Paired T-test T3 (February) compared to T4 (June)

|             | February |      | June |      | t     |
|-------------|----------|------|------|------|-------|
|             | M        | SD   | M    | SD   |       |
| Self-Care   | 3.84     | .83  | 3.89 | .99  | -.25  |
| Self-Care   | 4.58     | .69  | 4.53 | .84  | .57   |
| Break       | 4.00     | .94  | 4.05 | .91  | -.24  |
| Engage      | 4.11     | .74  | 4.11 | .66  | 0     |
| Quiet       | 4.61     | .61  | 4.44 | .70  | 1     |
| Enjoy       | 4.39     | .70  | 4.33 | .69  | .37   |
| Boundary    | 4.61     | .98  | 4.56 | .70  | .33   |
| Balance     | 4.06     | 1.06 | 4.18 | .95  | -.43  |
| Arrange     | 3.44     | 1.15 | 3.36 | .84  | .34   |
| Supervision | 3.12     | 1.22 | 3.12 | 1.32 | 0     |
| Negotiate   | 3.53     | 1.07 | 3.82 | 1.01 | -1    |
| Support     | 4.06     | .94  | 3.94 | .94  | .52   |
| Sensory     | 4.06     | .938 | 3.94 | 1.21 | .42   |
| Affirmation | 4.61     | .61  | 4.78 | .55  | -1.84 |
| Breath      | 4.11     | .96  | 3.89 | .68  | 1.46  |
| Comfort     | 3.60     | .90  | 3.60 | .67  | .02   |
| Walk        | 4.11     | .68  | 3.88 | 1.12 | .93   |
| Limits      | 3.88     | 1.07 | 3.38 | 1.58 | 1.61  |
| Praise      | 4.31     | .75  | 4.33 | .77  | -.15  |
| Peer        | 4.39     | .70  | 4.11 | .83  | 2.05  |
| Health      | 4.44     | .62  | 4.39 | .70  | 1     |
| Reflect     | 3.86     | .99  | 3.94 | 1.06 | -.42  |

Break=allow for breaks; Engage=engage with co-workers; Quiet=provide self a quiet time/space to complete tasks; Enjoy=participate in projects or tasks that are exciting; Boundary=set limits/boundaries with students and colleagues; Balance=balance workload; Arrange=arrange work space for comfort; Supervision=maintain regular supervision; Negotiate=negotiate needs; Support=participate in peer support; Sensory=used sensory tools when needed; Affirmation=read affirmations or positive notes from others; Breathe=engage in deep breathing; Comfort=wear comfortable clothes; Walk=able to walk hallway; Limits=say no to extra responsibilities; Praise=I get self-affirmation and praise at work; Peer=I have opportunity to maintain contact; Health=eat a healthy lunch; Reflect=make time to reflect; Emotion=allow space for expressing emotions.

**Bold**=statistically significant; *Italicized*=trending towards significance

To examine the relationship between self-care and the three subcategories of PROQOL (Burnout, Secondary Traumatic Stress, and Compassion Satisfaction) Pearson Correlation was used to examine each of the four-time points in relation to a summed self-care variable. The findings indicated a moderate negative correlation between burnout and self-care consistent across each of the four-time points; Time 1  $r(20)=-.589$ ,  $p=.006$ , Time 2  $r(25)=-.506$ ,  $p=.01$ , Time 3  $r(23)=-.690$ ,  $p=.000$ , Time 4  $r(23)=-.548$ ,  $p=.007$ . When examining self-care and secondary

traumatic stress a moderate negative correlation was found at Time 1  $t(25)=-.421$ ,  $p=.036$  and a strong negative correlation at Time 4  $t(23)=-.702$ ,  $p=.000$ . There were no statistically significant findings between self-care and secondary traumatic stress between Time 1 for Time 3. A moderate to strong positive correlation was found between self-care and compassion satisfaction at each of the four-time points; Time 1 ( $t(20)=.695$ ,  $p=.001$ ), Time 2  $t(25)=.719$ ,  $p=.000$ , Time 3  $t(23)=.646$ ,  $p=.001$ , and Time 4 ( $r(23)=.862$ ,  $p=.000$ ). (see table 5)

Table 5. Pearson Correlations of Self-Care and Burnout, Secondary Traumatic Stress, and Compassion Satisfaction

|        | T1_SC   | T2_SC   | T3_SC   | T1_BO   | T2_BO   | T3_BO   | T4_BO   | T1_STS  | T1_CS  | T2_STS | T2_CS   | T3_STS  | T3_CS  | T4_STS  | T4_CS   |
|--------|---------|---------|---------|---------|---------|---------|---------|---------|--------|--------|---------|---------|--------|---------|---------|
| T1_SC  |         |         |         |         |         |         |         |         |        |        |         |         |        |         |         |
| T4_SC  | .786**  |         |         |         |         |         |         |         |        |        |         |         |        |         |         |
| T2_SC  | .688**  | .764**  |         |         |         |         |         |         |        |        |         |         |        |         |         |
| T3_SC  | .783**  | .586**  | .609**  |         |         |         |         |         |        |        |         |         |        |         |         |
| T1_BO  | -.589** | -.207   | -.599*  |         |         |         |         |         |        |        |         |         |        |         |         |
| T2_BO  | -.615*  | -.674** | -.506** | -.683** | .791**  |         |         |         |        |        |         |         |        |         |         |
| T3_BO  | -.554*  | -.489*  | -.417   | -.690** | .812**  | .894**  |         |         |        |        |         |         |        |         |         |
| T4_BO  | -.500   | -.548** | -.561*  | -.700** | .769**  | .882**  | .904**  |         |        |        |         |         |        |         |         |
| T1_STS | -.226   | .248    | .082    | -.102   | .390    | .407    | .521    | .145    |        |        |         |         |        |         |         |
| T1_CS  | .695**  | .395    | .526    | .490    | -.662** | -.362   | -.439   | -.435   | -.154  |        |         |         |        |         |         |
| T2_STS | -.422   | -.678** | -.421*  | -.304   | .226    | .693**  | .608**  | .556*   | .615*  | .127   |         |         |        |         |         |
| T2_CS_ | .641*   | .830**  | .719**  | -.677** | -.502   | -.759** | -.750** | -.854** | -.235  | .539   | -.434*  |         |        |         |         |
| T3_STS | -.206   | -.509*  | -.327   | -.102   | .367    | .730**  | .591**  | .556*   | .790** | .160   | .920**  | -.542*  |        |         |         |
| T3_CS_ | .527    | .711**  | .562*   | .646**  | -.628*  | -.630** | -.670** | -.790** | -.008  | .723** | -.436   | .834**  | -.356  |         |         |
| T4_STS | -.134   | -.702** | -.552*  | -.354   | -.073   | .739**  | .537    | .686**  | .482   | .357   | .895**  | -.702** | .796** | -.611** |         |
| T4_CS  | .590    | .862**  | .736**  | .566*   | -.138   | -.671** | -.524*  | -.708** | .570   | .663*  | -.597** | .876**  | -.475* | .841**  | -.723** |
| N      | 11      | 23      | 18      | 19      | 11      | 18      | 20      | 23      | 11     | 11     | 18      | 18      | 20     | 20      | 23      |

SC=Self-care, BO=Burnout, STS=Secondary Traumatic Stress, CS=Compassion Satisfaction

\*\*. Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed).

### Qualitative

A total of 21 teachers and staff were divided into two focus groups. The findings from the focus group found 3 major themes; helpful self-care strategies during the school day; unhelpful self-care practices during the school day; and self-care impact on burnout.

#### Theme 1: Helpful self-care strategies

Teachers and staff identified multiple self-care strategies that were helpful during the school day. This was broken up into two subcategories: self-directed and activities sponsored by the school. Self-directed strategies included mindfulness, deep breathing, taking walks, social supports and utilizing sensory tools in the classroom (fidgets, squeeze toys). (N=11)

“We are really close-knit, and we interact with each other all day long every day helping each other”

“mindfulness and the breathing exercises I’ve found to be very helpful”

Sensory tools “I use the Monarch box [sensory toolbox], squeeze toys and spinners. I found myself using those which was super easy”

“I use positive affirmations a lot, color or do a puzzle with the students,”

“breathing helped me, deep breath”

School-sponsored activities included yoga with the students, chair massages, painting activities, breakfast, and ice cream social. The majority of teachers and staff reported the activities were helpful and enjoyable. (N = 15)

“We did some yoga with the girls and that was wonderful for all of us”

“Someone came in and brought like breakfast, so we all hung out and relaxed in the

“morning and listened to music”

“The self-care events “were fun”

“I thought the ice cream one was really good, food is good”

“I think people enjoy doing them because they were fun”

“for a teacher just call in and cover your classes, just take a walk”

Teachers and staff also identified a shift in the culture of the school. Self-care was identified as a priority and fully supported by the administration. In addition, the administration allowed teachers and staff to determine their end time on certain days. This meant teachers could choose to leave early and finish work at home or stay in the building to finish. This freedom was met with a mixed review. Some teachers felt it was freeing to be able to choose and others felt that the lack of a defined “planning period” made it difficult for them to schedule a time to complete their work. (*N* = 12)

The support of the administration “just knowing that you’re not going to be in trouble for taking a breather, Just that expectation”

“I think just the fact that the culture of the school is constantly bringing that up saying that self-care is important, asking “what are you doing for self-care”

“I think it’s great to remind us that, yep, you need to take care of yourself, you know, there’s a passion to feed and because we work with this population, I think it’s good that it’s on the forefront and that, to be reminded to take care of yourself”

## Theme 2: Unhelpful self-care activities

Teachers and staff identified that not all self-care activities were helpful. A couple of activities were identified as frustrating or bleak, such as painting with bland colors or having a directed activity that did not have clear instructions. There was also concern that having mandatory self-care events might put undue pressure on those that are not interested in the activity and that there were other responsibilities that interfered with the ability to enjoy the activities fully (*N* = 5).

