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Putting children and families first to ensure high academic achievement for all

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TRAUMA INFORMED CARE

AT A GLANCE

It has been estimated that at least 25 percent of children living within the United States have experienced some form of traumatic event including physical, sexual or emotional abuse, maltreatment, or other distressing events (Crosby, 2015; Donish, 2015). Additionally, youths of color, especially those in economically disadvantaged communities, tend to have higher incidents of community violence that have proven to be persistent, with long-lasting effects (Crosby, 2015). The Buffalo Public School District is not exempt from such traumatic experiences. Over a third (34.7%) of BPS high school students witnessing someone get shot, stabbed or beaten in their neighborhood on the 2015 YRBS Survey. Given the common occurrence of traumatic experiences among students, the BPS District has been actively implementing strategies to combat the effects. This research capsule summarizes recently published research on the prevalence rates of childhood trauma, short and long-term student impacts, and effective trauma-informed, school-based approaches.

What is Trauma?

The Substance Abuse and Mental Health Services Administration (SAMHSA) defines trauma as, "the experiences that cause intense physical and psychological stress reactions" (SAMHSA, 2017). Traumatic episodes can be a single event or an ongoing experience including a set of circumstances viewed as physically or emotionally threatening by the individual (Crosby, 2015). The effects of such events or circumstances have long-term effects on an individual's well-being including physical, social, and emotional and spiritual realms (Crosby, 2015).

Prevalence Rates of Childhood Trauma

Childhood trauma affects a large portion of the United States population. Recent studies project that childhood trauma affects approximately two-thirds of Americans (Center for Disease Control and Prevention, 2016). It has also been estimated that at least 25 percent of children living within the United States have experienced some form of traumatic event including physical, sexual or emotional abuse, maltreatment, or other distressing events (Crosby, 2015; Donish, 2015).

Additional studies indicate that over six million American children and adolescents experience some form of abuse or neglect each year, with four to seven children or adolescents dying each day from some form of abuse or neglect (Binder, 2016). Some youth populations, such as youths of color, of lower socioeconomic status, and those in the foster care or juvenile justice systems, are at even greater risk for abuse (Ford, Chapman, Connor, & Cruise, 2012). Youths of color, especially those in economically disadvantaged communities, tend to have higher incidents of community violence that have proven to be persistent, with long-lasting effects (Crosby, 2015). Adolescents in disadvantaged communities have high rates of exposure to stress and trauma, which can negatively impact emotion regulation and executive functioning, increasing the likelihood of school problems (Mendelson, 2015).

One of the most fundamental studies regarding prevalence rates of trauma and childhood was the Adverse Childhood Experiences (ACE) study conducted in the late 1990s. Researchers collected data at the Kaiser Permanente's San Diego Health Appraisal Clinic between 1995 and 1997. The purpose was to study the relationships between childhood abuse and adult health risk behaviors and disease (Felliti, 1998). It was one of the largest investigations of childhood abuse and neglect and later-life health and well-being, encompassing over 17,000 individuals. Researchers focused on seven categories of adverse childhood events that included: psychological, physical, or sexual abuse; violence against mother; and living with a household member who were substance abusers, mentally ill or suicidal, or ever imprisoned (Felliti, 1998.) Results indicated that more than half of the respondents experienced at least one event and one-quarter reported two or more categories of adverse childhood experiences. Researchers concluded that a relationship existed between the number of childhood adverse experiences and each of the adult health risk behaviors and diseases studied. The adverse experiences proved to serve as risk factors for several of the leading causes of death in adults (Felliti, 1998). Several current trauma-focused studies have roots back to this foundational study.

More recently, prevalence rates were studied by Bethell et al. (2014). The 2011-12 National Survey of Children's Health dataset was used to assess the frequency of adverse childhood experiences and to help determine whether a relationship existed between childhood-experienced trauma and health over the lifespan. Similar to the ACE study results, researchers found that almost half of all respondents reported at least one adverse event and 22% indicated experiencing two or more events. In addition, study results found lower rates of school engagement and higher rates of chronic disease among children with adverse childhood experiences (Bethell, 2014).

