SCHOOL PSYCHOLOGISTS' FAMILIARITY WITH DISSOCIATION IN THE CHILDREN THEY SERVE: A NATIONAL SURVEY

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ABSTRACT

A growing awareness of the negative impact of childhood trauma and adversity on life outcomes has led many schools to seek out ways to become trauma-informed. School psychologists, given their expertise and scope of practice in schools, could be considered potential leaders in such a movement. Given a growing body of theoretical and empirical evidence that dissociation marks more complex forms of traumatic stress, a national survey was conducted to examine school psychologists' familiarity with the phenomenon of dissociation in the children they serve. A small sample (N = 41) consistent with National Association of School Psychologists (NASP) membership data provided initial findings in this area of practice. Despite rating themselves as being generally familiar with terms related to significant trauma (PTSD, ACEs, complex trauma, developmental trauma, toxic stress, and dissociation), a simple majority (greater than 50%) of the school psychologists sampled self-reported that they were unfamiliar with dissociation in their students in terms of knowledge, awareness, and ability to identify during observation. More than 80% were not confident in assessing nor comfortable educating teachers and parents about dissociation in children. Furthermore, fewer than half of the school psychologists sampled would consider dissociative problems as accounting for symptoms overlapping with other childhood disorders. A majority of the sample received little to no training exposure to the topic of dissociation, both inside and outside of graduate school, implying a need for enhanced training regarding the reality and usefulness of recognizing dissociation and complex trauma in children. These results point to a potential gap in familiarity with conceptual terms and practical know-how related to helping children with trauma-related dissociation.

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Chapter One: Introduction

Our education system exists for the good of our children, and ultimately for the good of our society. While there are many ways we can evaluate its success, such as looking at retention, literacy, or vocational trends, one way to measure success is to look at how well the system serves the most needy and vulnerable children among us. These include those children who, having endured severe and/or chronic maltreatment at an early age, often go through school with limited access to the inner strength and outer resources necessary for long term health and success (Ringeisen, Casanueva, Cross, & Urato, 2009).

A Need for Trauma-Informed Schools

In a groundbreaking epidemiological study, researchers explored the link between the number and type of adverse stressors experienced in childhood, termed Adverse Childhood Experiences or ACEs, and later adult disease and health risk behaviors (Felitti et al., 1998). The study concluded that adverse childhood experiences are surprisingly common, including experiences of physical and sexual abuse. Long term child maltreatment researchers Cicchetti and Toth (2015), citing several years of increasingly rigorous research, claimed that a consensus has been reached regarding the broad impact of childhood trauma across multiple domains of development, which, if not addressed, extends into adulthood. Additionally, at least one major lawsuit has been filed against a school for failing to provide adequate education for children with significant trauma resulting from these adverse experiences (Ahlers, Stanick, & Machek, 2016). The growing awareness of the enduring impact of trauma on development and the legal mandate to provide a free and appropriate education to all children, regardless of personal history, have pushed many schools to become trauma-informed or trauma-sensitive (Overstreet & Chafouleas, 2016). Being trauma-informed means taking a comprehensive, systems-oriented approach to

trauma prevention and intervention, and engaging students with trauma histories in a manner that recognizes the impact of trauma on their learning and development (Garro, Brandwein, Calafiore, & Rittenhouse, 2011).

Understanding More Complex Traumatic Reactions

In order for schools to become sensitive to trauma, it is necessary to understand childhood trauma. It is now known that a significant percentage of children experience traumatic events (abuse, violence, disaster, terrorism, traumatic loss), with over two thirds of children reporting having experienced a traumatic event by age 16 (American Psychological Association, 2008). However, less is known about the variety and complexity of children's reactions to traumatic events, and how reactions unfold over time. Nevertheless, many experts in the field distinguish between acute or single incident trauma, and more chronic or severe trauma. Lenore Terr (1991) is generally credited with first drawing attention to this distinction within the field. She coined the terms Type I and Type II trauma to distinguish between traumatic stress related to single incidents resulting in relatively simpler patterns of traumatic symptoms, and trauma related to multiple events with an early childhood onset, having an ongoing, chronic nature, and resulting in more complex symptoms due to a pervasive negative impact across multiple areas of development (Terr, 1991). In other words, this second type of traumatic reaction can result in problems in every dimension of development, including biology, attachment, affect regulation, dissociation and consciousness, behavioral control, cognition, and overall self-concept (Cook et al., 2005). Thus, while many school children exposed to single incident traumas are surprisingly resilient (APA, 2008), children with more complex traumatic reactions are vulnerable to more pervasive effects that persist into adulthood (Cicchetti & Toth, 2015; Stien & Kendall, 2004; van der Kolk, 2003). According to a white paper by the National Child Traumatic Stress Network

(NCTSN), 22% of a nationally representative sample of 2,030 children aged 2 to 17 years had experienced 4 or more different forms of victimization in the past year. The paper defines complex trauma as exposure to multiple or chronic traumatic events that are often interpersonal, invasive, and occur within the child's caregiving system (Kliethermes et al., 2014).

Screening for Children with Dissociation

One way to screen for more severely traumatized children is by better understanding and recognizing the significant role that dissociation plays in their response to trauma and in everyday functioning (Paulsen, 2014). Children, when threatened by experiences that overwhelm their ability to cope, may seek to protect themselves by means of dissociation, a process of separating themselves from aspects of experience that are too difficult to bear (Paulsen, 2014). Broadly, dissociation can describe almost any reduced awareness or separation of mental processes related to sensation, perception, cognition, emotion, or memory (Figley, 2012). For example, daydreaming while in class, or becoming deeply absorbed in a book, some would consider normal experiences of dissociation when they involve reduced awareness of surroundings or lack of access to memory for the time period involved (Putnam, 1997). From a neurobiological point of view, dissociation describes part of the human stress response. At a certain level of arousal, during times of physical or emotional threat, a dissociative shut-down response is automatically triggered to preserve brain function (Schore, 2002). In this sense, dissociation can be adaptive both in normal and extreme experience. However, it turns pathological when it disrupts the continuity and integrity of mental processes in a distressing and lasting manner (American Psychiatric Association, 2013), such as occurs in children subjected to early maltreatment.

Schore (2009) explains that early abuse and neglect by caregivers condition dissociative defenses in infants and young children that severely disrupt attachment and the subsequent development of emotional and self-regulation. Essentially, in the first years of life, dissociation is the principle mechanism that preserves brain function in times of stress; furthermore, repeated episodes of dissociation hard-wire the brain for future uncontrolled, dissociative responses to stress (Schore, 2009). Therefore, when looking out for children in great need of support at school, it is important to identify those who have the greatest tendency to manifest dissociative symptoms in response to stress. Jones (2001) states that, even from their entry into formal schooling at the pre-school age, these children "seem remote and ill at ease with themselves…demonstrate sudden changes in outward manner and age behavior for no apparent reason, appear to have a poor sense of time, place, or difficulty learning from experience," and "appear unusually forgetful and generally disconnected from themselves and key people in their world." (p. 1250)

Link Between Complex Trauma and Dissociation

Dissociation can be considered a red flag for those children in need of intensive intervention. Some childhood studies have shown that higher levels of dissociation characterize chronic cases of trauma (Ensink, Berthelot, Bégin, Maheux, and Normandin, 2017; Kisiel & Lyons, 2001; Kisiel et al., 2014), and that early childhood maltreatment is correlated with higher levels of dissociation in later childhood (Hulette, Freyd, & Fisher, 2011; Macfie, Cicchetti, & Toth, 2001). Furthermore, studies have shown links between certain types of maltreatment and abuse, e.g. sexual and physical abuse, and a greater degree of dissociative symptoms (Hulette et. al., 2008; Macfie, Cicchetti, & Toth, 2001). Clinicians and researchers have studied children with complex trauma and its enduring impact on multiple levels of development (Cicchetti &

Toth, 2015). However, less studied is how childhood dissociation manifests within the school setting. In other words, there have been few formal studies looking at how school personnel perceive and interact with children with significant dissociative pathology.

Challenges to Identifying Childhood Dissociation

There are obstacles to identifying dissociation in school children. Stien and Kendall (2004) indicate that children with complex trauma and dissociative symptoms suffer a variety of problems that they share in common with other children. Accordingly, maltreated children are likely to be diagnosed with disorders related to resulting attention problems or oppositional behaviors; therefore, the adults in their lives will try to understand their needs through the lens of these more common childhood disorders, which unfortunately fail to capture the extent of their problems. Other reasons have to do with the nature of dissociative symptoms themselves, which serve to keep secrets from the self and others regarding atrocities too unbearable to realize (Paulsen, 2014). In other words, horrific experiences may be so dissociated from the child's everyday awareness, that it would prevent the child from disclosing maltreatment to a trusted adult at school (Stavropoulos and Kezelman, 2018). Spiegel (2006) notes that a child's dissociative states are easily mistaken for sleepiness, normal daydreaming, subtle attempts at defiance, or low intelligence. They can also be seen as dramatic and puzzling, due to the extremes in behavior that cannot be predicted given the context. In essence, children prone to dissociation can slip through unnoticed, or if noticed, misunderstood.

The Role of School Psychologists

Given their training and multi-faceted role within the school setting, school psychologists are well-placed to identify pathological dissociation, and therefore children with complex trauma, to facilitate the greater support and intervention they need. According to a practice

model proposed by the National Association of School Psychologists, school psychologists act as data-based decision makers, collaborative problem-solvers, consultants to teachers and parents, and leaders in implementing systems-level prevention efforts as well as student-level interventions (NASP, 2021). Traditionally, many school psychologists spent a majority of their time in assessment activities identifying children who were eligible for special education services (Hanchon & Fernald, 2013). Thus, they were well-practiced in gaining a full profile of concerns contributing to a student's learning problems, including social-emotional factors. Presently, a growing number of school psychologists are spending more time providing mental health counseling and consultation (Castillo, Curtis, & Gelley, 2012). School psychologists can encounter childhood dissociation in any of their roles, yet it is possible that they are more likely to directly encounter it within the context of a counseling relationship (Schore, 2014).

Studies have been done to examine the strength of training programs charged with preparing school psychologists to intervene in the mental health of children, including one study that specifically looked at practices identifying children who have experienced maltreatment (Sigel & Silovsky, 2011). Other studies have surveyed school psychologists' own self-perceptions regarding their competence in mental health counseling (Allen & Hanchon, 2013), as well as their familiarity with specific mental health problems such as bipolar disorder (Burrow-Sanchez, Call, Adolphson, & Hawken, 2009) or substance abuse (Burrow-Sanchez et al., 2009). To date, no studies have looked at the ability of school psychologists to identify dissociative symptoms in the children they serve.

Present Study

It is important for school psychologists to be able to identify dissociative symptoms in order to screen for more vulnerable children in need of greater support in school and at home.

Despite how well-placed school psychologists are to identify children with dissociative-based pathology, the extent to which they actually do so is unclear. The present study sought to gauge the familiarity of school psychologists with the phenomenon of dissociation in the children they serve.

Chapter Two: Literature Review

Dissociation as a phenomenon has been studied by researchers in several theoretical and applied fields, including those of clinical psychology, neurobiology and neuropsychology, developmental psychology, traumatic stress, epidemiology, and psychotherapy. This literature review begins with a definition of dissociation, followed by an overview of the general trends in these fields that make the identification of dissociative problems in children a pressing and relevant issue in practice settings, including within school settings. The review will then examine current models of school psychology practice supporting the idea that school psychologists are particularly well-placed to identify children with dissociative issues, and finally survey studies of school psychologists' practices and competencies related to identifying specific mental health problems in children. Thus, a case will be made for the current study to examine the extent to which school psychologists are familiar with the phenomenon of dissociation in the children they serve.

Defining Dissociation

The *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; *DSM–5*; American Psychiatric Association [APA], 2013) describes dissociation as a "disruption of and/or discontinuity in the normal integration of consciousness, memory, identity, emotion, perception, body representation, motor control, and behavior" (p. 291). From such a vague, ambiguous

definition that includes a variety of mental processes, it should come as no surprise that an empirical study of the phenomena found dissociation to be a broad, multilevel construct with multiple subtypes (Briere, Weathers, & Runtz, 2005). In addition to the categories of dissociative disorders found in the DSM-5 (depersonalization, dissociative amnesia, dissociative identity disorder, and unspecified dissociative disorder), taxometric studies have found several subtypes of pathological dissociation (Briere, Weathers, et al., 2005; Dell, 2009). Notably, researchers and practitioners have operationalized the broader term into two aspects or types, namely detachment and compartmentalization, which some consider to be qualitatively distinct (Barlow & Freyd, 2009; Holmes et al., 2005). In addition, both types exist along a continuum from normal to pathological, where pathological dissociation interferes with daily functioning or causes subjective distress (Barlow & Freyd, 2009; Dell, 2009). Dell (2009) further proposes that the term *automatism* gives an umbrella construct that includes all forms and better describes the experiences and manifestations of dissociation. In this sense, automated subconscious processes can become activated and intrude on consciousness, causing feelings of detachment from the self or the outside world, or allowing traumatic memories and automated parts of the personality (normally compartmentalized) to replace more consciously controlled functioning. More severe forms of detachment or compartmentalization result in pathology, with more pronounced detachment resulting in the diagnosis of Depersonalization Disorder (DD), and more pronounced compartmentalization resulting in Dissociative Identity Disorder (DID). There is no consensus about where to include altered states of consciousness such as absorption, meditative trance states, or other culturally or religiously sanctioned altered states of mind (Dell, 2009). However, this review is more concerned with the identification of more pathological dissociation, which can be better conceptualized by understanding its two main aspects.

Detachment. Dissociation can refer to an in-the-moment phenomenon of detachment during a stressful experience. Because it is associated with specific neurobiological mechanisms rooted in the autonomic nervous system, a dissociative response is characterized by reduced awareness of information coming into the senses from the outside environment, and/or information from one's own emotional and bodily states (Lanius, Paulsen, & Corrigan, 2014). More specifically, Polyvagal theory (Porges & Furman, 2011) posits that dissociative reactions are housed in the dorsal vagal system of the parasympathetic nervous system, designed to induce defensive behaviors of collapse, hiding and feigned death. Endogenous opioids released during this activation may promote a soothing experience of numbness and pain relief. In fact, Ford & Gomez (2015) hypothesize that nonsuicidal self-injury promotes activation of this hypoaroused state with its accompanying sense of release. In less extreme situations, dissociation can serve to detach us from outer experience so that we can more easily absorb inward to ponder an urgent issue or to daydream about possible scenarios related to our concern. Nevertheless, whether the stress is mild or extreme, dissociation can refer to a sense of detachment, or altered awareness of self or surroundings, a sense that is fluctuating and in-the-moment.