“I mean some of the things I had zero interest in, I was still required to sit there”

“We don’t have a luxury of like an extra two hours or an extra hour a week or even a month really” for the activities

“I am thankful that we talk about self-care and consider it but I’d also like some space on what self-care looks like for me and why that is”

### Theme 3: Self-care impact on burnout

The teachers and staff both reported less stress and burnout this school year even with an increase in aggressive student behavior and student turnover. The culture shift and focus on self-care provided permission to the staff and teachers to engage in self-care. (N=13)

Even with increased stressors at work “it’s not any worse than it was last year because this year for my own self-care, one of the promises I made to myself as I wasn’t going to take work home.”

“I do think teacher burnout has been less, I certainly feel less burnt out and I appreciate the schedule”

### **Discussion**

The hypothesis that the use of self-care strategies during the school day would increase following the implementation of self-care was supported. Of the 22 self-care strategies, two had statistically significant increases in use, “negotiating needs” and “participating in peer support”. These two significant findings support the assumption that the self-care intervention was helpful in making teachers and staff feel that their wellbeing was a priority in both accessing peer supports and advocating for their own needs. The increase in “peer support group” and “negotiating needs” suggests that teachers and school staff felt comfortable seeking support from the school, whether emotional support or support for advocating for their own needs. The trending themes “expressing emotions”, “comfortable clothes”, and “engage with coworkers” all indicate a school climate that promotes self-care.

These findings are further supported by the focus group results in which the teachers and staff reported that the culture of the school had shifted and that the focus on self-care was evident every day from the administration on down. Teachers and staff were no longer worried about punitive measures for taking care of their own wellbeing and utilized self-care strategies as they needed. In addition, the trending towards significant findings show that engaging with coworkers



and allowing space for emotions increased slightly from Time 2 to Time 3. This slight shift in conjunction with the focus group data describes an environment where the teachers and staff felt that they were “close-knit” and able to rely on each other for support.

The change in self-care strategy use and comments around school culture are important as it suggests the trauma-intervention contained a multi-level approach. The school introduced training around the use of self-care strategies during the school day and changed the school culture to be completely inclusive of self-care. While it is beyond the scope of this study to examine which piece was more impactful, training or culture change, it is important to note the combination was present in this environment. School administrators looking to implement self-care strategies during the school day should be mindful of this multi-layered approach.

In support of previous research findings (Flook, Goldberg, Pinger, Bonus & Davidson, 2013; Lee & Miller 2013, Salloum, Kondrat, Johnco, & Olson, 2015; Hydon, Wong, Langley, Stien, & Katoaka 2015), self-care had an inverse relationship with burnout at all four-time points and secondary traumatic stress at Time 2 and Time 4, which suggests that self-care may in fact mitigate burnout. This means as the frequency of use of self-care strategies increased, burnout decreased. These findings support the use of self-care strategies as a way to mitigate stress. It is important to note that consistent with previous literature, teachers reported feeling as if they did not have enough time to prepare for class (AFT, 2017) and this impacted their ability to engage in some of the self-care activities. This suggests that careful planning of self-care activities sponsored by the school may help to ensure that “wellbeing” activities do not interfere with lesson planning. Some teachers reported that while these activities were “fun”, if they had something to finish up, taking part in the activities had the opposite intended effect and made them feel more stressed.

In addition, the findings add to literature on how school-sponsored activities may be planned and implemented. When planning, the teachers and staff suggested that self-care activities should be voluntary and not mandated by the school. The school sponsored events should also contain culturally competent approaches. One teacher described a self-care event that had food as the focus during a time they were fasting for their religion, therefore, this was an activity they would have liked to opt-out of. There was a concern with the school trying to make prescriptive self-care when teachers and staff felt that self-care was very personal and different for everyone. It is important to note that teachers and staff both expressed that self-care activities were enjoyable, relaxing at times, and built camaraderie.

Consistent with previous literature, a positive relationship with compassion satisfaction was found at all four-time points. This is consistent with literature that supports building coping skills and understanding trauma and emotional experiences have all been linked to reduced compassion fatigue and the promotion of compassion satisfaction (Salloum, Kondrat, Johnco, & Olson, 2015; Sprang, Clark, & Witt-Woosley, 2007). The description of helpful self-care strategies in the focus groups explicitly contained coping strategies such as deep breathing, fidget spinners, walking, talking with a colleague, and positive affirmations. Teachers and staff also discussed a positive change in school culture with the importance that the school placed on self-care during the school day. These self-care activities in conjunction with the trauma training provided teachers with an understanding and awareness of trauma as well as how it may impact the students' and teachers' emotional experiences within the school, which is again consistent with literature about trauma-informed self-care (Sprang, Clark, & Whitt-Woosley, 2007; Salloum, Kondrat, Johnco, & Olson, 2015).

Stress and coping theory provided a framework for understanding the findings. Teachers and staff expressed experiencing negative interactions (excess paperwork, escalated student behavior) throughout the school year. The continued exposure to negative interactions led to some experiencing burnout, secondary traumatic stress, and compassion fatigue. This process was interrupted when self-care strategies were used more frequently. Additionally, the support from the administration to engage in self-care allowed teachers and staff the freedom to engage in self-care strategies that worked for them without concern for repercussions. The interactions between teachers, staff, and administration have therefore shifted from concern to support. The teachers' perceptions of internal and external stressors around being able to engage in self-care shifted. This led to teachers experiencing fewer burnout symptoms despite reporting higher levels of external stressors (more aggressive student behavior and higher student turnover). Teachers and staff identified the changes in the school schedule and focus on self-care as a mitigator of those stressors which resulted in the teachers and staff feeling fewer burnout symptoms overall. In relation to teacher and staff self-efficacy, literature states that teachers who experience stress from student behavior often have lower self-efficacy (Klassen & Ming, 2010) and teachers with high efficacy have developed coping skills and strategies to use in the classroom (Dicke et al., 2015). While teachers and staff described using self-care as a coping mechanism (deep breathing, fidgets, etc.), they also sought out interactions with other teachers to observe how they handled stressful situations. This suggests that additional training in behavior management might improve self-efficacy and modify cognitive appraisals of school-based stressors.

### **Strengths and Limitations**

Even though this was a small sample size, the use of PROQOL within education is innovative. The longitudinal methodology utilized in the current study provides a more rigorous

analysis than what has been done in previous studies in school settings using cross-sectional designs. Another strength is the focus on multiple time points in order to see trends in teacher wellbeing and the use of self-care strategies during the school day throughout the school year. This adds to the literature on what self-care strategies might be possible to incorporate in schools that could be successfully utilized during the school day. This study also adds to the literature by demonstrating self-care as a mitigator of burnout in high trauma educational environments.

A limitation included the small sample size which makes generalizing findings not possible. The small sample size also limited the types of statistical analyses that could be used and the ability to examine covariates. Additionally, the ProQOL5 has been shown to have some problems with construct validity (Hemsworth et al., 2018). Utilizing techniques such as Confirmatory Factor Analysis may mediate some concerns around psychometric problems; however, in this case, I was unable to use such techniques as they require a much larger sample size than what could be obtained in the current study.

### **Practice and Policy Implications**

As schools continue to be encouraged to adopt a trauma-informed approach to education, it is important to ensure the teachers' wellbeing in order to allow trauma-informed practices to be fully implemented. Teacher wellbeing leads to well-regulated teachers who are able to cope with the demands and stressors, especially those who serve populations with high trauma histories. Adding self-care practices for teachers and staff into professional development is a way to promote teacher wellbeing.

Another implication for practice suggests that when school administrators create policies that promote the use of self-care strategies, this may create a positive school climate and culture. If the leadership is stating that it is important to engage in self-care, it is likely to have an effect on

self-care practices among teachers and staff. Further, creating a climate that is pro-self-care may enable teachers to ask for help when needed without fear of repercussion. While this focus on self-care has not traditionally been a priority for school administrators these findings suggest that it may be effective in reducing teacher attrition through its impact on the proximal causes of attrition-burnout, secondary traumatic stress, and compassion fatigue.

Our findings indicate it is important for administrators to recognize that not all self-care strategies are created equal for everyone. Cultural competence should be used when developing school sponsored self-care activities. As mentioned above, planning a buffet on a day when one of your staff is fasting may not be ideal. Understanding who is in your school and what may impact the teachers' and staff's ability to participate in the self-care activity is important.

Lastly, while this study was conducted in an alternative educational setting, there is precedence for using trauma-informed approaches in general educational settings given the prevalence of trauma in the general population. Further, trauma-informed practices benefit all students whether they have experienced trauma or not as they promote empathy, understanding, and skill building.