Youth Impacts

Physiological Effects

Stress and trauma have proven to physiologically impact human development (Plumb, 2016; Keun, 2014; Terassi, 2017; Jaffee, 2014). Ongoing research examines how brains develop from both the nature and nurture perspectives. As the brain develops, frequently used neurological pathways are supported and reinforced while unused circuits are eliminated. Positive pathways tend to include higher-level functions,

including memory, emotional and behavioral regulation, and language (Keuhn, 2014). However, the brain and other parts of the body also retain repeated adverse experiences, such as physical or sexual abuse, neglect, or malnutrition that occur during childhood (Keuhn, 2014). These experiences may stunt healthy development of the brain and increase the likelihood that a child will fall behind or not meet appropriate developmental milestones; including behavior and learning performance (Plumb, 2016; Keuhn, 2014).

Research has proven that trauma is a stress reaction that affects brain development of children and tends to overwhelm an individual's capacity to cope with further experiences of stress (Plumb, 2016; Terassi, 2017). Stress that is unpredictable, severe, and prolonged can cause children to develop an acute vulnerability to the body's stress response (Plumb, 2016). Further research has identified that early life stress can produce stress hormones that may interfere with an individual's ability to respond effectively to a threat, along with, their learning, memory and cognitive control (Jaffee, 2014). Poverty, unsafe housing, and inconsistent caregiving is correlated with higher stress levels, even in infants (Blair, 2011). Over time, the accumulation of stress can become toxic.

Toxic stress refers to the bodies' prolonged exposure to excessively high levels of stress hormones that become harmful, particularly during child and adolescent development (Shonkoff et al. 2012), contributing to health and mental health disparities (Diez Roux and Mair 2010). These disparities appear early, as 20.5 % of children from families living in or near poverty exhibit behavioral or emotional difficulties, compared to 6.4 % of children from financially stable homes (Howell 2004; Blitz, 2016). Recently published results have also indicated that when stress hormones repeatedly flood the brain, they have a negative effect on a range of executive functions, weakening children's concentration, language processing, sequencing of information, decision making, and memory (Terassi, 2017).

Over time, such chronic stress may produce neurobiological changes in the brain, which researchers have linked to poor physical health and to poor cognitive performance (Lacoe, 2013). For school-aged children, the long-term effects of stress are particularly disruptive, impeding their physical, social, emotional, and academic development (Lacoe, 2013). Students may have difficulty trusting their environment, the people in it, and often have difficulty forming relationships, interpreting verbal and nonverbal cues, and understanding other people's perspectives. When children perceive their environment as a dangerous place, they can become hypervigilant and identifies everyone and everything as a potential threat to their safety (Terassi, 2017). This fear-driven existence is not conducive to learning (Lacoe, 2013). Children experiencing high levels of toxic stress are unable to achieve their full academic potential.

Developmental Impacts

Although many youth demonstrate resilience after traumatic experiences, other youth have experienced developmental disruptions into adolescence and adulthood (Donish, 2015). Adverse life events, especially early in life, have consistently been shown to strongly increase the risk for psychiatric disorders, including mood and anxiety disorders (Binder, 2016). Severe forms of early adverse life events such as childhood abuse or neglect have been associated with the highest rates of increased risk for psychiatric disorders (Binder, 2016). However, other forms of early adverse experiences, such as parental loss, bullying, or low socioeconomic status in childhood, were also shown to increase risk for a number of psychiatric disorders (Binder, 2016). Research has also indicated that early childhood trauma has had a demonstrated effect on youth self-regulation of behavior and attachment (Cook et al., 2005), as well as brain development (Anda, 2006; Black, 2012; West, 2014).

The effects of childhood trauma are not always visible and may manifest in several ways (Plumb, 2016). Trauma affects a person's quality of life across virtually all domains (Plumb 2016). Experiences of psychological trauma can impede cognitive, social, and emotional development in childhood, which can

impair youth academic achievement, behavior, interpersonal skills, and general success in school (Ganzel and Morris 2011; Crosby, 2015). Youth who encounter maltreatment generally exhibit diminished social skills, increases in internalizing and externalizing behaviors, as well as less school engagement (Shonk & Cicchetti, 2001; Crosby, 2015).

Literature has linked experiences of trauma to specific academic deficits throughout childhood. Achieving school success is generally contingent on the ability to effectively meet a combination of demands. Attention, memory, organization, comprehension, executive functioning, and self-regulation of behavior are but some of the abilities needed for successful classroom learning (Massachusetts Advocates for Children, 2005; Plumb, 2015; Mendelson, 2015; Crosby, 2015). Youth who have experienced trauma, typically have difficulty regulating these functions. Impacts from adverse childhood experiences are seen in several ways with children including difficulty with focusing, learning, self-regulation, communicating, memorization, decision making and forming positive relationships with youth and adults (West, 2014). Research also indicates that students have attachment difficulties, issues trusting others or regulating emotions such as aggression, and managing stress including behavioral issues at school (Plumb, 2016). Dysfunction in these areas undoubtedly affects youth behavior in the classroom and may increase the likelihood that a child will fall behind developmentally and require special education (Keuhn, 2014). Furthermore, exposure to violence has been linked to lower GPA's and higher school absence (Hurt, Malmud, Brodsky, & Giannetta, 2001), lower high school graduation (Mendelson, 2015; Plumb, 2016), lower IQ's (West, 2014), and long-term employment issues (Crosby, 2015).

