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The Early Promise of TBRI Implementation in Schools

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The program known as Trust Based Relational Intervention® (TBRI®) began as an exploration into the detrimental behaviors of foster and adopted children placed in homes with unsuspecting caregivers who assumed their living environment would result in positive results rather than fear based emotions and behaviors. The researchers at the Karyn Purvis Institute of Child Development (KPICD) at Texas Christian University held summer camps for adopted children and through that work developed an intervention to meet the needs of children who had experienced trauma. KPICD identifies these young people as "children from hard places" (Purvis & Cross, 2005). Copeland et al (2007) reported that an estimated 68% of children in the United States have experienced some sort of trauma. This astounding statistic holds great meaning for teachers and administrators, because these children from hard places routinely manifest aggressive and undesired behaviors due to an altering of their physiology. The literature on TBRI® at this point mostly has chronicled success with families, group homes and summer camps (McKenzie, Purvis, & Cross, 2014; Howard, Parris, Neilson, Lusk, Bush, Purvis & Cross, 2014; Purvis & Cross, 2006). TBRI® has only recently been implemented in school settings. This report provides an overview of the impacts of trauma, trauma related work in schools, and the four articles published to this point related to the use of TBRI® in schools.

The Impact of Trauma on Classrooms

Students, who have experienced trauma, often exhibit behaviors that impede their success in the classroom. For example, preschool children, who have dealt with traumatic situations, tend to have lower frustration levels, poor problem solving skills, and exhibit non-compliance (Egeland, Sroufe, & Erickson, 1983). Elementary aged children with trauma in their background will often lose motivation to see problems to a successful completion. They do not believe they can be successful, so they often quit working on the problem. In addition, they also tend to simply avoid any kind of challenging task (Shonk & Cicchetti, 2001). Older children with the same type of history, struggle with abstract thinking, and are unable to access their executive functioning to help them problem solve (Beers & DeBellis, 2002).

Children who have experienced traumatic histories often exhibit behavioral issues in the classroom and tend to take time away from instruction and bring on challenges to classroom management (Proctor, 2017). A child tagged as having behavior problems often gets excluded

from academic activities and may ultimately drop out of school or end up in alternative educational settings (Call et al., 2014). As mentioned above, 68% of Americans experience some type of traumatic experience in their lives (Copeland, Keeler, Angold, Costello, 2007). This statistic means a large number of children in schools may be functioning from a fear based perspective instead of a more rational, logic approach expected by teachers. These realities reinforce the importance of the training of teachers to help them understand the impact of trauma in the students they serve.

What is Trauma?

According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-V; American Psychiatric Association [APA], 2013), trauma is defined as "experiencing, witnessing, or confronting events that involve actual or threatened death or serious injury, or a threat to the physical integrity of self or others" (p. 467). Trauma and maltreatment impact brain development and learning. In addition, after a child has experienced a traumatic event the hypothalamic-pituitary-adrenal axis (HPA axis) stress response system in the body may trigger putting the student in an "on guard" mode. In this state the child becomes more hypervigilant and often is over responsive to environmental triggers (Bath, 2008). Students in such an agitated state can react impulsively and may not respond to requests or directives. TBRI® provides approaches for teachers to use when a student needs extra support to regulate their behavior.

What is TBRI?

Trust-Based Relational Intervention® (TBRI®) is an evidence-based intervention model, developed at the Karyn Purvis Institute of Child Development at Texas Christian University. TBRI® training shows adults how to build nurturing relationships with children that will generate behavioral success through three principles: Connecting, Empowering, Correcting (Purvis et al., 2014). TBRI® strategies help provide the safe, nurturing environment needed for children who have experienced trauma. Children, who experience a safe environment that includes what the child feels is a nurturing adult who will listen, are more often able to express their needs. Perry (2009) stated that children who learn at an early age that their needs will not be met, will often use behaviors rather than words to get their needs met. These behaviors can be problematic in any setting, but represent a significant challenge in a classroom environment.

Creating Trauma-Informed Classrooms

TBRI®, first developed as a method of helping foster and adopted children overcome past trauma and develop healthy relationships with new adults in their lives, has been met with both acceptance and success in the field of childhood development (Call et al., 2014). Applying the concepts of TBRI® to the classroom has evolved as the next logical step in the development of this trauma informed initiative. For example, Call et al. (2014) described the implementation of TBRI® in schools in Oklahoma, Texas, and Missouri, with broad success in lowering the disciplinary incidence reports. (The reports on the Oklahoma and Texas locations will be reviewed in great detail in this article.) To examine how the lowering of disciplinary incidence reports was made possible, teachers were instructed to first recognize the different sources of trauma students may have experienced prior to entering the classroom, such as: prenatal trauma