Alternative schools usually serve at-risk youth who have access to Title 1 funding to promote professional development training and activities to support teacher and staff self-care during the school day. The Support for Patients and Communities Act (H.R.6.) 2016, provides \$50,000 in grants specifically for educational setting for fiscal years ranging from 2019-2023. These funds can be used in various ways including increasing awareness of youth trauma among populations that interact with children and youth on a regular basis. This funding provides an opportunity for administrators to provide teachers with additional training that supports youth who have experienced trauma (Day, Vanderwill, Crosby, Baroni, 2020).

### **Conclusion**

Teacher well-being (burnout, secondary traumatic stress, and compassion fatigue) is linked to teacher attrition, student academic success, and student-teacher relationship. The frequency of use of self-care strategies during the school day has been identified as a mitigator of burnout, secondary traumatic stress and compassion fatigue. This finding is especially important for schools that serve court-involved youth in alternative education settings. Teachers in alternative educational settings are at greater risk of being exposed to secondary trauma. Implementing school-wide self-care strategies during the workday may improve teacher wellbeing, reduce teacher attrition, and improve the academic wellbeing of the student.

## **Chapter 4: The development and evaluation of a trauma-informed teaching fidelity tool: A mixed-methods approach.**

### **Introduction**

The prevalence of trauma in the general population provides a justification for implementing trauma-informed practices in schools. The National Survey of Children's Health, (2016), found that 47% of children aged 6-11 and 55.7% of adolescents aged 12-17 experienced at least 1 adverse childhood event (Bethell et al., 2017). Additional findings show 20% of children and youth reported experiencing 2 or more adverse childhood experiences (Bethell et al., 2017). Bethell et al. (2017) found that children who experience at least 1 adverse childhood event have increased difficulties demonstrating social and emotional skills when compared to children who have not experienced an adverse childhood event. It is important to note the rate of adverse childhood events in the population is not limited to one race, ethnicity, or socioeconomic status. However, a study by Slopen et al, (2016) found that Black and Hispanic youth and children in poverty experience greater exposure to adverse events compared to white youth or wealthier youth. In a 2016 ACEs study, Black (63.7%) and Hispanic (5.4%) youth reported higher rates of ACEs compared to White youth (40.9%) (Bethell, et al., 2017). Additionally, a higher percentage of Black and Hispanic youth experience 2 or more ACEs, 33.8% and 21.9% respectively, compared to white youth 21.9% (Bethell et al., 2017). Trauma in alternative schools is estimated to be about twice that of the general population (Fulkerson, Harrison, & Beebe, 1997). Kerig & Ford (2014), estimate the rate of traumatic events among court-involved females is between 70% and 93%. This is higher than the ACE's rates for the general population and of those experiencing poverty.

Alternative education and second chance academies were developed to serve youth who were not able to get their needs met in traditional school environments and were at a high risk of failure (Lehr, Tan, & Ysseldyke, 2009). While some alternative educational settings are chosen by

the student, more often the students are placed in those schools mandatorily (Lehr, Tan, Ysseldyke, 2009). A study by Lang & Lehr (1999) found students who had an increased rate of school engagement, participation in classroom activities, and the ability to work towards and accomplish goals were more likely to be successful in school. This implies that academic success is linked to the student's and teacher's ability to develop a relationship and the student's ability to attach to the school. Youth in alternative education settings are more likely to be court-involved (Lehr, Tan, & Ysseldyke, 2009; Fulkerson, Harrison & Beebe, 1997).

Court-involved youth are youth who entered the child welfare system through foster and/or the juvenile justice system. It is important to note there are differences between the experiences of male and female court-involved youth. Females make up approximately half (48%) of those involved in the child welfare system (U.S. Department of Health and Human Services, 2019) and under a third (28%) of juvenile justice cases (Ehrmann, Hyland, & Puzanchera, 2019). Court involved females have higher rates of Post-Traumatic Stress Disorder and trauma histories compared to males (Sherman & Balck, 2015; Teplin, Abram, McClelland, Dulcan, & Mericle, 2002). The difference in female experience, especially around trauma, provides justification for examining trauma-informed teaching in an all-girl alternative educational setting.

While youth characteristics may have a positive or negative impact on their educational outcomes, the limited research in the alternative education environment suggests there is difficulty finding teachers who are trained to address the specific needs of this population (Development Services Group, Inc., 2019 (DSG); Houchins et al., 2009). Several barriers to quality education were identified in a study of residential treatment school educators: "lack of support from administration, low staff morale, safety issues, unrealistic expectations for students, and low student motivation" (DSG 2019; Houchins et al., 2009). Trauma-informed training provides skills



to teachers and staff to build positive relationships with their students and promote safe and secure school environments to which students can build a healthy attachment. While there are some studies that examine the experiences of teachers and staff in residential treatment schools, there is a gap in research on preservice trauma training or training in general specific to teachers in alternative educational environments.

Trauma-informed interventions in the academic setting are designed to educate teachers, staff, and administration on the impact that trauma has on the student's development, behavior, and academic life (Australian Childhood Foundation, 2010; Perry, 2009; Walkley & Cox, 2013; Wolpow et al., 2009). One aspect of this intervention is to change perceptions and beliefs about the origin of student behavior. Specifically, there is a challenge to the traditional exclusionary approaches (suspension, expulsion) to behavior by introducing inclusionary methods of discipline, a focus on improving student/teacher relationships, and building students' coping skills. Teachers, staff, and administration are required to model trauma-informed behavior and social-emotional skills to their students. Teachers, staff, and administration must be self-aware, have necessary coping skills to maintain self-regulation, and understand not only the impact of trauma on their students but also recognize their own trauma histories (Crosby, et al., 2015; Perry, 2009; Walkley & Cox, 2013). Before teachers can implement, they need to be trained. Effective professional development/training includes detailing the model of effective practice, providing coaching, feedback, and reflection, and is ongoing throughout the year (Darling-Hammond, Hyler, & Gardner, 2017). There are multiple guidelines available to incorporate trauma-informed methods into school policies and practices (Crosby, 2015). These guidelines, however, lack fidelity measures to determine if schools are implementing the trauma-informed interventions as designed.

## **Fidelity**

While there are many approaches to trauma-informed practices in education, there is a dearth of literature around the effectiveness of trauma-informed practices in improving academic outcomes for youth (school connectedness, academic success, social-emotional growth). A contributing factor to examining the impact of trauma-informed practices is ensuring and tracking that the trauma-intervention was implemented as designed (implemented with fidelity). Lane et al. (2004) report that schools often focus on developing/finding an intervention, training of the intervention, who the intervention is designed to serve, selecting outcome variables to observe, and accuracy in which the data is collected, while forgetting to observe and track “treatment fidelity” (implementing the intervention as intended) (Lane et al., 2004; Gresham, 1989; Yeaton & Sechrest, 1981). Given the continued absence of focus on “treatment fidelity” in the current literature on school-based interventions, this appears to be a continued problem.

The level in which an intervention is implemented with fidelity may impact the success of the intervention (Mowbray, Holter, Teague & Bybee, 2003, p 317). For example, if the intervention implementation differs from the original design, this may weaken or negatively impact outcome results (Kershner, et al., 2013). Further, it will become difficult to determine if the outcome results are from the intervention or another factor introduced into the intervention by deviating from the original design (Baer et al., 2007; Spillane et al., 2007).

Several barriers to tracking “fidelity” include lack of fidelity tools, resources, and support (Akin, Strolin-Goltzman, & Collins-Carmargo 2017). Fidelity tools are used to ensure the internal validity of intervention implementation (Hohmann & Shear, 2002; Mowbray, Holter, Teague & Bybee, 2003). Fidelity tools are measures that examine how closely one adheres to implementation design (Baer et al., 2007; Spillane et al., 2007). Using fidelity tools provides validation of

implementation and allows the study to be replicated (Baer et al., 2007; Spillane et al., 2007). This is especially important if the intervention is seeking a promising practice or evidence-based practice designation. Utilizing a fidelity tool with a note if there is a deviation from the study design, provides an opportunity to explore why a deviation may have occurred, which allows for a full understanding of the process before recommending changes in implementation (Baer et al., 2007).

Although there are frameworks and guidelines available that could be utilized to increase the knowledge, skills, and abilities of teachers to engage in trauma-informed practices in schools, there is an absence of literature assessing the implementation of trauma-informed teaching practices. Currently, there are no fidelity monitoring tools developed for trauma-informed practices in schools. This article describes the process of developing and validating The Trauma-informed Teaching Observation Tool (TITO). TITO was designed to assess fidelity in the implementation of the adapted version of the Heart of Learning and Teaching (HLT) curriculum in a Midwest charter middle/high school that serves female court-involved youth.

The aim of this study was to evaluate the tool's usefulness in coaching teachers on trauma-informed teaching. To this aim I asked the following research questions: 1. Is the fidelity tool developed effective in tracking observed trauma-informed teaching practices?; and 2. What are the participants' experiences of the fidelity tool?