Compartmentalization. On the other hand, dissociation can refer to the compartmentalization of information and behavioral states that are conditioned into separate neural networks designed to be activated only within certain cued situations (Lanius et al., 2014; Holmes et al., 2014). Such states are to a certain degree separate and isolated from one another, stored within memory networks that are unconscious and implicit, out of direct awareness and control (Schore, 2001). Moreover, such states can be described as dissociated or dissociative states, regardless of whether they are characterized by hyperarousal or hypoarousal. What unifies them conceptually is that they are dysregulated and unintegrated into a larger, coherent self-

system. In this sense, dissociation refers to the separateness or compartmentalization of poorly integrated self-states. Thus, some clinical experts in the field identify the importance of *parts work* (Kezelman & Stavropoulos, 2020; Stolbach, 2005) in healing the effects of trauma and other adverse experiences at the level of personality integration and self-regulation. In parts work, therapists do not target cognitions or behaviors alone, but rather self-states that combine related cognitions, feelings, and behaviors into a single mode of perceiving and reacting to a given situation. Ego state theory posits that these behavioral states, termed ego states, persist into adulthood in both mild and severe forms (Watkins, 1993). Caution should be taken, however, when working with children clinically, to avoid overemphasizing the separateness they experience as a result of dissociation (International Society for the Study of Dissociation [ISSD] Task Force, 2003). This last point of caution reveals one problem in the literature related to defining dissociation, namely that conceptual references to compartmentalized self-states may apply more to adults than to children, whose memory and personality systems are still developing.

In summary, theoretical views and empirical evidence related to the definition of dissociation point to a typological distinction between detachment and compartmentalization. To combine the two aspects of dissociation, dissociative detachment activates at a certain threshold of subjective distress, and may result in the development of distinct and unintegrated parts of memory or self that can later intrude on conscious functioning in an automated manner, that is, without the individual's control (Dell, 2009). However, definitions of dissociation have been constructed based largely on adult presentations (Silberg & Dallam, 2009). A look at how dissociation manifests in children is therefore warranted.

Manifestations in Children

Silberg & Dallam (2009) recently composed a literature review about dissociation in children and adolescents. In their review, they draw attention to the different ways that dissociation manifests in children as opposed to adults. In adults, dissociative parts of self can take on a well-elaborated sense of autonomy. However, in young children, "feelings, thoughts, and impulses felt as foreign can be projected onto transitional objects such as dolls or imaginary playmates" (Silberg & Dallam, 2009). With a greater degree of dissociation, the child may assert that dolls, imaginary playmates, or even their own body parts have a life of their own beyond mere fantasy. The child may experience hearing inner voices, including those of abusive caregivers as well as younger, regressed baby-like voices. They may also talk to themselves out loud in different voices. Fluctuations in behavior occur, including tantrums that may occur unpredictably. Self-injurious and masturbatory behaviors may occur. Other fluctuations in young children may include regressive behaviors such as monosyllabic baby talk or less sophisticated use of language (Silberg & Dallam, 2009).

Children may also be observed in trance-like states. In young children, trance-like states may occur during play as they rigidly and compulsively reenact trauma scenarios. In school age children the trance-like states may intensify, yet generally range from milder forms of vacant staring or *spacing out* to more profound states of disconnection and unresponsiveness. As children age through school the fluctuations in their behavior become more noticeable as regressed states, yet still may be projected onto stuffed animals or toys (Silberg & Dallam, 2009). Fluctuations in skills and abilities occur, including academic, athletic, artistic, and social (Putnam, 1997). Amnesias may be present for certain activities or parts of the day, as well as perplexing forgetfulness for basic information (names of best friends, asking permission to do

something they just did), and dramatically alternating habits and preferences, e.g., favorite foods, clothes (Putnam, 1997). Perplexing forgetfulness means that it may initially be viewed by adults as lying or denial yet be present when there is little incentive to do so (Putnam, 1997; Silberg & Dallam, 2009).

During adolescence, dissociative states become more elaborate and similar to those of adults; self-destructive behaviors such as self-injury, eating disorders, substance use, and promiscuity become more problematic, and identity confusion occurs as the adolescent becomes more aware of and puzzled by intrusions into their consciousness felt as increasingly strange or out of their control (Silberg & Dallam, 2009). In addition, clinicians point out that there may be secondary or comorbid symptoms, as well as problems arising from attempts to cope with the dissociative core of their problems. Putnam (1997) points out that adolescents may present to counseling with complaints of depression, anxiety, mood instability, low self-esteem, or somatization, which unfortunately are often treated without regard to underlying dissociative problems. Also, unsuccessful attempts to cope with certain self-states may lead to suicidal ideation or attempts, self-mutilation, conduct problems, and sexual behavior problems. Finally, academic problems arise in the form of learning problems, attention and concentration problems, and difficulties solving problems using acquired information in memory (Putnam, 1997). Notably, these last symptoms enter the domain of the school psychologist, since they directly impact a child's academic functioning. However, it is unclear from the literature whether school psychologists have helped to define the dissociative symptomatology presented above, or if they routinely consider dissociation as possibly accounting for problems in learning and cognition. In other words, there is a need for descriptive research about the familiarity of school psychologists with dissociative symptoms in the children they serve.

Converging fields of study

Because dissociation is such a broad term with numerous types and levels of manifestations, a look at the concept from different perspectives is necessary to further understanding. Certain scientific fields of study are well-equipped to study dissociation in children. These include developmental psychology, with its focus on distinguishing normal from pathological pathways of development, and neurobiology, which studies the brain structures involved in a wide variety of human functions. In addition, there has emerged a relatively new field of study integrating the two, termed interpersonal neurobiology (Siegel, 2001), which studies critical structures and functions of the brain as they are influenced by human relationships.

Developmental psychology. It is best to study or intervene with childhood dissociation using developmentally-informed frameworks (ISSD Task Force, 2003; Silberg, 2017). From a developmental perspective, the expression of any psychopathology in children has cognitive, affective, physiological, and behavioral components, yet often can be seen as a failure of adaptation in some sphere of life (Evangelista & McLellan, 2004). The same holds true for dissociative problems, which, although initially conditioned in an automatic, uncontrolled biological manner (Schore, 2001), can become a non-normative skill the child uses to adapt to regulatory problems in the future (Barkley & Mash, 2014). Therefore, developmental theorists understand dissociation in reference to its interference in self-regulation, or rather core processes of self-regulation, including affective, cognitive, behavioral, and even bodily self-regulation (Ford, 2011). Unfortunately, dissociation affects these domains unpredictably. For example, one child may manifest delays in language and cognitive processing abilities, while another may have superior cognition but manifest constant fluctuations in externalizing behaviors, while still

another may be compliant yet withdrawn with chronic somatic symptoms. Thus, emerging experts have stated that there is no consensus on a typical profile of childhood dissociation (ISSD Task Force, 2003), pointing to a need for more research that can generate descriptive profiles of children affected by dissociation. Furthermore, the school is an important setting to study these different presentations of dissociation in children.

Structural theory of dissociation. Perhaps the most prolific authors regarding the conceptualization of dissociation include Nijenhuis, Van der Hart, and Steele (2010). They make a number of important distinctions when defining the term, including distinguishing it from everyday alterations of consciousness. According to their Structural Theory of dissociation, they assert that it is best conceptualized as a division within the personality between an emotional part or parts (EPs) that hold overwhelming defense-based feelings, and an apparently normal part or parts (ANPs) charged with routines of daily life. However, defining dissociation mainly as a division of the personality presents a problem for using this definition with children. When is personality expected to have sufficiently stabilized? Theorists of childhood dissociation have navigated around this question by stating that, for children, dissociation presents as a lack of integration rather than a *splitting* of an already formed personality (Silberg, 2017). Nevertheless, the conceptually synthesized structural model of dissociation, which has proven useful for understanding adult populations, may prove less useful for understanding children, who are still developing within their family and school systems.

Developmental theories regarding dissociative parts. More research needs to occur to understand how dissociative parts develop; however, progress is being made in this area, resulting in several different theories.

Discrete behavioral states. Putnam (1997), referring to the established, research-based theory of state-dependent learning, points out that certain autobiographical information, knowledge, and/or skills can be accessed more readily under certain bodily or environmental conditions. For example, if a subject was taught directions to a place on a map while the subject was intoxicated, he is more likely to recall it with accuracy while in the same state of intoxication, rather than fully sober. This same phenomenon holds true for other bodily and environmental (being underwater or in a certain room) conditions as well. Putnam's discrete behavioral states (DBS) model theorizes that dissociative parts of self develop under repeated conditions of extreme stress and adversity, where a child repeatedly reacts with a particular fight, flight, or freeze reaction, that is then ingrained as a behavioral state automatically triggered to deal with similar situations in the future.

Neurosequential model. Perry, Pollard, Blakley, Baker, and Vigilante (1995) integrate principles such as the use-dependent nature of neural pathways and sequential growth of regulatory mechanisms in the brain, to lend neuropsychological credence to the existence of dissociative parts, which begin as states that eventually turn into something more like personality traits. In explaining the Neurosequential Model of Therapeutics (NMT), Perry and Pollard (1998) describe the development of patterns set early in life that become neuronal templates for organizing future experiences. Still other non-normal mechanisms may be utilized by a child to instill or maintain dissociative states of mind. Some have theorized that children particularly adept at fantasy and absorption may utilize autohypnosis to develop and elaborate certain self-states to escape from experiences of extreme stress. Dell (2009) gave an overview of this research and concluded that empirical evidence is minimal in this area. Although some studies suggest that child-centered variables such as fantasy proneness, hypnotizability, or absorption

may indeed play a role in developing dissociative parts, others seem to contradict this assertion (Pekala, Angelini, & Kumar, 2001). While specific variables are being investigated, the gist of current understanding is that continued experiences of detachment result in compartmentalized parts of memory and personality. The neurosequential model captures this understanding in a well-developed and elaborated manner. However, Perry (2009) states that the neurosequential model is based on clinical work with maltreated children that is informed by readings of neuroscientific literature, rather than on controlled empirical studies. Furthermore, he does not indicate whether practitioners within school settings were consulted in the development of the model.

Betrayal trauma theory. From a cognitive processing standpoint, Freyd (1994) has analyzed the instinctive survival logic involved when a situation results in a dissociative hiding or freeze response, allowing an individual to detach from intense pain to survive a situation, e.g., blocking one's experience of a painful physical injury when movement toward help is necessary. In her formulation of Betrayal Trauma theory, an important contribution to our conceptual understanding of dissociation, Freyd has pointed out that the same logic applies to a child's response to maltreatment by a caregiver. Accordingly, a child, who is utterly dependent on her abusive caregiver, must mentally block out experiences of threat or abuse in order to maintain her attachment to the caregiver. In this manner, dissociation is an adaptive mechanism motivated by attachment survival. However, it becomes maladaptive when it serves as a barrier to developing more mature regulatory strategies, and ultimately integration of the personality (Lanius et al., 2014). Freyd's research brings into view the notion that dissociative reactions to trauma can be considered more normal and adaptive for children than for adults, which further complicates efforts to define dissociative pathology for younger populations.

Attachment disruptions. Others have pointed beyond specific experiences of trauma to other variables, such as attachment style and parenting profiles (Lyons-Ruth, Dutra, Schuder, & Bianchi, 2006). The field of attachment theory has long recognized a specific attachment style, termed *disorganized*, wherein a child exhibits contradictory behaviors in relation to his caregiver, where two contradictory internal working models of the relationship compete in the child's mind, one model where the relationship is safe, the other where it is threatening (Bowlby, 1980). One researcher gathered evidence showing that disorganized attachment is an early form of dissociation, or at least a related phenomenon, that significantly predicts later problems with dissociation (Liotti, 2006). Some theorists make sense of empirical findings to state that disorganized attachment creates a vulnerability to dissociation that persists into adulthood (Liotti, 2006; Lyons-Ruth et al., 2006). One study with children in later childhood suggested that organized yet anxious attachment styles are also correlated with persisting, but less severe, dissociative symptoms after trauma (Gušić, Cardeña, Bengtsson, & Søndergaard, 2016). The study also indicated that verbal harassment and bullying by peers in school could be associated with higher levels of dissociation, although this assertion was based on correlational evidence.

Neuropsychology. The field of neuropsychology includes a relatively new area of study devoted to understanding the effects of childhood adverse experiences on the stress system and brain (De Bellis, Spratt, & Hooper, 2011). An essential principle arising in the literature from this area is that complex trauma induces states of prolonged stress that sensitize the body's innate stress response. Following the theory that these children have a stress response system that has been overly sensitized in some manner, researchers have investigated changes in structures involved in the stress system. In addition, they have found changes in brain structures, such as reduced connectivity between spheres, lower overall brain volume, and volume changes in

structures including the amygdala and hippocampus, which are involved in coordinating reactions to outside events (Bremner, 2003; De Bellis et al., 2011; Lanius et al., 2014; Stien & Kendall, 2004; Teicher et al., 2003; van der Kolk, 2003).

Porges (2018), a neurobiologist, has made accessible to clinicians in recent years the theory that there are distinct brain-body systems that respond to various situations of threat at an automatic-instinctual level, including the sympathetic branch of the autonomic nervous system, which prepares the body for a fight or flight response, as well as the parasympathetic branch that activates a markedly different freeze response, felt as a dissociative numbing and eventual collapse. Porges also draws attention to the more recently evolved social engagement system that is activated in positive, non-threatening social interactions, to foster the engagement we need for learning and growth. This social engagement system interacts with the autonomic threat response system, being inhibited at times, or acting as a modulating influence depending on our need. However, with trauma and notably early attachment trauma, these systems can become imbalanced, with the defensive system chronically inhibiting the social engagement system. The result is that the affected individual cannot take in the social support necessary to regain a sense of safety (Porges, 2018).

According to noted child traumatologist Bessel van der Kolk (2018), Porges has given clinicians a framework for understanding and treating children with developmental trauma, since their impaired capacity for social reciprocity interferes with the natural restoration of safety necessary for the healing and development of the brain, mind, and self. Porges himself comments on how his theory breaks ground for clinical approaches by including dissociative responses in conceptualizing disorders of extreme stress:

> "As I developed the theory, I was trying to explain another basic defensive system used by mammals under extreme situations of life threat - a system of shutting down and immobilization. By not moving, mammals would not be detected by predator and, as a by-product of this strategy, heart rate may drop sufficiently to trigger a fainting response and consciousness would be lost, or for humans, states of dissociation may occur." (Porges, 2017, p. 200).

Porges goes on to describe how the state of shutdown, while enabling one to survive, makes it difficult to "recover the behavioral state flexibility that defines resilience" (p. 167). From a neurobiological perspective, therefore, children who struggle with dissociative responses to stress are less likely than their peers to develop the resilience necessary for social and academic success. Therefore it is imperative that school psychologists are active in seeking out these children using formal and informal methods; unfortunately, it is unclear the extent to which school psychologists are familiar with the dissociative response style to stress. The current study sought to provide initial descriptive research into school psychologists' practices related to dissociation.

Interpersonal neurobiology. Schore, a professor, clinician, and researcher at UCLA, has led the field (along with his colleague Dan Siegel) in integrating recent findings in these various fields of study. His work has consistently shown that dissociation is a key construct in understanding child and adult psychopathology that has its origins in early adverse experiences, especially in early attachment disruptions (Schore, 2001, 2002, 2009). Schore (2009) explains that early abuse and neglect by caregivers condition dissociative defenses in infants and young children that severely disrupt attachment and subsequent development of emotional and self-regulation. Essentially, if interpersonal regulation of behavioral states is not provided in the first

years of life, dissociation becomes the principal mechanism that preserves brain function in times of stress; furthermore, repeated episodes of dissociation hard-wire the brain for future uncontrolled, dissociative responses to stress (Schore, 2009). Schore cites numerous neuropsychiatric studies in support of his work, which claims to give an empirically justified understanding of how long-lasting dissociative response patterns develop in children. Nevertheless, Schore's work theorizes about the neural structures and relational dynamics that are likely involved in the development of dissociative patterns, with a focus on the early mother-infant relationship. Less represented in his work, or in the work of other interpersonal neurobiologists, is how these patterns are affected by later relationships, particularly within educational institutions designed to help children develop despite early deprivations.