Negative outcomes for students of color and those who are economically disadvantaged are common patterns in schools nationwide (Blitz, 2016). Systemic racial disparities, including disproportional poverty, are part of the problem. Regardless of their race, however, children who live with poverty often have heightened exposure to adverse experiences (Blitz, 2016). Researchers have found that implementing a culturally responsive trauma-informed approach to understand and respond to students can address the impact of disparities, teach resiliency skills, and promote the wellbeing and achievement of all students (Blitz, 2016). The National Task Force on Children Exposed to Violence termed the cost of children's trauma exposure “staggering” and recommended delivery of evidence-based prevention and early intervention services for trauma-exposed youth through systems that serve them (Listenbee et al., 2012; Mendelson, 2015).

How Can Schools Help?

Schools play a major role in improving educational outcomes for traumatized students; serving as the most common institutional entry point to mental health services (Crosby, 2015). However, since more than half of the students enrolled in public schools have faced traumatic or adverse experiences, school staff in addition to the mental health professionals, should understand how trauma affects students’ social, emotional, and academic growth (Terassi, 2017). A growing body of research highlights the importance of early intervention with disadvantaged children, in order to reduce the negative impact of stress and trauma on cognitive, emotional, and behavioral capacities that are critical for future social and occupational success (Mendleson, 2015; Terassi, 2017). It has shown that students who are given the appropriate environmental conditions and interventions, may reduce the severity of trauma symptoms (Davidson & McEwen, 2012; Teresi, 2017). Schools can serve the dual role of linking traumatized students to the appropriate resources, as well as providing a trauma-sensitive learning environment to assist students in focusing on their academic success (Wong et al., 2007). This includes creating and maintaining safe and supportive learning environments where student have the opportunity to manage emotional responses and redirect toward more positive behaviors (West, 2014).

Helping traumatized students to be successful requires schools to think outside of traditional methods and ensure that all staff are knowledgeable about trauma and effective ways to address it. Trauma-informed education requires buy-in from administrators, disciplinary policies that are sensitive to students, staff professional development, and strong relationships between school staff and mental health professionals (Crosby, 2015). Creating trauma-sensitive school environments can improve student performance and behavior, school climate, student seat time and retention, and teacher satisfaction (Oehlberg, 2008). It can also reduce student and staff stress, student suspensions and expulsions, and the need for special education services (Crosby, 2015).

Behaviors displayed by students such as anger and aggression, are often assumed to be acts of defiance, impacting how teachers and staff view and subsequently interact with students (West, 2014). Additionally, teachers who are unaware of the dynamics of complex trauma can easily mistake its manifestations as willful disobedience, defiance, or inattention, leading them to respond to it as though it were mere "misbehavior" (West, 2014). When students struggle to focus on tasks or complete assignments, teachers might interpret it as laziness or lack of motivation (Terassi, 2017).

Penner and Wallin (2012) found a consensus between students and teachers regarding ways to improve student behavior. Both agreed that improvements in student behavior and school attachment were heavily influenced by positive relationships between students and teachers, development of caring class environments, and feelings of safety (Penner, 2012). These results are similar to Wong's (2007) findings, in that students generally wanted to feel valued and respected by peers and teaching personnel, while also being safe from the distracting, and at times violent, behavior of their classmates. By implementing trauma-informed practices in classrooms, teachers can offer the much needed support to students, assisting them in participating in their education (West, 2014; Terassi, 2017), rather than lowering expectations for these young people.

School personnel are often aware of the adversity faced by their students, but may not feel adequately equipped to respond to students' mental health needs (Anderson, 2012). They may not have the professional preparation or in-service professional development training necessary for helping them better understand and manage trauma (Anderson et al. 2015; Blitz, 2016). Teachers should receive training on youth trauma as a part of their general professional development in order to maintain a classroom culture for understanding students rather than countering student externalizing behaviors (West, 2014).