## **Methods**

### **Trauma-Informed Intervention**

Since the pilot year 2012, the school had been receiving trauma training in the form of an adapted version of The Heart of Learning and Teaching: Compassion, Resiliency, and Academic Success (HLT) curriculum (Day et al., 2015). While the pilot site utilized an adapted version of

The Heart of Learning and Teaching, this curriculum did not come with a fidelity tool. The curriculum is an integration of research, theory, and clinical practice and based on attachment and ecological theories (Day et al. 2015). Sensory integration modifications were introduced to the curriculum in the 2014 year (Dorman, et al., 2009). Teachers were provided with a website that included each module of the curriculum for reference and booster training (Clara B Ford Academy, 2015).

### Sample

Participants in the study included 10 teachers who were employed during the 2017/2018 school year at an alternative public charter middle/high school located in the Midwest (see table 1). The school serves female court-involved youth from the lower socio-economic status from the surrounding community, and who have experienced traumatic events. It is important to note that the school serves a predominately African American student population with the majority of teachers being White.

Table 1. Sample Characteristics (N=10)

|                         |              | F    | %   |
|-------------------------|--------------|------|-----|
| Gender                  | Male         | 4    |     |
|                         | Female       | 6    |     |
| Race                    | White        | 9    | 75  |
|                         | Asian Indian | 1    | 8.3 |
| Years of experience     | M            | R    | SD  |
|                         | 11.4         | 3-30 | 7.6 |
| Years in current school | 3.9          | 1-9  | 2.6 |

### Measures

*The Trauma-informed Teaching Observation Tool (TITO) (development and creation)*

The Trauma-informed Teaching Observation Tool (TITO) was developed using the Heart of Learning and Teaching as a guide and a three-step approach: identifying criteria, measurement details, and assessing reliability (Mowbray, Holter, Teague, & Bybee, 2003). There are several approaches to fidelity monitoring which include observations, self-report forms and checklists, quality assurance checks by an independent person, field note reviews, interviews, and questionnaires (Spillane, 2007). The administration and research team discussed options for fidelity monitoring and chose to conduct classroom observations. Observations allow for close fidelity monitoring in comparison with self-reporting which is more prone to subjective responses (Reinke, Herman, & Stormont, 2012). In order to develop a thorough fidelity tool, the team discussed a structured and unstructured approach to classroom observation. The team chose to develop a quantitative and qualitative observation tool. This approach allows the observation to be a measure of skill implementation as well as provide a rich description to add context to the observed measures (Lindorff & Sammons, 2018). The use of a combined quantitative (structured) and qualitative (unstructured) approach to observations is supported by research (Lindorff & Sammons, 2018).

The pilot school had developed an online curriculum that included all components of the adapted HLT curriculum. The author reviewed each component and identified any observable skills that directly related to the HLT curriculum. The observable skills were compiled and placed into a table. The administrator and research team reviewed the skill list to ensure accuracy and remove any duplicated skills. This process repeated several times and resulted in the 43-item observation tool. Three questions were determined to be redundant and removed.

The Trauma-informed Teaching Observation Tool is a 54-item checklist observation tool that includes areas for descriptive notetaking. Within the 54-item measure, 40 items are distributed

among are 5 subcategories: Classroom Environment, Structured Class Time, Addressing Problematic Behaviors, Student / Teacher Dynamics, and Trauma-informed Skills. Classroom Environment contains 8 items to determine whether rules and policies are posted, learning styles, and comfortability of the room environment. Structured Class Time (6 items) includes predictability of class structure and teacher interactions. Addressing problematic behaviors (8 items) includes teacher boundary setting, delivering consequences, and strengths-based approaches. Student-teacher dynamics (8 items) include shared power, cultural competence, and effective communication skills. Trauma-informed skills (13 items) include the ability to identify triggers, deescalate, and regulate one's own emotions. Four categories of social-emotional learning were included in this measure as a special focus for the school. These four categories included Ownership (4 items), Organization and Planning (4 items), Motivation (2 items), and Teamwork (4 items). There were 14 items developed to specifically observe these four SEL categories within the classroom.

The 54-item observation checklist includes a “yes”, “no”, or “no opportunity” option next to each item. “Yes” indicates that the skill or behavior was observed, conversely, “no” indicates the skill or behavior was not observed. “No opportunity” means that there was no reason or opportunity to use the skill in the classroom. Scores for each subcategory were summed to create a new variable to track changes from Time 1 to Time 2. No opportunity and “no” were coded as 0 and “yes” was coded as a 1. See the full tool in Appendix B. The definitions for each item are included in appendix C.

In addition to the quantitative responses, each subcategory had a notes section. The notes section allows the observer to provide a rich description of the classroom environment as well as observed student and teacher interaction/behavior. The note section is intended to assist the

observer in providing detailed feedback to the teacher with real examples from their classroom in order to promote trauma-informed skills implemented in the classroom.

The TITO items and definitions were presented as were the descriptive statistics from the October classroom observations for each of the 5 subcategories. Teachers were asked to provide feedback on their experience with the observation process (classroom observation and follow-up), and the validity of the components of the fidelity tool.

### **Data Collection**

This study is a secondary analysis of school data gathered using a structured observation with a qualitative component. Institutional Review Board (IRB) at Wayne State University approved the current study. The school administrators obtained informed consent/assent from the teachers and staff during orientation prior to the school year beginning.

Classroom observations were conducted by an outside consultant who was trained in trauma and mental health. Classroom observations occurred at two time-points during the academic school year, October 2017 and May 2018, at which time each teacher was observed for one class period. To ensure consistency, one consultant conducted all observations. As a part of the observation protocol, each teacher received written feedback within a week of the observation. The written feedback contained a detailed report of the trauma-informed skills that were implemented during the class. In addition, teachers received feedback on missed opportunities to bring trauma-informed skills into the classroom. In order to assist teachers in professional development, concrete examples were given of how to integrate trauma-informed skills into the classroom. The concrete examples were based on observed interactions for that teacher's class. Teachers were also given the opportunity to meet one-on-one with the observer to discuss the feedback or if they felt the observation was not accurate.

Member checking was conducted in January of 2017, 2 months after the first observation. The results from the October observation were presented at the January meeting which lasted approximately 1 hour; all 10 teachers were present at the meeting. This meeting was not recorded, field notes were used for analysis. In order to ensure the reliability of the field notes and subsequent findings, the researcher used respondent validation (Anderson, 2010). A report of the field notes findings, which included recommended adjustments and main themes, was presented to the staff and teachers. Teachers had the chance to refute any item(s) in the report or add to the report anything the author missed.

### **Data Analysis**

Descriptive statistics and bivariate analysis were examined on all variables (race/ethnicity, gender, years working at this school, years working in schools, and participant job role) in SPSS, using descriptive statistics, including mean, median, mode, range, and standard deviation. A paired sample t-test was conducted to determine if there was a statistically significant change between each of the 5 major categories of the fidelity tool between Time 1 and Time 2.

In order to answer Research Question 1, a paired sample t-test was used to determine the change in scores on the TITO 5 subcategories (Classroom Environment, Structured Class Time, Addressing Problematic Behaviors, Student / Teacher Dynamics, and Trauma-informed Skills) between Time 1 and Time 2 (October 2017, May 2018).

To answer Research Question 2, field notes from the January 2017 member checking were analyzed for feedback on the reliability of the observation tool and recommendations for adjustments.



## Findings

Given the small  $N$ , there were no statistically significant findings between Time 1 and Time 2. One category was trending towards significance; the Trauma Training to Address Problematic Behavior increased from Time 1 ( $M=5.5$ ;  $SD=1.95$ ) to Time 2 ( $M=7.2$ ;  $SD=1.03$ ),  $t(9)=-2.193$ ,  $p=.056$ . (see table 2).

Table 2: Paired t-test October and May

|       | October 2017 |      | May 2018 |      | T     | p    |
|-------|--------------|------|----------|------|-------|------|
|       | M            | SD   | M        | SD   |       |      |
| COT   | 5.90         | .74  | 6.10     | .99  | -.56  | .591 |
| SCT   | 5.00         | .94  | 5.20     | .42  | -.61  | .555 |
| TTPB  | 5.50         | 1.96 | 7.20     | 1.03 | -2.19 | .056 |
| STR   | 4.70         | 1.49 | 4.80     | .79  | -.26  | .798 |
| SKILL | 7.10         | 2.88 | 7.90     | 2.23 | -.72  | .487 |
| OWN   | 2.10         | .99  | 2.40     | .84  | -.82  | .434 |
| ORG   | 1.67         | 1.53 | 1.67     | .58  | .000  | 1.00 |
| MOT   | 1.11         | .78  | 1.22     | .44  | -.36  | .729 |
| TW    | 2.11         | .93  | 2.22     | .67  | -.32  | .760 |

COT=Classroom Environment, SCT=Structured Class Time, TTPB=Trauma Training to Address Problem Behaviors, STR=Student Teacher Relationships, Skill=Trauma Informed SKILL, Own=Ownership, ORG=Organization and Planning, MOT=Motivation, TW=Teamwork

### Descriptive Notes: From the TITO

After examining frequencies and reviewing the qualitative notes, it was evident most teachers were able to use a calm clear tone and did not take student behavior personally. One area that was a struggle included structured responses to unwanted behavior. Teachers were highly aware of the origins of behavior and able to recognize the behavior was not directed at them personally. However, this recognition created some issues with how to create a structured response to problematic behavior while still, remaining trauma-informed. Feedback for the teachers included developing a structured response with the help of the students prior to needing it. No change in this was noted from Time 1 to Time 2.