Clinical Psychology. Professionals who treat children with complex trauma and dissociation use a number of intervention models in school and clinical settings. First, some clinicians have asserted that traditional interventions used with posttraumatic stress disorder (PTSD) due to single incident trauma tend to backfire with these children, causing treatment resistance and avoidance (McCrea, Guthrie, & Bulanda, 2016; Wieland, 2015). Because children with complex trauma suffer a wide range of adverse experiences, some of which are ongoing in their lives, and also because their toxic stress has affected their development in profound ways, interventions need to be comprehensive and long term. Specific therapeutic approaches often take the form of broad frameworks and models rather than focused interventions (Blaustein & Kinniburgh, 2005; Briere & Lanktree, 2012).

Intervention approaches. Among these clinical approaches are Perry's (2009) Neurosequential Model of Therapeutics (NMT), Blaustein and Kinniburgh's (2005) Attachment, Self-Regulation, and Competency (ARC) framework, Cohen's (2012) Trauma-Focused

Cognitive Behavior Therapy (TF-CBT), and Shapiro's (1997) Eye Movement Desensitization and Reprocessing (EMDR). These treatment models share some principles in common. First, assuring external safety is a priority, given that ongoing abuse or adversity could still be present in the environment. Internal safety is also a priority, installing inner resources and coping mechanisms to generate a sense of calm and self-soothing in the face of stress. Establishing secure attachment and consistent caregiving for the child (entailing concurrent family therapy and parent consultation) and a sense of permanency for those subjected to multiple placements and transitions also seems to be a theme. After stabilization work, the child's capacity to self-regulate and soothe negative emotional states is developed, sometimes in conjunction with child-parent therapy which targets the parent's ability to assist in this endeavor. Then, the approach turns toward extensive re-processing and integration of traumatic memories into a coherent sense of self in relation to others. Finally, maintenance and enhancement work ensure future resilience. Others have drawn attention to shared principles similar to those outlined here (Cook et al., 2005; Stien & Kendall, 2004). It should be noted that these treatment frameworks were developed in clinical settings. It is possible therefore, that school-based mental health practitioners, including school psychologists, are relatively unaware of these treatment approaches. Initial descriptive research investigating this familiarity is warranted.

Dissociation's impact on clinical approach. While the above models have proven effective in many ways, some (Silberg, 2013; Waters, 2016; Wieland, 2015) have shared observations from clinical experience that traumatized children with dissociative symptoms may not respond well to standard treatment models. Aside from the observations of experts, there is currently little direct empirical evidence to support this assertion of treatment resistance in children. Bailey & Brand (2017), in their review of the adult empirical literature, concluded that

adults with high levels of dissociation continue to have worse symptoms than those with low dissociation after treatment. They also cited studies that yielded apparently contradictory evidence about treatment impact, with some studies showing dissociation's apparent interference in standard treatment approaches such as Dialectical Behavior Therapy for Trauma (DBT-Trauma), psychodynamic and prolonged exposure (PE) therapies, and other studies showing no effect on treatment outcomes for other PTSD therapies, including narrative exposure therapy. Nevertheless, Stolbach (2005), when introducing a clinical case study, asserted that some children struggle with treatment due to the fact that dissociation manifests in an inner collection of *parts* in the developing personality; that is, in keeping with the theory of structural dissociation (Nijenhuis et al., 2010), the child may oscillate between apparently normal behavioral states and behavioral states of anxiety, rage, controlling behaviors, phobic avoidance, or shutdown. To some extent, these conflicting aspects of self have become automatized and out of direct volitional control, even long after a precipitating trauma has been desensitized. Therefore, specific approaches that include *parts work* (Stolbach, 2005), the integration of dissociated parts of the personality, may be necessary to eliminate longstanding behavior problems. By connecting apparently normal parts of the personality with the emotional parts (according to structural dissociation theory), the child becomes less dependent on controlled environments to manage behavior. Therefore, clinicians using the above frameworks may include techniques and verbiage to address dissociative defenses and parts of self, in order for the child to be open to learning new techniques of emotional regulation, building competencies, and trusting the adults in their lives (Silberg, 2013). For an overview of such practices, a clinician can look to the guidance of a professional society dedicated to fostering awareness of dissociation across the lifespan. Namely, the International Society for the Study of Trauma and

Dissociation (ISST-D), formerly the International Society for the Study of Dissociation (ISSD), has published a set of guidelines describing features of effective frameworks and practices for the treatment of dissociation in children and adolescents (ISSD Task Force, 2003). It is worth noting that there have been few empirical studies evaluating child therapy approaches utilizing parts-based language and techniques. Furthermore, the aforementioned guidelines warn that caution should be taken not to overemphasize separateness or parts of self when working with children. However, this assertion is based on the clinical opinion of a small group of experts. Research is needed to investigate whether using parts language is useful or detrimental when working with child populations.

Screening in clinical practice. One can find support for the practice of routine screening for dissociation among authorities in the clinical field. In fact, the aforementioned EMDR is a trauma treatment that has strong empirical support for use with adults, including dozens of randomized controlled trials, as well as official endorsement by the Department of Veterans Affairs (Department of Veterans Affairs, 2010), the American Psychiatric Association (Association, 2004), and others. EMDR includes screening for dissociative symptoms within the first session. Thus, in addition to questions such as, "are you feeling sad or anxious?" or "how is your appetite?", a clinician is taught to ask questions to draw out dissociative symptoms, such as "do you ever feel as though you are watching yourself from the outside? Do you feel as though things around you aren't real?" or "do you ever have periods of time where you cannot remember what happened?" (Lanius et al., 2014). Silberg (2013) provides a list of practical questions to help with interviewing children suspected of dissociation. A notable difference in screening questions between children and adults is assessing the area of imaginary friends, although certain caveats apply in this area due to research showing that imaginary friends are

normal in young children (Silberg, 2013). Finally, authorities in the field of childhood traumatic stress include the founders of the evidence-based Trauma Focused Cognitive Behavior Therapy (TF-CBT) for children. In a recent article, Cohen, Mannarino, Kliethermes, and Murray (2012) acknowledged the importance of screening for children with complex trauma and dissociation who may subsequently benefit from a modified form of the treatment approach.

Measurement scales. Normative measures that screen and assess for dissociative pathology in children have been developed in the past three decades. The Child Dissociative Checklist (CDC) screens for children likely to have dissociative problems. It is an observer report that can be filled out by a parent or teacher (Wherry, Neil, & Taylor, 2009). As of 1996, Putnam (1997) reported a mean test-retest reliability for the CDC of .74 in two studies and a Cronbach's alpha of .86 in three studies. In terms of validity, studies at that time found that it was able to discriminate among groups of abused vs. nonabused children, as well as between children with dissociative disorders vs. those without. The Adolescent Dissociative Experience Scale (A-DES) is a self-report screening questionnaire that is well-supported (Keck Seeley, Perosa, & Perosa, 2004). An initial U.S. study showed good scale and subscale reliability, and increased scores were able to distinguish adolescents with dissociative disorders and other clinical symptoms (Armstrong et al., 1997). The CDC and A-DES measures have been studied in various international populations with large sample sizes (N > 500). It is important to note that high scores on these measures are not necessarily indicative of a dissociative disorder, and must be considered in conjunction with other assessment practices. Briere's (1996) Trauma Symptom Checklist for Children (TSC-C) includes a subscale that screens for dissociative symptoms. Other widely used measures for trauma symptoms, such as the UCLA PTSD Reaction Index, investigated using a large national sample of over 6,000 children and adolescents, include items

rating dissociative symptoms of depersonalization and derealization (Steinberg et al., 2013). To date, no diagnostic instrument exists for assessing dissociation in children. While there are acceptable screening measures specifically for pathological dissociation, as well as for screening for the dissociative subtype of more classically presenting PTSD, it is unclear whether these screening instruments are used in schools, or the extent to which school psychologists are familiar with them.

Informal screening during psychological assessment. Silberg (1998) conducted a study that enumerated assessment behaviors and qualities of performance typically displayed by children with dissociative disorders while being evaluated with a standard psychological test battery. These behaviors include trance states manifested as staring episodes, odd movements, fluctuations in activity level or skill level, friendly vs hostile relatedness, somatic complaints and emotional reactivity, and references to inner dividedness, such as conflicting responses or referring to other selves, inner voices, and imaginary friends asserted to be real. Moreover, her study was able to identify which behaviors were more significantly correlated with confirmed diagnoses of pathological dissociation. In this way, Silberg was able to describe how these children may appear during assessment activities, an important contribution that may help achieve more widespread recognition among front line clinicians, including school psychologists. While Silberg asserts that clinicians who primarily assess children may be overlooking dissociative signs of deeper trauma-based pathology, no studies to date have attempted to discern whether or not this is actually the case.

Dissociation is often central to treatment specialists' understanding of more complicated clinical cases of trauma, and standard trauma treatments endorsed at the national level train professionals in the use of informal as well as standardized screenings for dissociation. The

assumption is that those with higher dissociation need greater stabilization and other modifications of treatment approach to ensure successful intervention. The current study sought to investigate whether school professionals are keeping abreast of this knowledge.

Empirical Studies of Complex Trauma and Dissociation

In order to realize the importance of screening for dissociation, one must examine its intimate link with more severe, complex cases of maltreatment and trauma. This link has increasingly been the focus of empirical studies in the fields of psychopathology, traumatic stress and child maltreatment. However, before detailing these findings, it is necessary to further define the term *complex trauma*.

Defining Complex Trauma. According to Cook et al. (2005), complex trauma is a term that has been adopted by the traumatic stress field "to describe the experience of multiple, chronic and prolonged, developmentally adverse traumatic events, most often of an interpersonal nature (e.g., sexual or physical abuse, war, community violence) and early-life onset" (p. 402). In other words, complex trauma is most often the result of chronic maltreatment of children, who suffer severe and pervasive effects on their development. These types of traumas can result in problems in every dimension of development, including biology, attachment, affect regulation, consciousness, behavioral control, cognition, and overall self-concept (Cook et al., 2005). Under these broad domains, more specific effects include interpersonal difficulties and social isolation, sensorimotor problems, learning difficulties and poor language development, aggression, oppositional behavior and/or excessive compliance, difficulty with feeling and expressing emotions, pathological dissociation, difficulties with attention regulation and executive functioning, disturbances in body image and self-esteem, and somatization (Cook et al., 2005).

By defining complex trauma, or other terms such as *developmental trauma* (van der Kolk, 2005), researchers have promoted awareness of more complex traumatic presentations in children. Others have drawn attention to the significant role that dissociation plays in their response to trauma and in everyday functioning (Freyd, 1994, 2009; Lanius, 2014, 2009; Porges, 2018, 2009; Silberg, 2017, 2009; van der Hart, 2005, 2009). Consequently, one way to screen for more severely traumatized children is by better understanding the link between dissociation and complex trauma.

Role of dissociation in complex trauma. While dissociation has been characterized as one possible symptom of trauma, evidence is growing to support the assertion that dissociation is a central feature of traumatic stress (van der Hart, Nijenhuis, Steele, van der Kolk, & Courtois, 2005), or at least a subtype corresponding with more complex and treatment resistant forms of traumatic stress disorders (APA, 2013; Bailey & Brand, 2017). In fact, some studies have found evidence that peritraumatic dissociation, dissociation at the time of trauma, significantly predicts development of posttraumatic stress symptomatology in children and adolescents. For example, Schäfer, Barkmann, Riedesser, and Schulte-Markwort (2004) conducted a short-term follow-up study with 45 child and adolescent victims of road traffic accidents. The researchers were able to administer a self-report measure one week after the accidents, and 62% endorsed at least one peritraumatic dissociative symptom during the accident. Three months later, peritraumatic derealization (an experience of detachment) accounted for 33% of the variance of posttraumatic stress symptoms in the sample. Sugar and Ford (2012) conducted a study with 90 psychiatrically impaired youth, assessing not only peritraumatic dissociation, but also peritraumatic arousal and emotional distress at the time of trauma. After controlling for previous pathology, trauma history, and gender, peritraumatic dissociation emerged as the only peritraumatic variable associated with

later PTSD severity ($p < .01$). However, the authors indicated caution in this interpretation, given that emotional distress and arousal, as opposed to dissociation alone, have been found in other studies to contribute to traumatic stress reactions in children. A study with adults has qualified findings related to peritraumatic dissociation by adding a time factor to the model. Briere, Scott, and Weathers (2005) asserted that it is not necessarily peritraumatic dissociation, which may temporarily interrupt encoding of memory at the time of trauma, but rather persistent dissociation, i.e., chronic avoidance of the unresolved affect and memory of the trauma, that predicts PTSD symptoms. In two studies, one with 52 participants and the other with 386, persistent dissociation, rather than peritraumatic dissociation, was found to be a strong predictor of PTSD. Still another study found that, in a sample of college females exposed to a school shooting, peritraumatic dissociation had an indirect effect, while experiential avoidance had a more direct effect on the development of trauma symptoms (Kumpula, Orcutt, Bardeen, & Varkovitzky, 2011). Van der Hart, van Ochten, van Son, Steele, and Lensvelt-Mulders (2008), in their critical review of research related to peritraumatic dissociation and PTSD, inferred that few inferences can be drawn in this area due to the variable methods used in each study, including the measurement instruments and timing of measurement of peritraumatic dissociation, the variable analyses that may or may not control for other variables, and the conceptual definitions or statistical constructs created to operationalize terms. Nevertheless, these studies show that dissociation can be integral to the development of a traumatic reaction, although they do not show that it is necessarily a central feature of all PTSD presentations.

More relevant to the current study, research with children and adults seems to indicate that dissociative symptoms mark more complex traumatic reactions that persist without intervention. A body of research with adults, including war veterans, found that a subset of

trauma victims, marked by dissociative symptoms, were especially resistant to trauma treatment-as-usual, leading to the inclusion in the most recent diagnostic manual of a dissociative subtype of PTSD, affecting as many as one in five trauma patients (American Psychological Association, 2013; Steuwe, Lanius, & Frewen, 2012; Tsai, Armour, Southwick, & Pietrzak, 2015). In these studies, those subjects found to fit the dissociative features subtype defined in the DSM had greater cumulative exposure to trauma and endorsed significantly stronger symptoms of depression and alcohol use problems. In a large sample study, 450 adults with complex posttraumatic stress disorder (cPTSD) were assessed regarding childhood symptomatology. Two-thirds were found to have complex childhood trauma, which was related to their complex adult symptoms through dissociation. In other words, dissociation was found to be a potential mediator of the relationship between childhood complex trauma and adulthood complex trauma presentations (van Dijke, Ford, Frank, & van der Hart, 2015).

Other studies support the existence of a dissociative subtype in children and adolescents. Hagan, Gentry, Ippen, and Lieberman (2018) explored and confirmed the existence of the PTSD dissociative features subtype in young children. Choi et al. (2017), using a national data set, found evidence for the dissociative subtype among adolescents seeking treatment for trauma. Kisiel et al. (2014), using the same dataset, demonstrated that adolescents with dissociative trauma had a greater level of difficulty with treatment, showing significantly more hospitalizations, self-injury, and suicidality. These studies hint at the power of dissociation to identify those in need of more intensive intervention.