Evidence-Based Practices

Current federal policy for the treatment of behavioral issues in the classroom is influenced by the Every Student Succeeds Act (2015) and the 2004 resurrected Individuals with Disabilities Education Improvement Act (Plumb, 2016). These acts require teachers to be highly qualified and use evidence-based practices in order to increase academic achievement and mainstreaming students with disabilities (Plumb, 2016). According to the Federal Substance Abuse and Mental Health Services Administration, trauma informed approaches must address the following principles in order to be deemed evidence-based strategies: (1) Safety, (2) Trustworthy and Transparency, (3) Peer Support; (4) Collaboration and Mutuality; (5), Empowerment, (6) Voice and Choice, and (7) Cultural, Historical and Gender Issues. Trauma-focused interventions that experience successful results with students.

One of the most commonly used evidence-based, trauma-informed practices is Positive Behavioral Interventions and Supports (PBIS). PBIS is framework consisting of a school-wide system of support that provides a multi-tiered framework for comprehensive management of behavior. PBIS aims to address several metrics including data-based decision-making on behavior, reactive discipline measures and overall

attendance. PBIS is used to improve school climate and increase positive student outcomes (Bosworth & Judkins, 2014; Bradshaw, 2013; Pugh & Chitiyo, 2012; Wang, et al., 2013). PBIS has also demonstrated success in increasing in-classroom instruction time for teachers (Lassen, Steele, & Sailor, 2006; Luiselli, Putnam, Handler, & Feinberg, 2005).

Another example of an evidence-based strategy often used is Check-In, Check-Out (CICO). This is one of the most widely implemented Tier 2 behavior interventions in a school-wide system of Positive Behavior Interventions and Supports (PBIS). Much literature has documented implementation of CICO across individual schools or districts. CICO is designed to provide students engaging in minor problem behaviors (e.g., off-task behavior in class, talking back to teachers, etc.) with a structured way to learn appropriate behaviors through positive reinforcement (Hawkin, 2015). During check-in, the CICO coordinator ensures students have materials for the day (e.g., pencils and completed homework) and supplies them with a Daily Progress Report (DPR) listing behavioral expectations and associated earned points. Hawkin's (2015) study of Illinois schools using CICO found that on average students earned 86% DPR points during the 2011-2012 academic year. Furthermore, 84% of the students earned more than 80% of their DPR points.

On a Local Note

Over a third (34.7%) of BPS high school students reported having seen someone get shot, stabbed or beaten in their neighborhood (2015 Youth Risk Behavior Survey). Given that prior research indicates that students with higher adverse childhood experiences (ACEs) exhibit more behaviors correlated with lower performance (e.g. higher drug use and lower levels of self-belief), while students with lower ACEs report higher grades and higher school attachment, the District has been actively implementing strategies to combat the effects of such experiences.

The BPS Office of School Climate identifies, promotes, and supports social and emotional development by designing systems and experiences that lead to healthy relationships and a safe, respectful environment that is conducive to learning for all constituents and creates a culture of partnerships with families, community members and school staff to foster social-emotional growth and well-being. The School Climate team, consisting of five coaches, a community education trainer, and administrator provide assistance to schools throughout the District using a Multi-Tiered System of Supports for Behavior (MTSS-B). They have specifically been implementing Positive Behavior Interventions and Supports (PBIS) in schools since the 2005-2006 school year. Work has included development of systems (e.g., processes, routines, working structures, administrative supports) that are needed to ensure consideration of valued outcomes, research validated practices, and data-based decision-making and the delivery of multiple staff trainings including trauma-based practices, restorative practices, and class management.

Buffalo Schools has been recognized nationally for being among the largest districts in the country to have wide scale implementation of PBIS. The District's leadership team presented about the district's efforts at the 2011 PBIS National Leadership Forum. Individual schools have also been recognized for their work in professional journal articles and by Randy Sprick Ph.D., Director and Lead Trainer for Safe and Civil Schools, at the 2011 International Conference on Positive Behavior Support. Most recently, evaluation results from the 2016-2017 school year indicated that schools who implemented PBIS with fidelity experienced a decrease in suspensions. For example, schools that received coaching assistance through the School Climate Transformation Grant this school year, witnessed an overall decrease of suspensions by approximately 45% compared to 2015-2016 results.

If you are interested in obtaining more information regarding MTSS-B or would like to request coaching from the Office of School Climate, contact Nicole Bycina at 816-3007 NCbycina@buffaloschools.org.

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