In the classroom, it was noted that teachers in general communicated respectfully and students mostly responded positively. There were however missed opportunities for shared responsibility. Teachers were encouraged to engage students in sharing classroom responsibilities. One teacher rotated out classroom jobs (handing out worksheets, collecting folders, etc.). This allowed the students to share ownership in the classroom.

One of the most difficult things in a classroom is teaching while attempting to catch triggers. There were a couple of incidents where small external behavior went unnoticed and ended up escalating to an aggressive display of the behavior.

### **Notes from Member Checking Event**

Several themes arose from examining field notes from January 2018: observation process, feedback, and coaching, trauma-informed observations, and SEL observations.

Teachers reported two-time points are insufficient in capturing teacher demonstration of skills. This was agreed upon by all teachers. Further, observing for one hour does not provide a complex understanding of what happens when the class changes and new students come in. For example, teachers talked about having a very well-behaved 2<sup>nd</sup> hour, if that hour is observed it will appear that they are able to navigate their classroom effectively. However, their 5<sup>th</sup> hour may be filled with externalizing behaviors and the ratings on the observation tool would be reflected in that. Teachers requested that at least 3 or 4 observations be conducted over different class periods. The teachers felt that adding these additional times would improve the ability to do effective coaching by allowing the observer to see the entirety of what the teachers are experiencing and demonstrating in the classroom. In addition to increasing observations, teachers wanted to know what categories and definitions were included in the observation sheet as a form of transparency in the observations.

When discussing feedback, teachers reported that the written feedback was helpful (see appendix D for example). While teachers were provided with contact information to set up an individual meeting to follow up or discuss the feedback, no teachers asked for additional coaching. During the meeting, teachers reported that it was difficult to find a time and asked that instead of having an open opportunity to schedule a meeting, it would be more helpful if there were designated times that the researcher made themselves available at the school and the teacher could plan to meet at that time. Teachers requested that the school administration be a part of the planning process and allow the teachers to use school or professional development time to complete the feedback sessions. This would enable the teachers to participate without adding another obligation to their schedule.

When reviewing the trauma-informed observations, teachers identified a couple of barriers specific to the classroom environment. Teachers reported difficulty with having agreed upon classroom rules in the class since the class changed every hour. Some teachers did have a poster with classroom rules up in the room. Another issue with having specific class material is some teachers had to move to different classrooms/buildings on campus to teach. This minimized their ability to bring specific items such as clearly posted expectations. Another concern was the temperature, teachers reported not having control over the temperature or comfortability of the room. Another concern related to the concern with the observation process; some teachers were giving tests during the observation period. This meant that there were minimal interactions and no opportunity to demonstrate the ability to incorporate different learning styles. This was another reason why teachers were asking for additional observations to occur.

Teachers felt the SEL observation items needed to be more robust. Teachers felt they were doing more in those areas than was being captured. For example, with organizing and planning,

the observer was looking to see if a planner was used in the classroom as it was a school-wide initiative and each student had a planner. However, teachers reported that they did not always use the planners and found it easier to use a classroom calendar that they either included in the class presentation or had on the wall. Motivation was another category teachers felt needed to have more items, but had difficulty coming up with suggestions. One teacher suggested that the grading sheets they incorporated into the class would fit in with motivation. This is a way for students to track their own progress. They meet with the teacher once a week to review the progress and compare their documentation to the teachers. This provides them with an opportunity to ask questions or when a grade is low, be able to see the whole picture by examining their sheet.

Lastly, Teachers reported teamwork as a point of contention for students. Teachers reported that due to the nature of the school and where the students are at (high trauma) and low frustration tolerance, teamwork can get problematic quickly. Teachers reported having to use dyads rather than groups. Teachers felt teamwork was difficult to incorporate to the school day and therefore would have low observation points.

### **Discussion**

While it is not surprising that there were no statistically significant findings given the small sample, it is important to note that one area that showed trending towards significance was trauma-informed responses to problematic behavior. A large component of the trauma-informed practice is understanding the behavior and brain development of those impacted by trauma (Australian Childhood Foundation, 2010; Perry, 2009; Walkley & Cox, 2013; Wolpow et al., 2009). The trending towards significance in this area suggests that teachers are implementing trauma-informed practices in the classroom.

Consistent with the literature, limitations in the number of observations occurred due to resource deficits (Akin, Strolin-Goltzman, & Collins-Carmargo 2017). Teachers recommended that at least three to four observations occur over different time-points in the day throughout the year. Teachers felt that two observations would not provide sufficient information on their adherence to trauma-informed practices.

Teachers found the feedback design of the observations helpful. The feedback included specific details on the events of the classroom and tailored the recommendations based on those specific events. Teachers found this approach helpful and easy to understand. It is important to note the design of feedback included a reflective piece and coaching that is in line with best practices in professional development (Darling-Hammond, Hylar, & Gardner, 2017). While the feedback component included the offer of coaching, no teachers engaged in one-on-one coaching. Teachers identified the lack of a specific or prescriptive time to meet with the consultant as a barrier to engaging in coaching.

Teachers were satisfied with the trauma-informed training components of the fidelity tool. However, they found the social-emotional learning items to be limited. Teachers recommended adding additional questions into each of the four subcategories, specifically motivation and organization and planning, and teamwork. The additional questions or modifications were in direct relation to the teachers concern that the TITO social emotional skills section did not account for student behavioral trends. This was particularly true for the teamwork section that assumes students have the ability to work effectively in a team. Teachers expressed concern with incorporating more teamwork exercises as students struggled with teamwork, often escalated the behavior of the students, and was met with resistance from the students. The concern of the teachers resulted in modifying the teamwork activities by reducing to dyadic groups This

highlighted the importance of the observations and member checking as it provided valuable information on the importance of training on how to incorporate teamwork activities when they are met with resistance. Overall teachers found the fidelity tool to be helpful in promoting growth through the feedback design.

### **Limitations**

A strength of this study is the innovation of designing a fidelity tool for trauma-informed practices in schools that uses a structured and unstructured approach as well as feedback (coaching) component. The lessons learned here can be used to improve the protocol and replicate it at a greater volume. Additionally, the use of qualitative feedback from the teachers and staff on the use of the tool and how the protocol was experienced will inform future use of the tool.

Limitations of this study included the small sample size and the limit of 2 observations per teacher for the school year. Additional observation time points would have provided a greater understanding of the implementation of trauma-informed practices across a wider variety of students.

### **Future Implications**

Schools that are implementing trauma-informed practices may use the fidelity tool to assess the degree to which teachers are adhering to an intervention's specifications, develop professional training topics areas, and provide coaching. Through the examination of adherence to the trauma-informed model, administrators are able to ascertain what are the areas of strength and weaknesses amongst their staff. This allows for the identification of areas that require professional development. One such area included the difficulty in developing clear, concise consequences to behavior in the classroom. This identified the need to train further on trauma-informed responses to student behavior including clearly defined rules of engagement in the classroom. The TITO

model includes an ongoing coaching model which is shown to be best practice (Darling-Hammond, Hyler, & Gardner, 2017). Utilizing TITO, provides a direct framework for feedback, reflection, and coaching which promotes teacher professional growth and adherence to trauma-informed teaching.

The findings indicate the importance of coaching and feedback; administrators may designate specific times for coaching to occur to encourage compliance with best practices and further support the teacher in professional development.

Lastly, any school that wishes to receive grant money to use toward implementation of trauma-informed practices will most likely be required to demonstrate fidelity to the model as well as outcomes. Utilizing the Trauma-Informed Teaching Observation Tool will enable the schools to demonstrate fidelity to trauma-informed practices.

## **Chapter 5: Conclusion**

This three-part dissertation examined the trajectory of teacher wellbeing throughout the school year, the relationship between self-care and teacher burnout, secondary traumatic stress, and compassion fatigue, and the development of the Trauma-informed Teaching Observation Tool. The findings in this dissertation highlight the importance of teacher wellbeing and how trauma-informed practices, including trauma-informed self-care, are linked to teacher wellbeing. In chapter 2, teacher wellbeing was examined at four-time points throughout the year; in addition, professional vitality was examined in relation to the teacher wellbeing at two time points. In chapter 3, changes in self-care were examined to determine if a self-care intervention was effective at increasing the use of self-care strategies during the school day. Additionally, the relationship between the use of self-care strategies and teacher wellbeing was explored. Finally, chapter 4 details the development of the Trauma-informed Teaching Observation Tool, a fidelity measure developed to examine adherence to trauma informed interventions. These studies detail the importance of trauma-informed practices in alternative educational settings as well as the necessity to highlight teacher wellbeing when implementing trauma-informed practices.

Overall, chapters 2, 3, and 4 provide a promising pathway to understanding and improving teacher wellbeing and professional development. Findings indicate teacher wellbeing fluctuates across the school year, with specific times designated as more stressful. Additionally, professional vitality was associated with higher levels of compassion satisfaction and lower levels of burnout. The frequency of self-care use was also associated with teacher wellbeing. As the frequency of self-care use increased, burnout and secondary trauma decreased. Lastly, the Trauma-informed Teaching Observation Tool was found to be effective at capturing trauma-informed practices in the classroom. Three areas for future research emerged: (1) Teacher wellbeing and interventions,



(2) Trauma-training and self-care strategies during the workday, and (3) Trauma-informed fidelity tools in schools.