Dissociation as a marker for vulnerable children. Dissociation can be considered a red flag for those children in need of intensive intervention. Several childhood studies have shown that higher levels of dissociation are characteristic of more chronic cases of trauma. Kisiel

and Lyons (2001) examined the relationship between dissociation and psychopathology in a sample of 114 maltreated children age 10 – 18 living in residential treatment centers. They compared scores on dissociative measures, including the Child Dissociative Checklist (CDC) and Adolescent Dissociative Experiences Scale (A-DES) with scores on measures of competence and psychopathology, including the Child Behavior Checklist (CBCL), Youth Self-Report, Child Acuity of Psychiatric Illness, and Child Severity of Psychiatric Illness. They found several significant relationships between dissociative scores and internalizing problems, externalizing problems, risky behaviors including suicide risk, as well as total score on the CBCL. However, while the study showed compelling relationships between abuse history, dissociation, and psychopathology, it was merely correlational in nature and lacked a control group. Moreover, the average scores on the dissociative measures were below the published cut scores for dissociative pathology; the study did not seek to prove whether individuals with high dissociation had more severe abuse histories (Kisiel & Lyons, 2001).

One study in preschoolers showed that dissociation can be used to distinguish between maltreated and non-maltreated children. Macfie, Cicchetti, & Toth (2001) compared a sample of 198 preschoolers that included maltreated and non-maltreated children. The Child Dissociative Checklist (CDC) was rated by preschool teachers, as well as the Child Behavior Checklist (CBCL). The sexually abused, physically abused, and neglected groups all demonstrated more dissociation than the non-maltreated group at the .001 significance level ($p < .001$). Moreover, clinical levels of dissociation were found only in the maltreated group. In addition, both severity and chronicity of maltreatment were associated with dissociation. One limitation of the study was that it was cross-sectional in nature, and did not look at the development or lessening of dissociation at a later date.

Other studies have shown that early childhood maltreatment is correlated with higher levels of dissociation in later childhood. For example, Hulette, Freyd, and Fisher (2011) examined dissociation in school-aged foster children who had been maltreated in early childhood (age 3-5 years). CDC scores of 67 children in foster care were compared to a community control sample of 55 children. Chi-square analysis showed a significant difference in categorically high dissociation between groups ($p < .002$), indicating that maltreated foster children were significantly more likely to be pathologically dissociative than their non-maltreated peers.

Notably, the above studies also found links between certain types of maltreatment and abuse, e.g. sexual and physical abuse, and a greater degree of dissociative symptoms (Macfie et al., 2001; Hulette, Freyd, & Fisher, 2011), although the specific links discovered are of less interest to the current study, and will not be enumerated here.

Other studies have shown a high level of dissociative experiences in children exposed to maltreatment, regardless of whether they were diagnosed with PTSD. For example, Ensink, Berthelot, Bégin, Maheux, and Normandin (2017) explored a theoretical model in which dissociation is a core process mediating the relationship between childhood sexual abuse and behavior difficulties in young school age children. A total of 290 children aged 2 – 12 participated, including 138 children with histories of sexual abuse and 152 without abuse histories. Dissociation was found to be a key mediator of internalizing, externalizing, and sexualized problem behaviors. Despite some limitations, these studies provide evidence that screening for dissociation will help schools discover more vulnerable children in need of intervention.

Interrelationship of dissociation and maltreatment. Kluft pioneered work with children with dissociative disorders (Kluft, 1985). Notably, he found his first subjects through

adult patients with dissociative identity disorder (DID), then termed multiple personality disorder (MPD). His clinical experience led him to conclude that children of individuals with significant trauma histories and dissociative problems were more likely to have children with similar issues. Because of their parents' tendency to attract abusive partners or to subconsciously recreate victimizing situations, as well as their emotional unavailability at times due to their own dissociative response to stress, these children were more likely to encounter early adverse experiences without caregiver attunement to process and resolve the disturbance. Kluft found that parents with dissociative problems tend to have children with dissociative problems.

More rigorous empirical research has shown that these early case studies exemplified a key predictive factor in the development of dissociation. Namely, if children fail to receive adequate attention to their emotional attachment needs, dissociative divisions in their developing personalities are more likely to endure into later childhood and adulthood. Lieberman, Chu, Van Horn, and Harris (2011) give a detailed review of the literature on factors that correlate with the persistence of early childhood trauma reactions. They detailed empirical studies linking maternal dissociation and unavailability and later childhood dissociation. In addition, another study showed that dissociation is a key mediator in the intergenerational transmission of abuse. Egeland and Susman-Stillman (1996), in analyzing a longitudinal study of abuse victims, found that mothers who abused their children were significantly more likely to abuse their children if they themselves suffered dissociative symptoms. Trickett, Noll, and Putnam (2011), following a large sample of sexually abused females, also found that dissociation, more than depression or anxiety, was broadly associated with trauma, as well as the perpetuation of trauma-related problems in children. This was a groundbreaking longitudinal study that called for more longitudinal studies in other traumatized populations. Ogawa, Sroufe, Weinfield, Carlson, and

Egeland (1997), in a sample of 168 individuals, found that a poor quality of early maternal-child interactions predicted dissociative symptoms at four time periods across 19 years of life. Interestingly, they also found evidence that dissociation in childhood may be a more normative response to stress, while dissociation in adolescence and adulthood may be more indicative of pathology. Practically, these empirical findings point to the importance of training clinical and school professionals to differentiate between normative and pathological dissociation in children at various levels of schooling, as well as to identify risk factors related to caregiver functioning and social history. The extent to which practitioners are in need of such training is unclear at this point. Initial descriptive research in school settings is especially needed, and could shed light on a more pressing need: the need to identify how children with complex trauma can be connected with effective treatment interventions.

Problems With Identifying Childhood Dissociation

While the prevalence of dissociative disorders for children is currently unknown, according to international general population studies, dissociative disorders have a lifetime prevalence of 9-18%, with dissociative identity disorder (DID) being present in approximately 1-1.5% of the general population (Şar, 2011). According to the DSM-5, a conservative estimate of the 12-month prevalence of dissociative disorders among adults ranges from 1.2 - 2.0%. These numbers are comparable to the 12-month prevalence of Obsessive Compulsive Disorder (OCD), 1.2% of adults, and Bipolar Disorders (I and II), 1.4% of adults (APA, 2013). Empirical studies have shown that dissociative disorders, while just as prevalent as other disorders, are commonly underdiagnosed (Foote, Smolin, Kaplan, Legatt, & Lipschitz, 2006), and underserved (Brand et al., 2012). For example, adults with dissociative disorders can go through several years of mental health treatment before they are identified as having a dissociative disorder (Brand et al., 2012).

There are a number of challenges to identifying dissociation in children. Before enumerating these challenges, it is worth noting that these have been put forth in the literature as clinical observations or anecdotes, rather than investigated using formal studies.

Nevertheless, a number of clinical and research experts have identified obstacles to identifying pathological dissociation in school children. These experts have worked extensively with children with dissociative problems, and conducted empirical research published in peer-reviewed journals (Dell, 2009; Paulsen, 2004; Silberg 2013; Spiegel, 2006; Waters, 2012). One obstacle to identification has to do with the vagueness inherent in its definition, and the heterogeneity of dissociative phenomena (Dell, 2009). Comorbidity is another reason. As stated earlier, Stien and Kendall (2004) indicate that the symptoms of complex trauma and dissociation overlap with symptoms of other diagnoses, such as attention problems, learning disorders, substance abuse, or oppositional behaviors; therefore, the adults in their lives will try to understand their needs through the lens of these more common childhood disorders, which unfortunately fail to capture the extent of their problems. For example, Children who experience complex trauma and dissociation could be labeled as having attention-deficit/hyperactivity disorder (ADHD) or an anxiety disorder (Struik, 2014). However, these labels may not capture the underlying causes of the child's problems, which are rooted in their traumatic experiences and their coping strategies. Misdiagnosis may lead to ineffective or inappropriate interventions that do not address the child's needs and may even exacerbate their symptoms (Struik, 2014). Thus, the role of a school psychologist becomes paramount, who, by correctly identifying the child's complex trauma and dissociative issues, can institute more effective interventions. These may include creating a safe environment, developing coping skills and emotional regulation

strategies, providing trauma-focused therapy, working with caregivers to foster attachment and stability, and collaborating with other professionals to ensure coordinated care (ESTD, 2017).

Other reasons these children are overlooked have to do with the nature and function of dissociative symptoms themselves. Spiegel (2006) noted that those who dissociate "try to put on a good appearance despite chaotic internal lives, in part to try to get by, in part to ward off further anticipated abuse" (p. 567). Paulsen (2014) has asserted that the very nature of dissociation is to keep secrets. This includes keeping secrets from the self, as well as from the world outside. Practically speaking, this means that dissociation can interfere with disclosure of maltreatment to school professionals. Misunderstanding of dissociation may be common. Spiegel also observed that, from a teacher's standpoint, a child's dissociating may be easily mistaken for sleepiness, normal daydreaming, subtle attempts at defiance, or low intelligence. Dissociative symptoms are often overlooked because they are dramatic and puzzling, due to the extremes in behavior that can apparently be suppressed at times, evoking the suspicion that the person is faking (Spiegel, 2006).

Waters (2012) observed that dissociative symptoms can appear and disappear quickly in response to the surrounding context, and thus are misunderstood or overlooked because of their fluidity. In addition, because there is such a wide range in what can be considered normal development, among children of any age and in any developmental domain, shifts in behavioral states from age-expected to regressed need to be especially dramatic to be considered noteworthy (Silberg, 2013). These are some of the identification challenges posited by experts based on clinical experiences. In essence, children prone to dissociation can slip through unnoticed, or if noticed, misunderstood.

Skepticism of dissociative disorders can be another reason that these conditions can be difficult to identify in school children. Many mental health professionals and educators may not be familiar with the symptoms and causes of dissociation, or may hold negative or inaccurate beliefs about them (Loewenstein, 2018). For example, some may think that dissociative identity disorder (DID) is a rare or fabricated disorder, or that dissociation is a sign of weakness or malingering (Subu et al., 2021). These beliefs can lead to missed diagnoses, inadequate treatment, and stigma for children who experience dissociation.

Children in Need of Adult Attunement

Various theoretical fields, clinical best practice, and increasingly numerous empirical studies have been homing in on dissociative symptoms as key to understanding difficult cases of childhood trauma. Those seeking to understand dissociation in children have developed theoretical models in need of empirical investigation. These models are emerging, and at this point rely heavily on the adult literature, which does not necessarily translate to children in the process of development. Moreover, current models are based in large part on clinical experiences informed by readings of literature in various fields.

Measurement tools have shown the ability to discriminate between high vs. low dissociators who are more vs. less likely to have suffered maltreatment. Yet these tools can only be used for screening purposes. No diagnostic instrument or standardized assessment of dissociation in children exists, which limits the inferences that can be made from current empirical studies.

Nevertheless, empirical studies have shown that dissociation plays a significant role in childhood traumatic reactions. While consensus has not occurred about whether dissociation is a central feature of all trauma, significant evidence supports the assertion that dissociation marks

more complex and persistent traumatic reactions. A few large scale studies, though none that claimed to be nationally representative, have found that the dissociative subtype of PTSD applies to young populations as well as adult. Furthermore, studies have shown that, regardless of PTSD diagnosis, children with high levels of dissociation are more likely to have experienced maltreatment, and to experience a variety of internalizing and externalizing problems, including greater risk for suicide. Childhood dissociation has also been correlated to caregiver dissociation, and shown through cross sectional and longitudinal studies to be a key mediator of the intergenerational transmission of abuse.

Overall, the literature in theoretical and practical settings generally supports the idea that screening for dissociation, though challenging for a number of reasons, can be beneficial to identifying vulnerable children in need of greater support. Essentially, after experiencing overwhelming, distressing events, children need a wiser, emotionally stronger and caring adult to help them return to a state of emotional regulation. This involves meeting basic needs for physical and emotional safety, as well as a more active empathic attunement that helps the child's brain and memory system to process, resolve, and integrate the dissociated material (Lanius, Bluhm, & Frewen, 2011; Lieberman et al., 2011; Liotti, 2009; Siegel, 2001). Subsequent paring with an attuned adult in a therapeutic or educational setting could reset their developmental trajectory toward greater self-regulation in the future. While theory and research are increasingly underscoring this principle, less studied is how childhood dissociation manifests within the school setting, and if professionals are identifying the phenomenon. There have been few formal studies looking at how school personnel perceive and interact with children who chronically dissociate in response to the many stressors of school life.

The Role of School Psychologists

Given their training and multi-faceted role within the school setting, school psychologists are well-placed to identify pathological dissociation, and therefore children with complex trauma and dissociative disorders, and may facilitate the greater support and intervention they need. According to a practice model put forth by the National Association of School Psychologists (NASP), school psychologists act as data-based decision makers, collaborative problem-solvers, consultants to teachers and parents, and leaders in implementing systems-level prevention efforts as well as student-level interventions. Some of the core beliefs that inform the practice model assert that school psychologists should stay abreast of current psychological theory, research, and best practices, as well as communicate important concepts. They should also be able to implement strategies to foster success for students academically, socially, behaviorally, and emotionally (NASP, 2021).

Traditionally, many school psychologists have spent a majority of their time in assessment activities identifying children who are eligible for special education services (Hanchon & Fernald, 2013). Descriptive surveys have shown that this continues to be the case. For example, Castillo, Curtis, & Gelley (2012) conducted a 2010 study sponsored by NASP, which indicated that school psychologists spend about 47% of their time engaged in special education evaluation activities, with considerably less time spent in other roles such as individual or group counseling (9% and 3%, respectively). In fact, one in three school psychologists surveyed engaged in no individual counseling. However, respondents spent 16% of their time engaged in consultation, most often regarding individual student issues. In addition, some in the field have called for a paradigm shift toward problem-solving and an expansion of their role toward implementing social-emotional best practices (Bear & Minke, 1997; Dawson et al., 2004;

Reschly, 2004). This would imply a greater emphasis on their role as mental health experts, a role that includes competencies in recognizing pathology.

School-based mental health experts. Recent authors have asserted that schools are a prime location to deliver mental health services to youth (Little & Akin-Little, 2013; Suldo, Friedrich, & Michalowski, 2010). For example, Suldo et al. (2010), in their review of empirical studies, found that the vast majority of youth who receive mental health treatment do so through the school rather than in specialty clinic settings. In addition, mental health services in schools are increasingly provided within a tiered framework, an approach with which school psychologists are well-acquainted (NASP, 2015).

Given their expertise, school psychologists are uniquely positioned to support service delivery of mental health practices, including screening for symptoms of mental health problems. Splett, Fowler, Weist, McDaniel, and Dvorsky (2013) have drawn attention to the increase in school mental health programs and their positive impact on student outcomes. In addition, they highlighted the school psychologist's critical role in mental health delivery systems, as well as barriers (high student to school psychologist ratios) and enablers (administrative support) of this role. At the macro level, a significant enabler of school psychologists seeking to expand their mental health role consists in the Every Student Succeeds Act (ESSA), a federal law that took effect at the beginning of the 2017-2018 school year. The ESSA offers federal funds to schools, including struggling schools, to improve comprehensive supports to students set up by leadership structures at the state and local level. Schools may use federal funds to create a comprehensive mental health delivery system as a school improvement strategy, with school psychologists having a significant say in the design and implementation of such a system. Other research has focused more specifically on factors that limit school psychologists' involvement in mental

health services. The study done by Suldo et al. (2010) highlighted one particularly important factor: their training and development as counselors.