during pregnancy, birth trauma, and the more common types of abuse and neglect students may have experienced. Then, teachers considered the role of fear in children's behavior and how to combat that fear. This approach involves strategies such as the prevention of over-stimulation and giving a voice to the children in the form of undivided attention, offering choices, compromises, and behavioral "re-dos." Teachers were also advised on the physical needs of the children, which encouraged them to keep water bottles and snacks available to help combat dehydration and fluctuating blood sugar. Lastly, the teachers were educated on the "Three Pillars of Trauma-Informed Care" (Bath, 2008). This paradigm emphasizes the safety, connection, and emotional regulation that is necessary for student success. Students need to feel safe in their environment, connected to themselves and others, and have the freedom and guidance to regulate their emotions. In hopes that more schools are able to successfully implement this initiative, Call et al. (2014) concluded by providing an appendix for educators to easily reference the different tenets of TRBI® and how to apply it to their classroom for the success of their students and schools.

Other Trauma Initiatives

Programs that have implemented a trauma informed approach do exist beyond TBRI®, and have had success in the school districts that have chosen to adopt their methodological approach. Cognitive Behavioral Intervention for Trauma in Schools (CBITS), while originally designed for school counselors (Jaycox, 2004) has had success with training teachers how to implement it in the classroom (Jaycox et al., 2009; Nadeem, Jaycox, Katoaka, Langley, & Stein, 2011). Similarly, programs like Heart of Teaching and Learning (HTL; Day, Somers, Baroni, West, Sanders, & Peterson, 2015) have also shown that addressing trauma in students and helping them heal and grow from their experiences have shown to be beneficial. Further, researchers at the University of California-Los Angeles (UCLA) have developed a program focused on children who experience traumatic events and suffer from conditions like post-traumatic stress disorder (Saltzman, Steinberg, Layne, Aisenberg, & Pynoos, 2001) and have shown success in reducing clinical level conditions in samples of children who have experienced war in Bosnia (Layne et al., 2001; Layne et al., 2008). While these programs have shown excellent results and promise, they often rely on a trained clinician to implement and manage them (with the exception of CBITS' evolution into the classroom). TBRI® focuses on providing teachers with conceptual understanding and strategies to provide support for students with a background that includes some form of trauma. With this approach, TBRI® offers an excellent resource for school districts that cannot afford to hire a specialized clinician for implementation or would like to supplement a specialized, clinician-run program already in place.

Three Core Principles of Trust-Based Relational Intervention® (TBRI®)

In the TBRI literature, there are three main principles which guide caregivers in helping students guide and develop their socioemotional skills, as well as begin to allow them to emotionally bond and trust their caregivers (e.g., teachers, guardians); these three principles include: empowering, connecting, and correcting (Call et al., 2015). While each principle can be conceptualized in isolation, holistically implementing them has shown promise with at-risk children (Parris, Dozier, Purvis, Whitney, Grisham, & Cross, 2015; Purvis, Cross, Federici,

Johnson, & McKenzie, 2007; Purvis, McKinzie, Cross, & Razuri, 2013) and adopted children (McKenzie, Purvis, & Cross, 2014; Purvis & Cross, 2006). This holistic approach can be generalized over to the classroom as well, and acts as the foundation for student/teacher interactions (Call et al., 2015).

The first principle addressed in the TBRI® protocol is empowerment. The empowerment principle is an offensive strategy used for combating fear in children by building a predictable, reliable learning environment (Call et al., 2015). Empowering students helps to relieve unnecessary stress in the classroom by giving voice to the students, and manipulating the classroom environment so that students do not become overstimulated. This approach creates a space where fear can be overcome before it can overtake a student.

The connecting principle, which has been highlighted as the most important aspect of any trauma-informed intervention (Bath, 2008), centralizes the relationship between the student and the teacher. The ability of teachers to connect with their students helps them grow both emotionally and socially, but also academically (Call et al., 2016). Teachers have many tools at their disposal to help develop connections with their students. By utilizing those tools, teachers make an investment in not only the success of the current school year, but also, perhaps more importantly, the future school years of those children. The connecting principle represents a key element in the success of TBRI® implementation in a classroom.

The correcting principle requires knowledge of how to respond to behaviors and also an understanding of how to teach more appropriate responses. Using the correcting principles can prevent poor choices by students and help children be more successful with their expressions of need (Purvis et al., 2014). The correction principles include TBRI® proactive strategies such as role play, self-regulation techniques, and social skills practice (Parris et al., 2015). These proactive strategies routinely decrease behavior issues when working with students who have experienced trauma. However, even with these strategies in place, some students may lose control of their emotions and act inappropriately. When a child is highly dysregulated like this, she or he needs immediate intervention. TBRI®'s IDEAL Response © provides guidelines to interact with an agitated student in calming, nurturing ways in an attempt to discover and meet the need of the student. For example, a teacher working with a dysregulated child can use the IDEAL response to guide them through how to match the intensity of the behavioral reaction with appropriate responses that maintain a nurturing connection that assures the child that he is safe, his needs will be met, and strengthens the relationship with the adult.