### **Teacher Wellbeing**

Teacher wellbeing has been linked to teacher attrition (Chang, 2009; Howard & Johnson, 2004; Hutell, Melin, & Gustavsson, 2013; Wang, Hall, & Rahimi, 2015), student academic outcomes (Arens & Morin, 2016; Herman, Hickmon-Rosa & Reinke, 2018), and student-teacher relationships (Wentzel, Battle, Russel, & Looney, 2010). While much of the literature around burnout, secondary traumatic stress, and compassion fatigue have focused on the medical field, a shift in including educators is occurring. This is especially important in an alternative education environment in which youth are more likely to have trauma histories. Findings from this dissertation suggest that teacher wellbeing is not static and fluctuates throughout the school year. This fluctuation identifies timepoints (December holidays, Mother's Day, and April testing) in which targeted interventions can be implemented by school administration in order to alleviate these peak stress times. Additionally, professional vitality shows a positive relationship with compassion satisfaction. While this research does not provide the mechanism to increase professional vitality, it does describe meaning-making, ownership, and skills to handle adversity as contributing to the overall concept of professional vitality. Future studies should investigate if teacher wellbeing follows a similar trajectory in other educational environments (general education, male alternative education environments), how professional vitality influences teacher wellbeing, and what targeted interventions are successful in reducing peak times of stress.

### **Trauma-training and Self-Care**

Self-care has been identified as a method to mitigate the effects of burnout and stress, (Flook, Goldberg, Pinger, Bonus & Davidson, 2013; Lee & Miller 2013, Salloum, Kondrat,

Johnco, & Olson, 2015) secondary traumatic stress (Hydon, Wong, Langley, Stien, & Katoaka 2015) and compassion fatigue (Abernathy & Martin, 2019) in many helping professions. Trauma-informed self-care includes awareness of trauma, understanding of emotional experience, and building capacity in coping skills (Salloum, Kondrat, Johnco, & Olson, 2015). While many self-care strategies tend to focus on what occurs after work, the findings from this dissertation detail self-care strategies implemented during the workday. This approach is particularly salient for those working in high trauma environments where exposure to adverse events is greater. Findings indicate a higher frequency of self-care strategies during the school day are linked to a reduction in burnout and an increase in compassion satisfaction. The ability to reduce the impact of burnout and secondary trauma is imperative for those working in high trauma environments. This is also important from a trauma-informed practice lens if teachers are burned out and experiencing secondary trauma, how can they implement the trauma-informed practices that require them to be regulated and model coping skills. Limitations of this study included a small sample size that prevented more rigorous statistical analysis. Future research should investigate the impact of school day self-care strategies on teacher wellbeing across multiple schools, which would allow for a larger sample size. Additionally, investigating if specific self-care strategies are more effective at mitigating burnout and secondary trauma would inform the development of self-care strategies during the school day guidelines/suggestions.

### **Trauma-informed Fidelity Tool**

There are many approaches to trauma-informed practices in education, however, there is a dearth of literature around the effectiveness of trauma-informed practices in improving academic outcomes for youth (school connectedness, academic success, social-emotional growth). This is in part due to the lack of fidelity tools ensuring compliance to the model (Lane et al., 2004). Trauma-

informed practices are necessary when working with court-involved youth in an alternative education setting. Studies show that youth in alternative education have higher rates of trauma than those in the general population. The findings from this dissertation proposed a model for monitoring trauma-informed teaching fidelity with the school environment. This model includes a mixed-methods design with feedback and coaching opportunities. The findings support the use of monitoring trauma-informed practice implementation in the classroom. Teachers requested additional observations to increase the rigor of the findings and provide a greater understanding of their ability to implement trauma-informed practices across the student population. Further, the tool identified topic areas for professional development by observing similarities across teachers. Future research should replicate the study to determine its effectiveness in monitoring trauma-informed practices, test out the theory of additional observations increasing rigor and exploring the impact of prescriptive coaching with specific day/time set for meeting with teachers to ensure best practices for professional development.

Finally, while this research was conducted in an alternative educational setting, the interventions used may be beneficial in general education settings. The presence of trauma amongst the general population is widely known (Bethell et al., 2017). While trauma-informed interventions are beneficial to those who have experienced trauma, they also benefit those that have not through modeling and teaching empathy, tolerance, and building the skills necessary to regulate and succeed in schools and beyond.

### **Future Research**

Moving forward, I intend to continue to research the aforementioned areas of study. Specifically, I intend to examine the following research questions:

- Do teachers in general education experience the same trajectory of wellbeing as teachers in alternative education settings?
- Does a school that uses self-care strategies during the workday have increased wellbeing compared to schools that do not use self-care during the workday?
- Is self-care found to be a mitigator of burnout and secondary trauma in other schools?
- What specific components of self-care are the most impactful in reducing burnout and secondary traumatic stress?
- Is attrition lower in schools that implement and promote self-care throughout the school day?
- Is the Trauma-informed Teaching Observation Tool effective in other school environments (general education, other alternative schools, charter schools)?
- Is it feasible for schools to adopt fidelity measures when implementing? What are the barriers to implementing fidelity tools?

### APPENDIX A SCHOOL DAY SELF-CARE INVENTORY

| Thinking about your experience during the school day, please rate the frequency you do the following. | It never occurred to me | Never | Rarely | Occasionally | Frequently |
|---|-------------------------|-------|--------|--------------|------------|
| 1. Allow for breaks during the workday  | 1                       | 2     | 3      | 4            | 5          |
| 2. Engage with co-workers   | 1                       | 2     | 3      | 4            | 5          |
| 3. Provide self a quiet time/space to complete tasks  | 1                       | 2     | 3      | 4            | 5          |
| 4. Participate in projects or tasks that are exciting and rewarding                                   | 1                       | 2     | 3      | 4            | 5          |
| 5. Set limits/boundaries with students and colleagues.  | 1                       | 2     | 3      | 4            | 5          |
| 6. Balance workload   | 1                       | 2     | 3      | 4            | 5          |
| 7. Arrange workspace for comfort  | 1                       | 2     | 3      | 4            | 5          |
| 8. Maintain regular supervision or consultation   | 1                       | 2     | 3      | 4            | 5          |
| 9. Negotiate needs (benefits, bonuses, raise, etc.).  | 1                       | 2     | 3      | 4            | 5          |
| 10. Participate in peer support group   | 1                       | 2     | 3      | 4            | 5          |
| 11. Use sensory tools when needed   | 1                       | 2     | 3      | 4            | 5          |
| 12. Read affirmations or positive notes from others such as thank you notes                           | 1                       | 2     | 3      | 4            | 5          |
| 13. Engage in deep breathing exercises to help ground you.  | 1                       | 2     | 3      | 4            | 5          |
| 14. Wear comfortable clothes to work.   | 1                       | 2     | 3      | 4            | 5          |
| 15. Able to walk the hallway or outside when needed.  | 1                       | 2     | 3      | 4            | 5          |
| 16. Ability to set boundaries and say no to extra responsibilities                                    | 1                       | 2     | 3      | 4            | 5          |
| 17. I get self-affirmation and praise at work   | 1                       | 2     | 3      | 4            | 5          |
| 18. I have opportunity to maintain contact with colleagues  | 1                       | 2     | 3      | 4            | 5          |
| 19. Eat a healthy lunch   | 1                       | 2     | 3      | 4            | 5          |
| 20. Make time to reflect on the school day.   | 1                       | 2     | 3      | 4            | 5          |
| 21. Ask for help when needed  | 1                       | 2     | 3      | 4            | 5          |
| 22. Allow a space for expressing emotions.  | 1                       | 2     | 3      | 4            | 5          |

**APPENDIX B TRAUMA-INFORMED TEACHING OBSERVATION TOOL (TITO)**

Classroom Environment:

|  | Yes | No | N/A |   | Yes | No | N/A |
|--|-----|----|-----|---|-----|----|-----|
| Rules and Policies posted              |     |    |     | Youth participate in planning               |     |    |     |
| Comfortable temperature                |     |    |     | Provides visual opportunities for learning  |     |    |     |
| Opportunity for engagement             |     |    |     | Provides tactile opportunities for learning |     |    |     |
| Provides verbal opportunities to learn |     |    |     | Provides aural opportunities to learn       |     |    |     |

Notes:

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Structured class time:

|                                   | Yes | No | N/A |                              | Yes | No | N/A |
|-----------------------------------|-----|----|-----|------------------------------|-----|----|-----|
| Class has a defined structure     |     |    |     | Teacher provides assistance  |     |    |     |
| The youth know the structure      |     |    |     | Ample time to complete tasks |     |    |     |
| Teacher allows time for questions |     |    |     | Cues to signify changes      |     |    |     |

Notes:

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Ability to utilized trauma training to address problem behaviors:

|  | Yes | No | N/A |   | Yes | No | N/A |
|--|-----|----|-----|---|-----|----|-----|
| Teacher utilizes a calm clear tone when speaking                 |     |    |     | Once a consequence is given, the teacher lets it go |     |    |     |
| Teacher sets clear boundaries                                    |     |    |     | The teacher focuses on the youth's strengths        |     |    |     |
| Teacher has clear consequences                                   |     |    |     | Teacher does not take student behavior personally   |     |    |     |
| Teacher asks about a situation rather than jumping to conclusion |     |    |     | Teacher is flexible                                 |     |    |     |

Notes: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Student Teacher dynamics

|  | Yes | No | N/A |  | Yes | No | N/A |
|--|-----|----|-----|--|-----|----|-----|
| Teacher communicates respectfully                    |     |    |     | Teacher listens effectively to the students concerns or problems |     |    |     |
| Students respond positively to teacher interventions |     |    |     | Teacher /Student share responsibilities                          |     |    |     |
| Teacher Student share power                          |     |    |     | Authoritarian teacher  |     |    |     |
| Teacher is culturally competent                      |     |    |     | Teacher treats boys/girls equal                                  |     |    |     |

Notes: \_\_\_\_\_  
 \_\_\_\_\_

Trauma Informed skills

| Skill   | Yes | No | N/A | Notes |
|---|-----|----|-----|-------|
| Teacher greets students by name   |     |    |     |       |
| Teacher is able to identify triggers  |     |    |     |       |
| Teacher is able to show compassion  |     |    |     |       |
| Able to Deescalate Behavior   |     |    |     |       |
| Provided opportunity for self-expression  |     |    |     |       |
| Utilized sensorimotor tools to deescalate (what tools)                                      |     |    |     |       |
| Practiced Mindfulness   |     |    |     |       |
| Provided a Warning if something changed in the structure                                    |     |    |     |       |
| Emotional Regulation: teacher was able to regulate their own emotion during the class time. |     |    |     |       |

|  |  |  |  |  |
|--|--|--|--|--|
| Teacher encouraged use of coping skills during times of distress |  |  |  |  |
|--|--|--|--|--|

Additional Notes:

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Ownership

|  | Yes | No | N/A |  | Yes | No | N/A |
|--|-----|----|-----|--|-----|----|-----|
| Teachers give students opportunities to make choices |     |    |     | Teachers collaborate with students to solve problems |     |    |     |
| Teachers provide feedback                            |     |    |     | Teachers collaborate with students on class agenda   |     |    |     |

Organization and Planning

|   | Yes | No | N/A |                                    | Yes | No | N/A |
|---|-----|----|-----|------------------------------------|-----|----|-----|
| Teachers provide opportunities to maintain a calendar |     |    |     | Teachers assist in goal setting    |     |    |     |
| Teachers provide feedback on goal attainment          |     |    |     | Teachers break down steps to goals |     |    |     |

Motivation

|   | Yes | No | N/A |  | Yes | No | N/A |
|---|-----|----|-----|--|-----|----|-----|
| Teachers relate topics to students' lives |     |    |     | Teachers provide autonomy on assignments |     |    |     |

Teamwork

|  | Yes | No | N/A |  | Yes | No | N/A |
|--|-----|----|-----|--|-----|----|-----|
| Teachers identify the roles of a group       |     |    |     | Teachers model effective communication                 |     |    |     |
| Teachers acknowledge effective communication |     |    |     | Teachers remain calm and model effective communication |     |    |     |



### APPENDIX C TITO DEFINITIONS

| <b>Subcategory</b>                 | <b>Variable</b>                            | <b>Definition</b>   |
|------------------------------------|--|---|
| <b>Classroom Environment</b>       | Rules and policies posted                  | There is a visual within the classroom that clearly states the rules and policies of that classroom.  |
|                                    | Comfortable temperature                    | The classroom is a comfortable temperature. (not too hot, not too cold)   |
|                                    | Opportunity for engagement                 | The teacher provides opportunities for students to engage in, lead, or contribute to the classroom experience   |
|                                    | Provides verbal opportunities to learn     | Learning opportunities that include verbal and written materials.   |
|                                    | Youth participate in planning              | Students are encouraged to contribute to the day's lesson plan, activity, or classroom environment. This can include building the rules/policies for the classroom, assisting with determining how much time an activity will take and so on. |
|                                    | Provides visual opportunities for learning | Learning opportunities were present that include graphs, charts, posters, images, etc.  |
|                                    | Provides tactile opportunities to learn    | Also known as kinesthetic learning. Teacher provided opportunities for students to carry out physical activities as a part of learning  |
|                                    | Provides aural opportunities to learn      | Teachers provided opportunities for students to hear directions, lectures, etc. as well as opportunities for the students to speak answers to the lesson  |
|                                    | <b>Structured class time</b>               | Class has a defined structure   |
| The youth know the structure       |  | Students know what is expected and when. This can be observed by students grabbing folders at the beginning of class  |
| Teacher allows times for questions |  | Teacher provides opportunities throughout the class for students to ask questions.  |
| Teacher provides assistance        |  | Teacher is accessible for students to approach and will walk around the classroom to offer assistance to students   |
| Ample time to complete tasks       |  | Teacher provides enough time to complete activities/tasks in the classroom. Teacher   |

|   |   |   |
|---|---|---|
|   |   | will check in with the students to determine if more time is needed to complete an activity/task and make adjustments as necessary  |
|   | Cues to signify changes   | Teacher will use sound cues, hand gestures, or another cue to signify transitions in the classroom  |
| <b>Ability to utilize trauma training to address problematic behavior</b> | Teacher utilizes a calm clear tone when speaking                  | Teacher maintains a calm clear tone throughout the class time even during times of stress.  |
|   | Teacher sets clear boundaries                                     | Teachers are able to set clear realistic boundaries. Example: teachers are able to set a personal boundary on how students can approach them (high five, side hug)  |
|   | Teacher has clear consequences                                    | When a situation arises, the teacher is able to verbalize a clear consequence. Example: if you continue to talk to the person next to you, you will have to move your seat to here.   |
|   | Once a consequence is given, the teacher lets it go               | The teacher is able to administer a consequence and then refrain from reminding the student of the transgression throughout the class time.   |
|   | Teacher asks about a situation rather than jumping to conclusions | The teacher is able to take a step back and ask the student what happened and give them a chance to explain.  |
|   | The teacher focuses on the student's strengths:                   | Teachers used strength-based messaging when interacting with students. Teachers are able to provide specific feedback of strengths the students have, example: a student talks constantly in class, the teacher views the student as having great conversational skills and provides guidance on how to use those great conversational skills at the appropriate times. |
|   | Teacher does not take student behavior personally                 | The teacher is able to recognize that a student's behavior is not a personal attack against them, but rather an expression of their current need and/or past trauma. Example: a student is swearing at a teacher, rather than getting upset, the teacher checks in with the student to determine what may have happened to make them upset.                             |

|                                     |  |   |
|-------------------------------------|--|---|
|                                     | Teacher is flexible  | The teacher demonstrates an ability to change course as needed. Example: the teacher is lecturing and sees that the students are having difficulty paying attention. The teacher stops the lecture and has the class stand up and stretch. By doing this the teacher is demonstrating flexibility in order to respond to the students |
| <b>Student-teacher Relationship</b> | Teacher communicates respectfully                                | Teachers model respectful communication. Teachers use please and thank you with the students  |
|                                     | Students respond positively to teacher interventions             | Students respond well to teacher interventions and conflict is resolved.  |
|                                     | Teacher/Students share power                                     | The teachers provide opportunities for students to share power and ownership of the classroom. Example: students are able to dictate how much time they need to complete a task or what the daily activities for the week should be.  |
|                                     | Teacher is culturally competent                                  | The teacher demonstrates cultural competence during lessons. The teacher is aware of cultural implications in certain lessons, the teacher does not use generalizing terms or continue stereotypes.   |
|                                     | Teacher listens effectively to the students concerns or problems | The teacher takes the time to listen to student concerns and is responsive  |
|                                     | Teacher/students share responsibilities                          | The teacher provides opportunities for students to demonstrate responsibility. Someone tracking the sensory tools and making sure all are put back at the end of class, collecting folders, handing out materials, etc.   |
|                                     | Authoritarian teacher:   | The teacher is very strict and demands students follow these strict guidelines, the teacher does not share power or responsibilities with students.   |
|                                     | Teacher treats boys/girls equal                                  | Teachers do not treat boys or girls differently in class.   |
| <b>Trauma-Informed Skills</b>       | Teachers greet students by name                                  | Teachers welcome students into their classroom by saying their name.  |