Training. Perfect and Morris (2011) asserted that there are considerable gaps in graduate training programs, which may place little emphasis on training and field experience in therapeutic interventions. Such gaps would ill-prepare school psychologists to identify and respond to any mental health disorder, much less disorders often overlooked even within the clinical world. Training guidelines indicate that school psychologists should be trained to provide services or programs that promote the mental health and well-being of students (NASP, 2021). Perfect and Morris (2011) pointed out that training programs have mixed approaches to training in mental health, where some require practical experience in clinical settings, while others include no such requirement and may attempt to expose students to mental health competencies through field experience in schools alone. Regardless, at the end of a training program, trainees can be expected to function as novices in certain domains of practice, rather than having complete mastery (Ysseldyke, Burns, & Rosenfield, 2009). Therefore, it is possible that some school psychologists have had early training exposure to the idea that routine screening for dissociation is best practice.

A related area concerns the degree to which graduate training programs prepare psychologists to assist maltreated children in particular. Sigel and Silovskey (2011) surveyed programs about the number and type of trainings targeting the needs of maltreated children and their families. Of the 201 programs that responded, 140 provided some sort of training, and 125 of these made students familiar with one empirically supported treatment. Training in the treatment rated as meeting the highest standard of evidence, trauma-focused cognitive–behavioral therapy (TF-CBT), was provided in 45% of the programs. Notably, this survey

described the practices of programs in clinical and counseling psychology as well as school psychology, and concluded that considerable improvement is needed in this area of training in general. Therefore, it is unlikely that school psychologists are already graduating with competencies associated with serving maltreated children, including the ability to recognize dissociative symptoms.

Nevertheless, formal training programs are not the only source of knowledge and experience for practicing professionals. Hanchon & Fernald (2013) found that, despite gaps in graduate training, most school psychologists perceived themselves as sufficiently competent to intervene in a range of mental health problems.

Preparedness to serve maltreated children. School psychologists are in a unique position to learn about and help children who have experienced, or are at risk for, maltreatment (Viezel & Davis, 2015). Cognitive processing deficits commonly arise in maltreated children, especially those removed from home (Viezel & Davis, 2015). Therefore, it is likely that school psychologists are more familiar with this group's needs, given their role in schools to provide standardized assessments to children struggling to learn. There are articles detailing knowledge necessary to properly assess maltreated youth, including those with resulting neurodevelopmental delays and deficits (for an example, see Davis, Moss, Nogin, & Webb, 2015). However, the existence of articles on a topic, or even freely available trainings offered online (NCTSN, 2018), does not necessarily entail their consumption by school psychologists practicing in the field.

In fact, a recent survey collected from a nationally representative group of 510 school psychologists, showed that they engage in professional development regarding topics mostly related to academic screening, academic intervention, and behavioral intervention (Armistead,

Castillo, Curtis, Chappel, & Cunningham, 2013). A previous survey showed that over 70% felt that the only areas of assessment in which they felt the need for improvement were related to personality, emotional status, and social skills (Fowler & Harrison, 2001), which are all areas affected by developmental trauma and dissociation. However, social-emotional assessment ranked low in priority for school psychologists' professional development interests (Armistead et al., 2013). On the other hand, school psychologists have expressed a perceived need to improve competence in recognizing symptoms resulting from child abuse (Arbolino, Lewandowski, & Eckert, 2008), and demonstrated a gap in their ability to correctly identify a case of sexual abuse (Lusk, Zibulsky, & Viezel, 2015). Thus, the literature seems to imply that school psychologists perceive a need for training to better conceptualize the social-emotional life of children, including maltreated children, yet feel drawn toward professional development having more to do with practical interventions for academic and behavioral issues.

Familiarity with specific mental health issues. Regarding competence with specific issues related to mental health, Mayo and Mayo (2008) found that school psychologists rated themselves as moderately informed about issues related to childhood bipolar disorder. Burrow-Sanchez, Adolphson, and Hawken (2009) found variable self-ratings regarding competence to screen and assess for substance abuse problems in youth. Regarding their ability to identify and respond to cases of ongoing child abuse, Arbolino, Lewandowski, and Eckert (2008) found that school psychologists were fairly competent in discerning when to report, yet believed they could use more training in symptom recognition. Lusk et al. (2015) also examined school psychologists' ability to report child maltreatment using a scenario format to elicit recognition and response tendencies. Notably, school psychologists displayed excellent recognition and ability to report scenarios of maltreatment, save for a scenario involving sexual abuse, where

only 44% were able to recognize and respond appropriately. These studies were mostly survey-based, and meant to be exploratory in nature, gradually painting a picture of school psychologists' perceived competence to recognize and respond to mental health problems in youth.

Present Study

Theorists, researchers, and clinicians serving children have begun to notice the centrality of dissociative pathology to understanding more severe cases of need. While theoretical views have evolved in a variety of fields of study, certain theorists have integrated these views into detailed frameworks for understanding dissociation in children. These are synthesized conceptual models that as of yet lack the empirical support of controlled studies. Clinicians have developed treatment approaches that address complex trauma and dissociation in children, and evidence has been accruing to validate these approaches. Empirical studies have explored the relationship between the construct of dissociation and its role in traumatic stress reactions, leading to a recent identification of a diagnostic subtype of trauma with dissociative features. Moreover, statistical analyses of large databases, as well as empirical studies using rating scales have indicated the presence of dissociative pathology in young children and its negative impact on life adjustment. School psychologists, as potential leaders in school-based mental health, are positioned to discover more severe cases of complex trauma and adversity by routinely screening for dissociative symptoms. However, to date, no studies have looked at the ability of school psychologists to identify dissociative symptoms in the children they serve. The present study sought to provide initial insight into school psychologists' familiarity with the phenomena of dissociation, as well as the extent to which they include the phenomena in the mental health side of their assessment and intervention practices. Furthermore, the study sought to examine the

need for increased education and training to support the identification of dissociative symptoms manifested by certain children in need. The following research questions were explored.

Research question one. To what extent are school psychologists familiar with pathological dissociation in children?

Research question two. To what extent do school psychologists screen for dissociative symptoms in the children they serve?

Research question three. Are there differences in the characteristics of school psychologists related to their familiarity with childhood dissociation?

Research question four. Are school psychologists familiar with appropriate treatment approaches for complex trauma and dissociation?

Research question five. Do school psychologists hold certain positive or skeptical beliefs regarding dissociation in school children?

Research question six. To what extent are school psychologists being exposed to the topic of dissociation in their formal and informal training experiences?

Chapter Three: Method

The study design was nonexperimental and descriptive in nature, using survey methodology to better understand the research questions.

Procedure. A web-based methodology was used as the method of sampling, given the efficiency and cost savings involved. A survey was created using Alfred University's access to eSurveysPro, a professional online survey software. The survey was approved for use by the Alfred University Human Subjects Research Committee. A pilot study was conducted with five currently practicing school psychologists to help determine the appropriateness of survey length,

survey questions, and face validity of the survey in general. The results of the pilot study were used to improve the survey, including wording of certain questions and technical settings for data collection. The National Association of School Psychologists (NASP) was then contacted for permission to survey members, and permission was granted according to standard guidelines and procedures. The NASP research director sent emails with the survey link to a randomly selected group of currently practicing members, along with two follow-up reminders. Member participation in the survey was completely anonymous with no personal identifiers used. IP Addresses were used to verify no repeat submissions, but no IP addresses were collected or saved. An incentive to participate was offered in the form of a donation made to the Children's Fund of School Psychology, Inc, for the first 100 surveys completed.

Sample and Participant Selection. The sample included school psychologists currently practicing within a public or private school setting, from across the United States, in a way that maximized the sample size and national representativeness of the sample. According to the NASP website, the maximum number of people who could be sampled for research requests was 1000 members. Because no studies have looked at awareness of dissociation in school children at any level, school psychologists working with all levels from pre-school to 12th grade were surveyed. Demographic characteristics of geographic location, gender, and race/ethnicity were collected to compare the sample to the most recent data from the 2020 NASP membership survey (Goforth et al., 2021).

Variables. Due to the nature of the study, variables measured were primarily descriptive and related to demographic characteristics of participants, as well as broad constructs related to familiarity with dissociation, beliefs regarding dissociation, and level of training related to dissociation. Demographic characteristics were self-reported and included gender, race,

ethnicity, socioeconomic level of practice setting, geographic region of practice, grade level served, educational degree, credential type, years of experience, and weekly hours spent in mental health practice. These variables were coded as categorical variables. Familiarity with dissociation was gauged by first giving the DSM-5 definition of dissociation, then asking participants to self-report their level of knowledge, awareness, confidence in assessing, and level of consideration during assessment and consultation practices. Level of agreement or skepticism regarding dissociation was investigated to obtain descriptive data on the extent to which school psychologists hold certain positive vs. skeptical beliefs regarding the phenomenon of dissociation in children, which could impact their level of familiarity. Level of training was included to identify whether there are potential gaps in training related to dissociation, which could also impact familiarity.

Assessment Measure. An assessment measure based on the research questions was developed by examining the literature and generating survey items designed to target each research question. A copy of the assessment measure can be found in Appendix A. The assessment measure consisted of four sections. The first section acquired demographic characteristics. The second section inquired about concepts and practices related to dissociation. One question in this section included a list of terms related to dissociation, including terms taken from the DSM-5 as well as terms from the research literature. Similarly, a question regarding treatments included evidence-based approaches used to address complex trauma and dissociation in school age children. Other approaches with emerging research support were identified using the NCTSN website. The third section measured beliefs and/or skepticism regarding dissociation, and the fourth inquired about training related to dissociation. Parts of the assessment measure were modeled after existing surveys that were successfully used in

published research studies regarding school psychologists' familiarity with certain populations or issues in practice (Arbolino, Lewandowski, and Eckert, 2008; Robertson, Pfeiffer, and Taylor, 2011). Similar to the measures used in those studies, this assessment measure was designed with a four-point Likert scale for most questions related to familiarity and training. In the third section on beliefs, however, a five-point scale was used to allow for a neutral rating.

Data Analysis. Using the assessment measure, data were collected to generate descriptive statistics, in the form of frequency counts and percentages, to answer the research questions. Questions from section one were used to collect data for the demographic variables. Frequency counts and percentages were calculated, then compared to the most recent NASP member survey to gauge representativeness of the sample. For some questions, other statistics calculated included the average and range. Questions from section two were used to explore the research questions related to general familiarity and the extent of routine screening. The questions in this section consisted of a four-point Likert scale. Frequency counts and percentages were calculated for each of the four items. For some questions where a four-point Likert scale were used, the first two items were combined and the last two items were combined to group participants in terms of two categories of greater or lesser familiarity. These groups were then used in Chi-Square analyses to explore research question three regarding differences in demographic groups related to familiarity. For example, participants were grouped according to highest degree held (doctoral vs. other) and compared to determine any statistically unexpected differences in their responses to survey questions. In addition, five questions related to familiarity were combined into a composite variable to compare means between different groups of respondents, using a one-way Analysis of Variance (ANOVA). The internal reliability of these five items were measured by calculating Cronbach's Alpha.

For research question four related to beliefs, the five-point Likert scale data were collected as frequency counts for each of the five levels of agreement or skepticism. For each question, the two points on the extremes were combined to show percentages of respondents that deviated from the neutral response. For example, the combined percentage of respondents who agreed or strongly agreed that children should be screened for significant trauma was determined.

For research question six regarding training, questions from the corresponding survey section were used to collect descriptive statistics, including frequency counts and percentages, as well as average number of years in supervision or consultation. Participants were then grouped according to their level and/or type of training exposure to determine any notable differences in their responses to questions about familiarity with terms, treatments, and practices.

Chapter Four: Results

This study examined the self-perceived familiarity of school psychologists with dissociation in the children they serve. In reporting results, demographic variables are reported first, followed by the main survey results related to the research questions. Tables of survey results are included in Appendix C. Some inferential statistics are included in sections where there were significant differences in responses between different groups of participants. Participants were grouped according to degree type held, credential held, SES level served, age level served, and years of experience. In addition, participants were grouped according to their responses to the questions on training, including those who reported being exposed to the topic of dissociation in supervision, consultation, and by attending workshops.

Survey Section I: Demographics

The number of respondents completing the entire survey totaled 41 (N = 41). Participants were asked to identify demographic characteristics to help determine the representativeness of the sample. Where possible, results were compared to the most recent NASP membership survey. Demographic results can be found in Table 1 in Appendix C.

State. Participants sampled were from 23 different states from various regions of the country. Ohio and Massachusetts were the most represented with four participants, followed by Texas, New York, and Maryland with three. There were two participants each from Washington, California, Illinois, New Jersey, and North Carolina. The remaining states, including Alaska, contributed one participant each.

Gender, race, and ethnicity. Participants reported as 85% female, 15% male, 0% other. According to the 2020 NASP member survey, gender was reported as 87% female, 12% male, 0.5% other. Regarding race, 38 participants were white, 1 American Indian or Alaskan Native, 1 Black or African American, and 1 Native Hawaiian or Other Pacific Islander. The sample was 93% white, compared to 86% white reported in the 2020 NASP member survey. Regarding ethnicity, 36 (88%) were Not of AMENA or Hispanic/Latinx origin, two were of Hispanic or Latinx origin, two preferred to self-describe, and one preferred not to answer. The NASP member survey reported 80% being Not of AMENA or Hispanic/Latinx origin.

Education level and credentials. Regarding highest graduate degree held, 10% reported practicing at the Master's level, 61% at the Specialist level, and 29% at the Doctoral level. According to the 2020 NASP member survey, 10% reported having a Master's degree, 73% Specialist, and 17% Doctorate. Thus, there is a comparatively higher percentage of doctoral-level practitioners in the sample. Two participants reported having a temporary school psychologist

credential. Other credentials included permanent school psychologist credentials (34), mental health clinician (7), licensed psychologist (9), and other (4).

School environment served. To gauge level of socioeconomic status served, participants were asked to report on the percentage of students on free or reduced lunch. Some neglected to report this percentage. Of the 38 out of 41 who responded, reports ranged from 0 to 100% of students being on free or reduced lunch. On average, 61% of students were on free or reduced lunch. The percentage of the sample that worked at each grade level were as follows: 10%, preschool; 44%, elementary; 28%, middle/junior; 18%, high school.

Time spent in mental health related practice. The average amount of time spent in mental health related activities was reported to be 15.8 hours per week, with a range of 0 to 35 hrs. Assuming a 40 hour work week, this would represent an average of 39% of time spent in counseling, much higher than data reported by Castillo, Curtis, and Gelley (2012), who found that school psychologists were spending an average of 12% of their time in counseling.

Survey Section II: Concepts and Practices

Following are results from the section of the survey dealing with concepts and practices related to dissociation. Results are listed in Table 2 in Appendix C.

Familiarity with dissociation-related terms. Participants self-reported their level of familiarity with dissociation and related terms from the literature, which included official diagnoses in the DSM-5. While respondents chose from four categories, ranging from being not at all familiar (having never come across the term), to vaguely familiar (having heard of it, but not being able to define or describe it to others), to moderately familiar (can give basic definition or overview), to very familiar (can speak at length about the term). Notably, 98% of respondents (n = 40) indicated being moderately to very familiar with the term *posttraumatic stress disorder*

(PTSD), and 95% (n = 39) were familiar with the term *adverse childhood experiences*. 78% (n = 32) and 73% (n = 30) of respondents indicated being moderately to very familiar with the terms *complex trauma* and *dissociation,* respectively. 66% of respondents (n = 27) indicated at least being moderately familiar with the terms *developmental trauma* and *toxic stress*. A significant percentage of participants were familiar with the dissociative diagnoses found in the DSM-5, including *dissociative identity disorder (*63%, n = 26), d*epersonalization* (51%, n = 21), and d*issociative amnesia* (49%, n = 20). 54% (n = 22) reported being familiar with the term *disorganized attachment*. Participants were less familiar with specific theories used to account for the phenomena of dissociation, with 17% (n = 17) being familiar with *polyvagal theory,* and only 7% (n = 3) being familiar with the term *betrayal trauma theory*.

Chi-square analyses revealed that there were significant differences across groups regarding familiarity with the above terms. For example, there were significant differences between doctoral-level and non-doctoral level school psychologists for the following terms, with doctoral-level school psychologists reporting greater familiarity: depersonalization, $X^2 = 11.1$, $p = .001$; dissociative amnesia, $X^2 = 8.1$, $p = .004$; and disorganized attachment, $X^2 = 6.0$, $p = .014$. In addition, those who had a mental health credential (state license as a mental health counselor or licensed psychologist) were more likely to report familiarity with the term dissociative amnesia ($X^2 = 4.4$, $p = .037$).

Familiarity with childhood dissociation. A number of items were designed to answer research question one about familiarity with dissociation in students. Familiarity was gauged by having participants self-report their level of knowledge, awareness, ability to identify, confidence in assessing, and level of comfort educating about dissociation in children. When asked about childhood dissociation, 54% of participants (n = 22) reported having little to no knowledge of

dissociation in children. In addition, 61% (n = 25) reported having little to no awareness of dissociation in the children they serve. Accordingly, 51% (n = 21) indicated that, during an observation, they could not recognize a child with a high level of dissociation. 85% (n = 35) reported having little to no confidence if asked to assess for dissociation in a student. 88% (n = 36) reported feeling uncomfortable educating teachers or parents about childhood dissociation.

Extent of routine consideration. To answer research question two, participants were asked whether they routinely consider dissociation in general, as well as whether they would consider it when assessing disorders with overlapping symptoms. 66% (n = 27) reported that they never or rarely consider dissociation when conceptualizing a child's problems. 27% of respondents (n = 11) reported that they do not routinely consider dissociation when assessing specific disorders with overlapping symptoms. From the reports of the remaining 30 respondents, dissociation was most considered when assessing for major mental disorders, including psychotic disorders (n = 20), bipolar disorder (n = 17), and major depression (n = 16). Autism Spectrum disorder (n = 16) was next, followed by ADHD (n = 13), oppositional defiance (n = 10), eating disorders (n = 9), obsessive compulsive disorder (n = 8), and seizure disorder (n = 6). Finally, A related question asked if participants could identify at least one screening instrument for dissociation in children. Only 24% (n = 10) of respondents could do so. They were asked to name the screening instrument. Answers included the Behavior Assessment System for Children, 3rd edition (BASC-3), Dissociative Experiences Scale (DES), Feiffer Assessment of Childhood Trauma (FACT), Child Dissociative Checklist (CDC), Millon Adolescent Clinical Inventory (MACI), Scales for Assessing Emotional Disturbance (SAED-3), and the Emotional Disturbance Decision Tree (EDDT).

Chi-square analyses were used to explore differences among groups of participants regarding their level of screening for dissociation. Those who discussed dissociation in their supervision and/or consultation experiences were more likely to consider dissociation in a routine manner ($X^2 = 7.87$, $p = .005$). Regarding specific diagnoses, one analysis found a significant difference between school psychologists who primarily work with younger children (preschool and elementary) vs those who work with older children (middle school and high school), with those working with older students more likely to assess for dissociation when assessing for bipolar disorder ($X^2 = 8.91$, $p = .003$).

Differences in groups regarding familiarity. To address research question three, inferential statistics were used to determine differences in level of familiarity between groups of participants. A composite variable of the five questions related to familiarity with dissociation in students was computed and assigned to be the dependent variable. A Cronbach's Alpha of 0.89 was determined for these five items, indicating an acceptable level of internal reliability. A one-way analysis of variance (ANOVA) determined a significant effect of degree held, with those holding a doctoral degree reporting a higher level of familiarity ($F(1, 41) = 11.04$, $p = .002$)). In addition, those serving a comparatively higher level of SES, based on percentage of students on free or reduced lunch, reported greater familiarity with childhood dissociation ($F(1, 38) = 4.81$, $p = .035$)). Other groupings related to experience, credential, and time spent in counseling showed no significant differences.

Familiarity with treatment approaches. 78% reported familiarity with treatment approaches for a high level of dissociation. Of the specific treatment approaches listed, participants were most familiar with TF-CBT, with 71% indicating that they had at least basic knowledge of the approach, who might benefit from it, could give an overview, and/or

recommend the approach. Other treatment approaches recognized by respondents included CBITS (61%), EMDR (51%), and PCIT (49%). For the remaining treatments, 75 – 100% of respondents had little to no familiarity, meaning they had minimal knowledge or had never come across the treatment approaches. 42% of school psychologists sampled (n = 17) could identify a referral source to someone looking for treatment. A chi-square analysis showed that those who had a mental health credential (state license as a mental health counselor or licensed psychologist) were more likely to report knowing a specific referral source for children with dissociative problems ($X^2 = 8.91$, $p = .003$).

Survey Section III: Agreement or Skepticism Related to Dissociation Screening

A number of questions were posed about participants' agreement or skepticism related to screening children for more significant trauma and dissociation. Results are listed in Table 3 in Appendix C. 93% of participants (n = 38) agreed on the importance of checking for significant trauma history in children with academic problems. In addition, 78% of participants (n = 32) agreed on the importance of distinguishing whether a child was experiencing complex vs. simple trauma. Only 32% (n = 13) agreed on the importance of routinely considering dissociation as a factor in a child's problems, with 61% (n = 25) being neutral. Only 24% (n = 10) believed it too rare to consider routinely among other mental health problems. While only 2% (n = 1) were skeptical of childhood dissociation, and only 7% (n = 3) skeptical of dissociation in general, 29% (n = 11) were skeptical of Dissociative Identity Disorder as being a valid diagnosis for children. In addition, 26% (n = 10) would be skeptical if a parent or teacher labeled a child's issues as *dissociative*.

An internal reliability test for these eight items yielded a Cronbach's Alpha of 0.55, a low level of internal reliability indicating that different questions were measuring different beliefs.

When taking out items about perceived prevalence or validity of diagnostic labels, a higher Cronbach's Alpha of 0.67 was obtained, reflecting beliefs about checking for significant trauma and/or dissociation.

Survey Section IV: Training

Participants' exposure to the topic of dissociation in their formal and informal training experiences was measured. Results from the section on training can be found in Table 4 in Appendix C. Results indicated that 88% of participants (n = 36) recalled the topic of dissociation receiving little to no attention during graduate training, meaning it may have surfaced once or twice during a reading or discussion, but was never explored. 71% (n = 29) reported little to no training (formal or informal) outside of graduate school. 76% of participants (n = 31) did not recall dissociation being discussed during formal supervision, despite receiving an average of 4.6 years, median of 2 years, of supervision. On average, respondents had participated in an average of 11.3 years of regular consultation, with a median of 9 years of consultation reported. Despite the longer period of time spent in consultation, 63% of respondents (n = 26) did not recall dissociation being discussed during these consultation experiences. Another way that school psychologists could become familiar with dissociation is through professional development workshops or trainings. The sample indicated that on average they had attended 7.8 workshops specifically focused on trauma, with an average of 2.5 of these workshops spending at least 15 minutes discussing the topic of dissociation. Almost half of the respondents (n = 20) reported that none of the trauma workshops they attended had addressed the topic of dissociation. When looking at all three sources of potential exposure to the topic of dissociation, 37% (n = 15) had no exposure to the topic in supervision, consultation, or professional development workshops.

Finally, 76% of respondents were moderately to strongly interested in learning more about dissociation in children.

The question of which types of training exposure resulted in greater familiarity with dissociation was explored. A one-way ANOVA was conducted to compare those who reported some exposure to the topic in any manner, whether through workshops, supervision, or consultation, to those who had not received exposure to the topic at all. Those with some training exposure had a significantly higher average rating on the composite variable of familiarity ($F (1,41) = 13.46$, $p = .001$). Chi-square analyses were conducted to compare differences in individual survey responses between groups based on type of training exposure. Those who reported being exposed to the topic in trauma workshops alone did not significantly differ in their responses to any survey questions. However, those who received exposure to the topic during supervision and/or consultation experiences reported greater familiarity with the terms dissociative identity disorder ($X^2 = 5.59$, $p = .018$), disorganized attachment ($X^2 = 3.93$, $p = .047$), and dissociative amnesia ($X^2 = 4.63$, $p = .031$) In addition, they were more familiar with the TF-CBT treatment approach ($X^2 = 6.62$, $p = .015$) and PCIT treatment approach ($X^2 = 13.10$, $p = .001$), able to refer to a specific provider ($X^2 = 10.15$, $p = .001$), and reported that they often consider dissociation when assessing the reason for a student's problems ($X^2 = 7.87$, $p = .005$). In addition, those who had at least some exposure to the topic through any training channel were more likely to routinely consider dissociation during the differential assessment of three or more overlapping diagnoses ($X^2 = 4.63$, $p = .031$).

Chapter Five: Discussion

This research study was predicated on the idea that routinely screening for dissociation could help identify children in need of intervention. The survey data yielded results that warrant further discussion.

Key Results

The sample was small (n = 41) yet characterized by demographic data comparable to the 2020 NASP membership survey. Notably, the sample had a higher level of practitioners with doctoral degrees, and also reported a higher percentage of time spent in direct counseling when compared to a recent survey by Castillo, Curtis, and Gelley (2012). Despite rating themselves as being generally familiar with terms related to significant trauma (PTSD, ACEs, complex trauma, developmental trauma, toxic stress, and dissociation), a simple majority (greater than 50%) of the school psychologists sampled self-reported that they were unfamiliar with dissociation in their students in terms of knowledge, awareness, and ability to identify during observation. A greater percentage (greater than 80%) were not confident in assessing nor comfortable educating teachers and parents about dissociation in children. These results point to a potential gap in familiarity with conceptual terms and practical know-how related to helping children with trauma-related dissociation.

A working assumption of this study is that, ideally, dissociative disorders would be routinely considered along with other mental health disorders. According to the sample data, school psychologists rarely consider dissociation in their routine assessment of problems. Fewer than half of the school psychologists sampled would even consider dissociative problems as accounting for symptoms overlapping with other mental disorders. When considered, they are more likely to be differentiated from major mental disorders including psychotic disorders,

bipolar and major depression, followed by Autism and ADHD. This is unfortunate because many children and adolescents with dissociative disorders could also qualify as having oppositional defiance, eating disorders, and obsessive-compulsive disorders. Or, if a child is assessed as having ADHD to account for fluctuating attention, the ADHD label may not account for the true cause of the attention problems, which could be the result of dissociative coping (Putnam, 1997; Stein and Kendall, 2004).

If a child was identified as having a high level of dissociation, many of the school psychologists sampled reported that they could identify at least one treatment approach that might address their needs. However, less than half knew of a specific outside referral for such a case, indicating a potential area for improved service. Regarding the specific treatment approaches that they recognized, namely TF-CBT and CBITS, some research practitioners have questioned whether they need to be further explored with these populations due to avoidance and resistance behaviors inherent in complex trauma (Silberg, 2013; Waters, 2016; Wieland, 2015). However, the founders of TF-CBT respond that it is unfair to discount the effectiveness of evidence based treatments (EBT's) with complex trauma, pointing out that the randomized controlled trials with these approaches included many children with complex trauma (Cohen, Mannarino, Kliethermes, and Murray, 2012). Further, there have been recent studies that have verified the efficacy of TF-CBT with a sample of children having complex trauma symptoms (Ross et al., 2021).

Regarding beliefs, the sample agreed that it is important to check for significant trauma, and to determine whether that trauma is complex in nature. However, the sample was neutral on whether it is important to do so by screening for dissociation. The hesitance in dissociation screening was not due to general skepticism about dissociation in children, nor doubt about its

prevalence. There was some skepticism about the validity of the DSM-5 diagnosis *Dissociative Identity Disorder* for children. This may or may not hinder identification of more severe cases of trauma in children and adolescents, depending on the reasons for the skepticism. For instance, the skepticism could reflect a hesitance to label and stigmatize a child as having identity disturbance, where the child's identity is still developing. However, it could indicate a blind spot in awareness of those children whose level and type of dissociation is more severe.

Regarding training, many of the school psychologists sampled had little to no exposure to the topic of dissociation in their training experiences. In addition, some had no exposure to the topic in ongoing professional development activities, including workshops purporting to focus on trauma. Despite openness and interest on the part of school psychologists to learn about childhood dissociation, the topic seems to be overlooked in the field in terms of its importance for conceptualizing and intervening in the lives of traumatized students. For those who did report exposure to the topic, those exposed to the topic through supervision and consultation experiences self-reported greater familiarity with specific terms and more routine practices that could benefit their students. According to the sample data, familiarity with dissociation is passed on through informal contact and discussions with other school psychologists rather than formal teaching and training experiences in workshops.

Limitations

Despite a broad sample comparable to recent NASP membership data, the sample size was low ($n = 41$). The response rate was at the low range of what was expected according to the NASP research guidelines, which quoted a 4% to 11% response rate as typical for the procedure used (NASP, n.d.). The low sample size limited the use of inferential statistics to examine the third research question, which explored the characteristics of school psychologists related to their

level of familiarity with dissociation. In general, the low sample size limits the confidence of extrapolating the results to the broader population of school psychologists. Other limitations include the self-report nature of the survey and the lack of validity and reliability data for the survey measure.

A potential limitation affecting the representativeness of the sample is a self-selection bias (Elliot and Valliant, 2017), where those who took the survey were more likely to take part due to having a stronger interest in or awareness of the topic of dissociation. The sample included a relatively higher number of doctoral level practitioners, as well as a greater number of hours spent in counseling. Both variables could skew the results towards showing a higher level of familiarity with the topic than exists in the broader population of school psychologists. Doctoral level practitioners could have had greater exposure to the topic due to expanded training, or they could simply have a higher level of perceived competence. Those who spend more time in direct counseling could have a greater awareness and/or interest in the topic because of firsthand experiences and the resulting search for competencies to better help children with emotion regulation problems. A self-selection bias toward greater familiarity could affect responses on the survey section about beliefs related to dissociation, with skepticism about dissociation and its prevalence being underrepresented. With self-selection bias, it is also possible that those who chose to take the survey were unfamiliar with the topic, yet were curious or fascinated by the topic and therefore drawn to participate. This would lead to an underrepresentation of familiarity across topics. Overall, self-selection bias is perhaps the greatest limit on representativeness of the sample.