|  |   |  |
|--|---|--|
|  | Teacher is able to identify triggers      | The teacher is able to recognize potential/present triggers. Example: A student drops a large book on the ground creating a loud noise, another student starts to escalate their behavior. The teacher is able to recognize the loud noise as the cause of the escalating behavior and calls out the trigger rather than the behavior to assist in de-escalation. The teacher announces, wow that was really loud and startling. Is everyone Ok? |
|  | Teacher is able to show compassion        | The teacher demonstrates compassion even during times of stress. Example: the student is distraught and swearing at the teacher, the teacher is able to demonstrate compassion by trying to understand what the student is experiencing and maintains a calm tone as they attempt to communicate. After behavior happens, the teacher is able to welcome the student back in and demonstrate an understanding of their behavior                  |
|  | Able to deescalate behavior               | Teachers are able to use interventions within the classroom to deescalate behavior, such as the low and slow, window of tolerance  |
|  | Provided opportunity for self-expression  | Teachers are able to provide opportunities for students to express themselves, such as decorate notebooks/folders, writing/poetry, artwork.  |
|  | Utilized sensorimotor tools to deescalate | Teachers encouraged students to use sensory-motor tools to deescalate. Document which tools were used and the type of behavior the student demonstrated  |
|  | Practiced Mindfulness                     | Teachers practiced mindfulness during the classroom. Take a moment to breathe, observe the surrounding, etc. This may be used to help refocus the class or to deescalate after a trigger. This could also be done as a normal everyday part of the class.  |
|  | Emotional regulation:                     | The teacher was able to regulate their own emotions during class time: Teachers demonstrated the ability to regulate their own emotions during class. Example: breathing through stressful times.  |

|                           |  |   |
|---------------------------|--|---|
|                           | Teachers encourage the use of coping skills during times of distress   | Examples: mindfulness, breathing, sensory-motor tools   |
| Ownership                 | Teachers provided students with the opportunity to influence class rules, contribute solutions to classroom issues, and influence learning topics.   | Example: The teacher allowed students to choose a methodology of demonstration knowledge (essay, poem, or oral presentation). Teachers collaborated with students to determine the structure of class (what are the rules, timelines, etc.)   |
| Organization and Planning | Teachers provided students the opportunity to organize notes, homework and other material for class, follow a class calendar, and plan ahead for projects or upcoming events.                              | Example: Teachers provided a planner for students to mark down important dates and referred to the planners in class. Teachers established homework folders and detailed how papers are organized within that folder.   |
| Motivation                | Teachers provided opportunities for students to link learning topics to their current life experiences.  | Example: Teacher linked the topic of the class to real life experiences that students can relate to. When discussing the parts of the cell working together, the teacher talked about how working together in teams is related and asked what happens when you work well as a team versus if you are not able to work together, then related it back to cell functioning processes. |
| Teamwork                  | Teachers provided opportunities for students to work together as teams, teachers identified the various roles in team building, teachers provided feedback and opportunities to reflect on team exercises. | Example: Teacher described and assigned the roles for each team. Teacher used debriefing to discuss the experience of working on a team (barriers and strengths)  |

**APPENDIX D EXAMPLE OF FEEDBACK LETTER (TITO)**

Dear Teacher,

Here is your feedback from the observation. I recognize that I only saw a snapshot of what you do. Please take the feedback as such. The feedback is structured in two categories: stars and strive for. Stars are all the amazing things you are already doing in your classroom. The “strive for” category are some ideas to help increase engagement, build autonomy and ownership, and encourage collaboration between you and the students. Note the “strive for” category might look bigger but that is only because I lay out some concrete ways to integrate in the classroom. If you would like to have a further discussion, I am available and can be reached at X.

Stars:

You clearly have genuine relationships with your students. You were relaxed and able to joke around with them in a way that was true to your role as a teacher and understanding of them as students. You had a clear structure that allowed the students a lot of autonomy by allowing students to choose how best to engage in the spelling and vocabulary words. The students responded well to interventions with behavior (you waited patiently for students to stop talking before continuing). You provided cues and countdowns to changes and provided assistance to anyone who asked. You recognized and honored the strengths of students. I love that you pick names and have the class right down positive things about that student and then take that to make a certificate for the student. Doing that builds community, strengthens bonds, and teaches people how to look for the positive in each other and themselves. When students were stuck you helped them problem solve, not doing it for them, but pushing them to find solutions (a student didn't know what option to pick and you encouraged them to think about which one fit with them the best). You have created such a collective environment that students will call out other students' behavior to correct it. When there was a disruption in the class you used that opportunity as a centering time “alright, let's sit down, take a deep breath”.

Strive for:

You are rocking it! So, I'm giving you some challenges ☺

Add in opportunity to maintain a calendar, set goals, and break goals down into manageable steps with your assignments. This could be as easy as “our goal today is to complete A task, in order to do this, we have to X, Y, and Z. In order to have enough time to complete we have to finish X by (time), Y by (time), and Z by (time). You are already giving a countdown this would just be a next step. Ultimately, you want the students to then hear the goal and be able to break down the steps.

# WAYNE STATE UNIVERSITY

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<http://irb.wayne.edu>

## CONCURRENCE OF EXEMPTION

To: Angelique Day  
Social Work Instruction Un

From: Dr. Scott Millis *S. Millis, PhD*  
Chairperson, Behavioral Institutional Review Board (B3)

Date: October 30, 2012

RE: IRB #: 107312B3X  
Protocol Title: Assessing the Impact of Trauma on Learning Among a Sample of Alternative Education Students Who Are in Residential Placement  
Sponsor:  
Protocol #: 1210011408

The above-referenced protocol has been reviewed and found to qualify for Exemption according to paragraph #4 of the Department of Health and Human Services Code of Federal Regulations [45 CFR 46.101(b)].

- Protocol Summary Form (received in the IRB Office 10/22/12)
- Protocol (received in the IRB Office 10/22/12)
- A waiver of consent has been granted according to 45CFR 46.116(e) and justification provided by the Principal Investigator in the Protocol Summary Form (data used for this study will be a secondary data pull of de-identified school records). This waiver satisfies: 1) risk is no more than minimal, 2) the waiver does not adversely affect the rights and welfare of research participants, 3) the research could not be practicably carried out without the waiver, and (4) Providing participants additional pertinent information after participation is not appropriate.

This proposal has not been evaluated for scientific merit, except to weigh the risk to the human subjects in relation to the potential benefits.

- Exempt protocols do not require annual review by the IRB.
- All changes or amendments to the above-referenced protocol require review and approval by the IRB **BEFORE** implementation.
- Adverse Reactions/Unexpected Events (AR/UE) must be submitted on the appropriate form within the timeframe specified in the IRB Administration Office Policy (<http://iro.wayne.edu/policies-human-research.php>).

NOTE: Forms should be downloaded from the IRB Administration Office website <http://irb.wayne.edu> at each use.

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**ABSTRACT****TEACHER WELLBEING AND TRAUMA-INFORMED INTERVENTIONS IN AN  
ALTERNATIVE EDUCATION MIDDLE/HIGH PUBLIC CHARTER SCHOOL**

by

**LORI VANDERWILL****May 2020****Advisory:** Dr. Suzanne Brown**Major:** Social Work**Degree:** Doctor of Philosophy

Teacher wellbeing (burnout, secondary trauma, compassion satisfaction) is associated with teacher attrition (Chang, 2009; Howard & Johnson, 2004; Hutell, Melin, & Gustavsson, 2013) and student academic outcomes (school connectedness and academic achievement) (Arens & Morin, 2016; Caprara, Barbaranelli, Steca, & Malone 2006). Teacher wellbeing impacts the ability to implement Trauma-Informed School-Based (TISB) interventions with fidelity. TISB interventions place the responsibility on the adults in the school to make changes in order to address student behaviors' (Herman, Hickmon-Rosa, & Reinke, 2018). This includes ensuring teachers and staff are able to regulate their own emotional responses. The importance of teacher wellbeing and the implementation of TISB is evident in schools that serve court-involved youth in alternative educational settings, as the students have a higher rate of trauma-histories than the general population (Kerig & Ford, 2014). Female youth experience higher rates of PTSD and sexual abuse than their male counterparts (Sherman & Balck, 2015; Teplin, Abram, McClelland, Dulcan, & Mericle, 2002). There is a gap in literature examining the wellbeing of teachers over the school year and monitoring the fidelity of TISB interventions. This three-paper dissertation seeks to fill this gap by examining teacher wellbeing, mitigating factors to



teacher wellbeing (self-care), and a TISB fidelity monitoring tool. A mixed-methods design examined the trajectory of teacher wellbeing and the changes in frequencies of use of self-care strategies during the school day over four timepoints, the relationship between self-care and teacher wellbeing was explored ( $N=27$ ). The fidelity monitoring tool, Trauma-informed Teaching Observation Tool (TITO) was examined using mixed methods ( $N=10$ ). Findings show that teacher wellbeing fluctuates throughout the school year with December and April identified as more stressful. The frequency of use of self-care strategies had a strong negative relationship with burnout and secondary trauma, indicating the use of self-care as a mitigator of burnout and secondary trauma. Lastly, TITO was found to be useful in examining teacher implementation of TISB interventions. Teachers suggested adding additional observation timepoints and additions to the social-emotional component of the observation tool. Implications for policy and practice are discussed as is future directions for research.

## **AUTOBIOGRAPHICAL STATEMENT**

Lori Vanderwill is a Research Scientist at the University of Washington-Seattle School of Social Work and a former mental health therapist in a Detroit community health agency. Previous work in community mental health included school-based mental health for K-12 students throughout the year. This work inspired engagement in trauma-informed research in school. Over the last 7 years she has participated in mixed-methods research focused on trauma-informed teaching with court-involved youth. Her ongoing research interests include trauma-informed teaching methods, social-emotional learning in education, and support systems for teachers and families. Additional research interests are training of those who serve court-involved youth, including teachers, foster/adoptive/and kinship parents.