Another limitation related to representativeness is the fact that the sample was drawn from NASP membership, which, although is the largest professional association representing

school psychologists in the United States, may not be representative of the broader population of practicing school psychologists. For example, membership in NASP could reflect alignment with an approach to school psychology practice that is more or less clinical or reflect a higher level of professional dedication and activism. If NASP membership reflected a higher level of conscientiousness in regard to understanding and serving more traumatized children, the sample would overestimate the level of familiarity with complex trauma and dissociation.

Another potential limitation or critique of the study is that it focused on a term more widely used in the clinical world rather than that of the school environment. It is therefore possible that, despite the low familiarity with the specific term of dissociation, school psychologists are in fact able to recognize children with complex trauma and dissociative problems, doing so through a different conceptual lens. For example, school psychologists might conceptualize dissociative problems through the broader lens of trauma, recognizing that a child's response to trauma falls on a continuum, with more severe trauma marked by amnesia for everyday experiences. Or they could use the notion that trauma affects children differently, and that an alternative response to trauma includes flat affect, detachment, and difficulty bonding with others. Given their reported familiarity with the term ACEs, they could view certain children as being students with a high level of ACEs. Thus, school psychologists could recognize the more severe symptoms and follow up without having a familiarity with the term dissociation.

Implications

Results from the current study point to a potential gap in the practical knowledge of school psychologists looking to intervene in the lives of traumatized students. Splett et al. (2013) demonstrated that school psychologists are positioned to be leaders in providing school-based mental health services to children in need of intervention. The current study extends research

into the self-perceived competence of school psychologists regarding specific mental health issues such as bipolar and substance abuse (Burrow-Sanchez, Adolphson, and Hawken, 2009; Mayo and Mayo, 2008). It complements findings from Arbolino, Lewandowski, and Eckert (2008) that school psychologists felt the need for more training in recognizing symptoms of child abuse. It is important to note that the identified gap is not unique to school psychologists but extends research showing that dissociative disorders are commonly under-recognized and undertreated (Brand et al., 2012).

The study sample was small but useful in identifying a gap in a specific area of competency. The sample was subject to self-selection bias, where school psychologists already familiar with the topic were more likely to choose to participate; however, this could be seen as strengthening the impact of the results, meaning that a more random sample would likely report even less conceptual and practical familiarity with dissociation in the students they serve. This assertion is made with caution, however, since it is also possible that there was a self-selection bias toward greater interest and less familiarity with the topic. However, if the results of the current sample were verified with a larger sample size, the results could indicate an area of knowledge and practice in need of improvement for school psychologists, and likely for other adults tasked with educating, counseling, and caring for students.

One finding showed that school psychologists were somewhat familiar with trauma treatment approaches TF-CBT and CBITS; however, these were not specifically designed for use with more dissociative cases of trauma, and may need to be modified or lengthened to be effective with this population (Cohen, Mannarino, Kliethermes, and Murray, 2012). One implication for the field is a need to educate school professionals on additional interventions and intervention frameworks for helping children with complex trauma.

Another gap shows an area of opportunity for the field of psychology, namely the gap between the reported beliefs in the importance of screening for trauma and complex trauma, versus the practice of screening using dissociation. According to this initial finding, it is likely a lack of training exposure and not doubts about prevalence and skepticism that keep school psychologists from using the practice, implying an interest and openness to learning more practical competencies in this area.

The study gives evidence of gaps in training experiences related to the topic of dissociation. A vast majority reported little to no exposure in graduate training. Those who have influence over curriculum and coursework could take note to include more exposure to the topic as it relates to children and adolescents in schools, and greater encouragement to screen for dissociation intentionally and routinely. For instance, if graduate students are introduced to the famous study on adverse childhood experiences (Felitti et al., 1998), a discussion of child maltreatment, developmental trauma, and dissociation could ensue. Similarly, when introduced to PTSD in their abnormal psychology course, care can be taken to discuss the dissociative subtype that is often overlooked yet can be identified with some simple screening questions. In a recent review, psychology textbooks not only failed to provide empirical research regarding dissociative disorders but provided inaccurate or sensationalized information about diagnosis and treatment of dissociative disorders (Wilgus, Packer, Lile-King, Miller-Perrin, & Brand, 2016).

The current study sheds some light on where school psychologists do find training in recognizing dissociation. Unfortunately, it is not in professional development workshops about trauma. Almost all the school psychologists surveyed had attended multiple workshops on trauma. Instead, the specific competency of recognizing dissociation seems to be acquired through supervision and consultation with other professionals, presumably when searching for

answers regarding unexplained, complex behaviors in a difficult case. These school psychologists were fortunate to find someone with practical experience related to complex trauma to help them learn what they did not learn in formal training experiences. As reported earlier, they were more likely to be familiar with related constructs such as disorganized attachment, dissociative amnesia, and dissociative identity disorder. They were also more likely to routinely screen for and/or consider dissociation during assessment of overlapping disorders. The implication here is that dissociation is a topic that is overlooked or given insufficient coverage in formal training programs. According to the study results, there is a small chance that school psychologists will have the good fortune of encountering the topic when seeking guidance from other professionals. However, when they do, there is a resulting change in their assessment practices. Therefore, training programs interested in becoming more trauma-informed should seek out local professionals experienced in spotting signs of trauma to advise ways to transfer skills to the next generation.

Another implication is that the ongoing professional development and trauma workshops that school psychologists are attending are likely giving insufficient coverage to the topic. Ideally, a workshop on childhood trauma would cover the importance of identifying whether a child presenting with trauma has a high level of dissociation, since these children require more stabilization and emotion regulation skills before being able to tolerate a standard intervention. Apparently, this competency, one of the first taught in standard trauma treatment protocols (Blaustein and Kinniburgh, 2005; Cohen et al., 2012; Perry, 2009; Shapiro, 1997), is not being covered adequately. School psychologists, who require training in a wide range of topics to intervene in many different types of problems, cannot be expected to become fully competent in the specialized treatment of childhood trauma. However, given the prevalence of adverse

experiences in today's world, including child maltreatment, it would be in children's best interest for frontline practitioners to learn simple practices to routinely screen for more complex trauma, such as asking the child if they feel detached from themselves or if they remember what they did in the morning.

Finally, an implication of the study unrelated to the topic has to do with the research techniques used by those in the field. The low response rate could be due to lack of interest or incentive. However, it could also indicate that lower response rates are to be expected for similar online surveys moving forward. This may indicate a need for problem-solving at a professional, communal level as to how to generate survey data that is representative, non-biased, and of sufficient sample size.

Future Research

The current study measured self-perceived familiarity with terms and estimation of abilities and practices. Future research could more directly measure knowledge and competencies rather than relying on self-report. As mentioned earlier, a potential limitation of the study is that the term dissociation is not widely used in the world of education, and school psychologists could use different conceptual constructs and screening instruments to identify more traumatized children. Therefore, a case study format could be used, or a questionnaire involving recognition of trauma signs and symptoms, including signs of more hidden, complex trauma.

There is an opportunity for school psychologists to shed light on how children with dissociative problems interact within the school setting. Since many slip through unnoticed or misunderstood, the development of descriptive profiles through case study research could be helpful to aid recognition. Profiles should capture presentations from younger to older children,

different levels of academic ability including gifted students, and different ethnic and cultural backgrounds. More broadly, the literature shows that current ways of understanding dissociative pathology are based on adult presentations, and therefore more research needs to be done to distinguish normative vs. problematic dissociation in children. The research by Silberg (1998) into how to identify dissociation during psychological testing provides a starting place to build up communal knowledge on how to register signs of dissociation when administering cognitive or academic achievement tests.

The development of interventions is another area of possible leadership. Given that the study sample reported limited knowledge of specific treatment approaches and outside referral sources, research into the specific channels used to identify and intervene in the lives of traumatized students is warranted. School psychologists excel at assessing the needs of individual students and advocating for the necessary supports. Children with complex trauma and dissociation may resist or simply not benefit from typical approaches to counseling and may require advocacy to be referred to a specialist, or to be supported in a more therapeutic school environment accessed through special education channels. Guidance needs to be given to teachers with practical ways to help children manage stress and build the resilience needed to stay engaged in the classroom. The field of education and special education could use the dual expertise of school psychologists to help find ways to maximize the development of these students in all domains. More research needs to be done to develop best practices in support of students with complex trauma.

In the world of graduate training, descriptive research can be conducted to determine the extent to which training programs value and promote trauma-informed approaches to school psychology practice. For practicing school psychologists, there is both a need and an interest in

understanding difficult cases of childhood trauma. However, current professional development workshops on childhood trauma seem to be either lacking information or pedagogical efficacy in transmitting the important competency of screening for dissociation in children and adolescents. Program development and evaluation can be done to determine effective ways to transmit knowledge and competencies appropriate for school psychologists practicing within mainstream school settings.

Recommendations for Practicing School Psychologists. Based on the findings of the current study, the following practical recommendations are suggested for school psychologists who work with children who may be exposed to a high level of adverse experiences.

1. Learn to screen for dissociative symptoms during observations, interviews, counseling, and psychological testing situations. Screening competencies can be learned by using screening instruments such as the Child Dissociative Checklist or the Adolescent Dissociative Experiences Scale. For school psychologists in particular, screening also includes observing and documenting behaviors typically displayed during psychological testing, such as trance states, fluctuations in activity or skill level, emotional reactivity, and references to inner dividedness (Silberg, 1998).
2. If dissociation is suspected, conduct a detailed developmental history, including trauma history, and a comprehensive medical, neurological, and mental status examination of the child to consider factors unrelated to adverse experiences (Sharma & Gupta, 2019).
3. When a dissociative disorder is confirmed, study professional guidelines for this population to guide interventions and psychoeducation of families and teachers. Guidelines include the ESTD Guidelines for the Assessment and Treatment of Children and Adolescents with Dissociative Symptoms and Disorders (ESTD, 2017), as well as the

Guidelines for the Treatment of Complex PTSD in Adults (APA & ISSTD, 2021).

4. Seek out consultation experiences, including practical skills groups, as well as continuing education and supervision from experts in the field of dissociation and trauma. Consider joining professional organizations and networks that offer resources and support (APA & ISSTD, 2021; NASP, 2020).

Following these recommendations will help practicing school psychologists enhance familiarity and competence with dissociation in the children they serve, fostering their well-being and academic success.

Recommendations for Trainers of School Psychologists. Based on the findings, the following recommendations are suggested for leaders in school psychology training programs to enhance the knowledge and skills of their students and graduates:

1. Incorporate curriculum that covers the theory, research, and practice of trauma and dissociation, including the prevalence, etiology, assessment, diagnosis, and treatment of dissociative disorders in children and adolescents (ISSTD, 2021).
2. Provide clinical training that exposes students to diverse populations and settings where they can encounter and work with children who have dissociative symptoms, under the guidance and feedback of experienced supervisors (Brand, 2016).
3. Foster professional development that encourages students to pursue continuing education and supervision in the field of trauma and dissociation, and to join professional organizations and networks that offer resources and support (APA & ISSTD, 2021; ISSTD, 2021).

By implementing these recommendations, school psychology training programs can better prepare graduates to identify, assess, and intervene with children who have dissociative

symptoms, thus promoting their well-being and academic success.

Concluding Summary

The growing awareness of the enduring impact of trauma on development (Felitti et al., 1998) and the legal mandate to provide a free and appropriate education to all children, regardless of personal history, have pushed many schools to become trauma-informed or trauma-sensitive (Overstreet & Chafouleas, 2016). Being trauma-informed means taking a comprehensive, systems-oriented approach to trauma prevention and intervention, and engaging students with trauma histories in a manner that recognizes the impact of trauma on their learning and development (Garro, Brandwein, Calafiore, & Rittenhouse, 2011). While many school children exposed to single incident traumas are surprisingly resilient (American Psychological Association, 2008), children with more complex traumatic reactions are vulnerable to pervasive effects that persist into adulthood (Cicchetti & Toth, 2015; Stien & Kendall, 2004; van der Kolk, 2003). One way to screen for children with severe trauma is by screening for dissociation (Paulsen, 2014). Overall, the literature in theoretical and practical settings supports the idea that screening for dissociation, though challenging for several reasons, can be beneficial to identifying vulnerable children in need of social and emotional support.

School psychologists, as leaders in delivering school-based mental health services, are positioned to discover more severe cases of complex trauma and adversity by routinely screening for dissociative symptoms. The current study sought to provide initial insight into school psychologists' familiarity with dissociation in the students they serve. The study used a survey instrument to inquire about familiarity, screening practices, beliefs, and training. The study was limited by sample size (N = 41) but was drawn nationally and was consistent with recent NASP membership data. The response data indicated a low level of self-perceived familiarity with

dissociation in students that it is not routinely screened for along with other disorders. Those who were familiar with dissociation were more likely to consider it routinely. Most could identify a specific treatment approach that could be helpful while less than half knew of a specific referral source. The sample agreed on the importance of considering whether a child's problems stem from trauma but held neutral beliefs about dissociation. Most of the sample did not receive any meaningful exposure to the topic in graduate training, nor were they informed in multiple trauma workshops during professional development. Those who received exposure to the topic did so through direct contact with other professionals in supervision and/or consultation experiences, resulting in a greater familiarity with dissociation-related terms, treatments, and screening practices. Perhaps the biggest implication for the field has to do with enhancing training, both inside and outside of graduate school, to include an introduction to the reality and usefulness of recognizing dissociation, due to its link to childhood maltreatment and complex trauma presentations that lead to so many negative life outcomes. Notably, most of the study sample reported having little to no confidence educating others about dissociation in children. This reflects the emerging development of knowledge regarding childhood dissociation in the field of psychology in general, and reveals an opportunity for school psychologists to use their unique position to bring connection and advocacy to children who are disconnected and overlooked. Overall, more research needs to be done to determine how students with complex trauma and dissociative disorders can be identified and helped; otherwise, the cycle of trauma will be continued and passed on to subsequent generations.

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APPENDIX A: ASSESSMENT MEASURE

Preliminary Questions

Are you currently employed in a school as a school psychologist? Yes No

If your answer was No to the above question, thank you for your time, but you are not eligible to participate. Please close out of the survey.

Section I: Demographic Information

1. Please specify the state in which you primarily work:

____

2. Your gender: male female other

3. Are you Hispanic, Latino, or Spanish in origin?

Yes. No

What is your race? Please mark all that apply.

White

Black or African American

American Indian or Alaska Native

Asian

Native Hawaiian or Other Pacific Islander

Other

4. What grade level do you primarily serve?

__ preschool

__ primary school (K – 2nd grade)

__ elementary (3rd – 5th grade)

__ middle school (6th – 8th)

__ high school (9th – 12th)

5. Please indicate the nature of the community of your primary employment setting. (check one)

__ Urban

__ Suburban

__ Rural

6. What percentage of your school building's population is receiving free or reduced lunch? ___ (0 – 100%)

7. Please indicate your highest level of graduate education in school psychology. (check one)

__ Master's Degree (30 to 59 semester hours)

__ Post Master's, Specialist Degree (60+ semester hours)

__ Doctoral Degree

__ Other (please specify) ________________________

8. Please indicate how many years you have been a practicing school psychologist: ________

9. Please indicate all credentials that apply. (check all that apply)

__ State Certified School Psychologist

__ Nationally Certified School Psychologist

__ Licensed Psychologist

__ Other (please specify):

10. About how many hours per week do you spend engaging in counseling with students? _____

Section II: Concepts and Practices

11. How familiar are you with the following terms?

Not at all familiar - Have never come across or heard this term.

Vaguely familiar - Have heard of it, but cannot define it or describe what it is referring to.

Moderately familiar - Know enough about the term to give a basic definition, and/or briefly describe it to others.

Very familiar - Could give a detailed definition, description of the term. Could speak about it at length to others.

	Not at all	Vaguely	Moderately	Very
Adverse Childhood Experiences (ACEs)	______	______	______	______
Posttraumatic stress disorder (PTSD)	______	______	______	______
Complex trauma	______	______	______	______
Developmental trauma	______	______	______	______
Developmental trauma disorder (DTD)	______	______	______	______
Polyvictimization	______	______	______	______
Dissociation	______	______	______	______
Depersonalization	______	______	______	______
Dissociative amnesia	______	______	______	______
Dissociative identity disorder (DID)	______	______	______	______
Betrayal trauma theory	______	______	______	______
Type I vs. Type II trauma	______	______	______	______
Disorganized attachment	______	______	______	______
Polyvagal theory	______	______	______	______
Toxic Stress	______	______	______	______

12. *Dissociation* is described by the American Psychiatric Association's latest diagnostic manual, the DSM-5, as a "disruption of and/or discontinuity in the normal integration of consciousness, memory, identity, emotion, perception, body representation, motor control, and behavior" (p. 291).

Overall, how much do you know about dissociation in children and/or adolescents?

__Nothing at all

__A little

__A moderate amount

__A great deal

13. How would you rate your awareness of dissociation in the students you serve?

__Not at all aware

__A little aware

__Moderately aware

__Very aware

14. How confident would you be if a parent or teacher asked you to assess a child for dissociative problems?

__Not at all confident

__A little confident

__Moderately confident

__Very confident

15. When considering the reason for a student's problems, how often do you consider the possibility of dissociation?

__Never

__Rarely

__Sometimes

__Often

16. I routinely consider dissociative disorders during the differential diagnosis and/or informal assessment of the following (check all that apply).

__ADHD

__Oppositional Defiance

__Eating Disorders

__Schizophrenia and other psychotic disorders

__Seizure Disorder

__Bipolar Disorder

__Major Depression

__Obsessive Compulsive Disorder

__Autism Spectrum Disorder

__None

17. When observing a child during assessment practices, I can identify behaviors and/or symptoms that may indicate a high level of dissociation.

__Strongly Disagree __Disagree __Agree __Strongly Agree

18. Can you identify one assessment tool that screens for dissociative symptoms in the students you serve?

__No __Yes

If Yes, please specify: ________________________

19. If someone asked you for an outside referral to address dissociative-based mental health problems, do you know a clinic/professional able to treat such issues in children?

__No __Yes

20. How comfortable are you educating parents and teachers about appropriately responding to dissociation in children?

__Not comfortable at all

__Somewhat comfortable

__Moderately comfortable

__Very comfortable

21. For a child with a high level of trauma-related dissociation, how familiar are you with appropriate treatment approaches?

__Not at all familiar

__Somewhat familiar

__Moderately familiar

__Very familiar

22. How familiar are you with the following treatment approaches?

Not at all familiar - Have never come across or heard of this treatment.

Vaguely familiar - Have heard of it, but could share minimal information about it.

Moderately familiar – Have basic knowledge about this treatment approach and who might benefit from it. Could give an overview to others, or know enough to recommend it.

Very familiar – Have detailed knowledge and/or training/experience with this approach.

	Not at all	Vaguely	Moderately	Very
Attachment, self-regulation, and competence (ARC)	______	______	______	______
Trauma-focused cognitive behavior therapy (TF-CBT)	______	______	______	______
Parent-child interaction therapy (PCIT)	______	______	______	______
Eye movement desensitization and reprocessing (EMDR)	______	______	______	______
Child Parent Psychotherapy (CPP)	______	______	______	______
Integrative Treatment of Complex Trauma (ITCT)	______	______	______	______
Cognitive Behavioral Intervention for Trauma in Schools	______	______	______	______
Neurosequential model of therapeutics (NMT)	______	______	______	______
Real Life Heroes (RLH)	______	______	______	______
Safety, Mentoring, Advocacy, Recovery, and Treatment	______	______	______	______
Trauma Systems Therapy (TST)	______	______	______	______

Section III: Level of Agreement or Skepticism Regarding Dissociation in Children

23. Please rate your level of agreement with the following statements.

	Very Much Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Very Much Agree
It is important to investigate whether a child with academic problems has a significant history of trauma.	______	______	______	______	______
It is important to actively investigate whether a child's trauma symptoms are complex vs. simple in nature.	______	______	______	______	______
School psychologists should routinely consider dissociation as a possible explanation for a child's problems in school.	______	______	______	______	______
Dissociation in children is too rare to consider on a routine basis.	______	______	______	______	______
Dissociation in children should not be considered because it is a questionable phenomenon for children.	______	______	______	______	______
In general, dissociation is a questionable phenomenon.	______	______	______	______	______
Dissociative identity disorder is a valid diagnosis for children.	______	______	______	______	______
If a teacher or parent labeled a child's symptoms as dissociative, I'd be skeptical.	______	______	______	______	______

Section IV: Training/Professional Development

24. During graduate school, how much training did you receive regarding dissociation in children?

__None at all (It was never brought up as a topic)

__A little (It surfaced once or twice in a reading, lecture, or discussion, but was not explored much)

__A moderate amount (It surfaced a few times across lectures, readings, discussions, and was given some importance as a topic/phenomenon to be familiar with)

__A great deal (It surfaced several times across lectures, readings, discussions, and was given great importance as a topic/phenomenon to be familiar with)

25. What year did you complete your training program? ________

26. Outside of graduate school, how much training have you received regarding dissociation in children?

__None at all

__A little (Have heard of the topic, but have not received any specific instruction)

__A moderate amount (Have experienced some formal or informal instruction on how to recognize and deal with dissociative symptoms in children)

__A great deal (Have experienced a great deal of formal or informal training in how to assess or treat children with dissociative problems)

27. Indicate the number of years you have received regular supervision and/or formal mentoring by a more experienced school psychologist or other mental health professional. ___

26b. (If >0) Was the topic of dissociation in children ever discussed? _Y _N

28. Indicate the number of years you have engaged in regular consultation (either formal or informal) with other mental health professional(s). ____

27b. (If >0) Was the topic of dissociation in children ever discussed? _Y _N

29. How many professional development workshops or trainings have you attended that specifically focused on trauma?____

28b. If you have attended at least one workshop related to trauma, how many of these workshops spent at least 15 minutes discussing the topic of dissociation? _____

30. How much interest would you have in learning more about dissociation in school age children?

__No interest

__A little interest

__Moderate interest

__A great deal of interest

APPENDIX B: INVITATION TO PARTICIPATE

Subject: School Psychologist's Familiarity with Dissociation in the Children They Serve

Dear fellow school psychologist,

You are asked to participate in a research study regarding childhood dissociation in the school setting. This survey will be used for Doctoral dissertation purposes at Alfred University by Marcel Lanahan, M.A.

Procedure. You will be asked to answer a number of demographic questions and rate questions related to your familiarity with dissociation in the children you serve. This survey will take approximately 10 - 15 minutes.

Risks. There are minimal risks associated with this study concerning asking respondents for their self-perceived knowledge and beliefs regarding dissociation in children. While unlikely, it is possible that a respondent may feel discomfort due to an association with the subject matter.

Benefits. There are no direct benefits to you; however, for the first 100 participants to complete the survey, a $1 donation will be made to the Children's Fund of School Psychology, Inc.

Voluntary nature of the study. Your participation is completely voluntary. You may withdraw at any time with no penalty by closing out of the survey website; however, no money will be donated for incomplete surveys and the data will not be counted.

Confidentiality. The results of the survey will be kept completely confidential. The data will be kept anonymous by having no personal identifiers used. The results will be analyzed and reported in a doctoral dissertation and/or published research study.

Contacts and questions. This survey [has been approved] by the Human Subjects Research Committee (HSRC) at Alfred University. Specific questions related to the integrity of the research may be addressed to Dr. Danielle Gagne, chair of the HSRC, at HSRC@alfred.edu or by calling 607-871-2213.

Thank you in advance for your participation. Should you have any questions, or if you would like the results, please contact Marcel Lanahan at ml15@alfred.edu. You may also contact the dissertation chair for this study, Andrea Burch, Psy.D. at burcha@alfred.edu.

Consent. Consent will be assumed if you follow the link below and complete the survey questions. In order to complete the survey, please click on the link. (Insert link here.)

Sincerely,

Marcel Lanahan
Doctoral Student

Andrea Burch, Psy.D.,
Dissertation Chair

APPENDIX C: TABLES OF SURVEY RESULTS

Table 1
Demographics

Question 1 - State of Practice (N=41)	Count per State	Total
Ohio, Massachusetts	4	8
Texas, New York, Maryland	3	9
Pennsylvania, Illinois, New Jersey, California, North Carolina, Washington	2	12
Florida, West Virginia, Connecticut, Wisconsin, Alaska, Oklahoma, Michigan, Indiana, New Mexico, Kansas, Missouri, Virginia	1	12

Question 2 – Gender (N =41)	n	Percentage (%)
Female	36	85
Male	5	15
All other responses	0	0

Question 3 – Race (N=41)	n	Percentage (%)
American Indian or Alaskan Native	1	2.4
Asian	0	0
Black or African American	1	2.4
Native Hawaiian or Other Pacific Islander	1	2.4
White	38	93
All other responses	0	0

Question 4 – Ethnicity (N=41)	n	Percentage (%)
Arab, Middle Eastern, or North African (AMENA)	0	0
Hispanic or Latinx origin	2	5
Not of AMENA or Hispanic/Latinx origin	36	88
Prefer to self-describe	2	5
Prefer not to answer	1	2.4

Question 5 – Grade level served (N=41)	Percentage Of Time (%)
Preschool	10
Elementary	44
Middle/Junior High	28
High School	18

Question 6 – Socioeconomic level served (N = 37)	Avg. Percentage	Range
Students on Free or Reduced Lunch	61	0 to 100

Question 7 – Highest degree held (N=41)	n	Percentage (%)
Master's	4	10
Specialist	25	61
Doctorate	12	29

Question 8 – Experience (N=41)	Average	Median	Range
Years of Experience	12.8	10	1 to 41

Question 9 – Credentials held (N=41)	Count
Temporary School Psychologist	2
Permanent School Psychologist	34
Mental Health Clinician	7
Licensed Psychologist	9
Other (NCSP, Licensed School Psychologist)	4

Question 10 – Mental Health Counseling (N = 39)	15.8 Avg. Hrs/week	Range 0 to 35

Table 2
Knowledge and Practices

Question 11
Familiarity with Dissociation-related Terms (N=41)

Term	Not at all	Vaguely	Moderately	Very
Posttraumatic Stress Disorder (PTSD)	0	1	12	28
Adverse Childhood Experiences (ACEs)	0	2	7	32
Complex Trauma	2	7	22	10
Dissociation	1	10	20	10
Developmental Trauma	2	12	16	11
Toxic Stress	3	11	18	9
Dissociative Identity Disorder	4	11	18	8
Disorganized Attachment	6	13	19	3
Depersonalization	3	17	11	10
Dissociative Amnesia	3	18	15	5
Type I vs. Type II Trauma	17	14	9	1
Developmental Trauma Disorder (DTD)	10	22	5	4
Polyvictimization	14	20	7	0
Polyvagal Theory	21	13	7	0
Betrayal Trauma Theory	29	9	3	0

Familiarity with Childhood Dissociation (Cronbach's α = 0.89)	None	Low	Moderate	High
Question 12 – Knowledge of Dissociation in Children	2	20	17	2
Question 13 – Awareness of Dissociation in Students	10	15	14	2
Question 14 – Confidence in Assessing	20	15	5	1
Question 17 – Can Identify when Observing	0	20	14	7
Question 20 – Comfort Educating Parents/Teachers	22	14	4	1

Routine Consideration	Never	Rarely	Sometimes	Often
Question 15				
How often do you consider when assessing?	8	19	14	0
Question 16				
Consider dissociation during assessment of:	Count			
None	11			
Schizophrenia and other psychotic disorders	20			
Bipolar Disorder	17			
Major Depression	16			
Autism Spectrum Disorder	16			
ADHD	13			
Oppositional Defiance	10			
Eating Disorders	9			
Obsessive Compulsive Disorder	8			
Seizure Disorder	6			

Table 2 (Cont'd)
Knowledge and Practices

Familiarity with Treatment Approaches (Cronbach's α = 0.84)	Not at all	Vaguely	Moderately	Very
Question 21				
How familiar with treatment approaches – in general	8	19	14	0
Question 22 – How familiar with specific treatments:	Not at all	Vaguely	Moderately	Very
Trauma-focused cognitive behavior therapy (TF-CBT	4	8	15	14
Cognitive Behavioral Intervention for Trauma in Schools (CBITS)	3	13	17	8
Eye movement desensitization and reprocessing (EMDR)	3	17	16	5
Parent-child interaction therapy (PCIT)	9	12	12	8
Child Parent Psychotherapy (CPP)	15	16	8	2
Attachment, self-regulation, and competence (ARC)	16	18	6	1
Integrative Treatment of Complex Trauma (ITCT)	22	15	3	1
Neurosequential model of therapeutics (NMT)	34	4	2	1
Trauma Systems Therapy (TST)	25	13	3	0
Safety, Mentoring, Advocacy, Recovery, and Treatment (SMART)	31	10	0	0
Real Life Heroes (RLH)	35	6	0	0

Table 3
Beliefs about Trauma and Dissociation

Question 23 Belief/Skepticism re: Trauma & Dissociation (N=41)	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a. Important to check for significant trauma	0	0	3	7	31
b. Important to distinguish complex vs. simple	0	1	8	17	15
c. Should consider dissociation routinely	0	3	25	12	1
d. Dissociation too rare to consider routinely	3	18	10	10	0
e. Dissociation in children is questionable	11	16	13	1	0
f. Dissociation questionable in general	12	19	7	3	0
g. D.I.D. is a valid diagnosis for children	6	6	18	9	2
h. Skeptical if parent/teacher uses label	2	7	21	8	3

(Cronbach's α = 0.57 for all; Cronbach's α = 0.67 for a, b, c, e, f)

Table 4
Training Exposure

Training regarding Dissociation (N=41)	None	Low	Moderate	High
Question 24 – Training Exposure in Grad School	16	20	3	2
Question 25 – Years since graduating Average = 12, SD = 9; n=40				
Question 26 – Training Exposure outside Grad School	17	12	11	1

	No	Yes
Question 27 – Years Supervision Average = 4.6; Median = 2		
Question 28 – Ever discussed in Supervision	31	10
Question 29 – Years Consultation Average = 11.3; Median = 9		
Question 30 – Ever discussed in Consultation	26	15
Questions 31, 32 – Trauma Workshops Mentioning Dissociation (total attended = 324)	224	100

Training Interest	None	Low	Moderate	High
Question 33 – Interest in learning more about dissociation	1	9	11	20