Teachers and Trauma

O'Neill (2010) listed three things that teachers need when working with students who have experienced trauma. First, teachers need to have some knowledge about trauma and its impact on young people. Second, educators need to be able to recognize behaviors that result from trauma, and finally, these same teachers need to know how to assist students with the regulation of these behaviors. TBRI® empowers teachers with these three requirements and supplies an approach that combines structure and support. In addition, TBRI® focuses on relationship building. Cassidy (2001) noted that relationship building targets four skills that

promote secure meaningful connections including the ability to give and seek care, the ability to negotiate, and the ability to feel comfortable with their own being. The following sections explore the TBRI® interventions in schools currently reported in the literature.

TBRI in an Oklahoma School

An elementary school in Tulsa, OK implemented TBRI® on their campus and saw positive results (Purvis, 2014). This particular Oklahoma school was considered to be one of the worst schools in the state. Test scores were low, a high percentage of their students lived in poverty, and 75% of the students had a parent or caregiver in prison. The faculty and staff had worked diligently to improve the school, but previous interventions had had little impact. During the first year of TBRI® implementation, the school employed 33 teachers for 428 students in grades pre-kindergarten through 5th. The student demographics were reported as 40% African American, 21% White, 20% Hispanic, 8% American Indian, and 1% Asian.

The plans for training began in June of 2010. The school staff received several rounds and types of TBRI® training. The teachers and staff school-wide received training. In addition, TBRI® trainers entered classrooms to work with individual teachers and their students. Also, some of the elementary staff attended one of the Institute's Hope Connection Camps on the TCU campus. The training on the implementation of nurture groups was extensive. TBRI® trainers visited the campus three times in the months of August, September, and February. During the first visits, the trainers modeled effective nurture groups. The visits transitioned into having the teachers facilitate the nurture group with the trainers providing feedback.

Nurture groups consist of six steps informed largely by a program authored by Rubin & Tregay (1989) called Theraplay®. Usually the students are paired up for the nurture groups. In step one, the rules are reviewed. The students are reminded to have fun, stick together, and not cause harm. In step two, the students are asked non-threatening questions to warm up. In step three, students share an emotional or physical pain they are feeling. The student's partner can then provide comfort by applying an actual Band-aid ® on the person's body in an appropriate place that represents the pain shared. Step four focuses on developing social skills through activities like role playing or puppet shows. Step five ramps up the intimacy of the pairing by offering an opportunity for each student partner to feed each other. Finally, in step six the facilitator leads the group in a celebration and a review of the three rules. The purpose of these groups is to help students to give and receive nurturing. These skills and understanding are often lacking with students who have experienced trauma.

Over a two year period using strategies that included nurture groups, the Tulsa school experienced dramatic positive changes. The faculty reported that students were more successful in forming positive relationships. Students also were more able to use their words which helped to avoid major outbursts. These observations of improvement were supported by an 18% decrease in overall behavioral incident reports. In addition, before the implementation of TBRI®, 16% of the students in their school had received three or more referrals to the principal's office. The administration reported that the year TBRI® was implemented, this 16% of students with the most referrals in previous years had a decrease in office referrals by 23%. The principal

reported that the incidents that were documented had transitioned into more minor offenses, because the teachers were using TBRI® approaches with the students that deescalated many of the more serious behavior outbursts.

The overall environment of the school became more positive and nurturing. Teachers and staff used language that was used throughout the school that promoted safety and met the students' needs. Each classroom adopted the rules from Theraplay® – "Stick Together, No Hurts, Have Fun!" (Rubin & Tregay, 1989). The school staff and administration developed a deeper understanding and sense of empathy for children who have experienced trauma, neglect, and maltreatment. Knowing how their students were affected and how their bodies respond to adverse childhood experiences gave the educators tools to know how to handle their behaviors. It also increased teachers' confidence on how to manage their classrooms.

Implementing TBRI in a Charter School at a Residential Facility for at Risk Youth

Parris et al (2014) reported on the implementation of TBRI® in a charter school in Texas based in a juvenile justice residential setting. This educational setting represented one of 45 charter schools in the "residential treatment/juvenile detention center" category in the state of Texas. The student population in these settings differs from other schools serving the same age ranges in that many of these students have been separated from their family members and homes and many have experienced some form of maltreatment. Parris et al (2014) surmised that the students in the charter school they studied likely exceeded Copeland's estimate of 68% of people in the U.S. having experienced some form of childhood trauma. Schools that serve populations like this one likely will experience the greatest success with the implementation of interventions that target a reduction of the effects of trauma (Bath, 2008). Also strategies that provide structure as well as support can be successful (Cole et al, 2005).

This study in a charter school explored the impact of TBRI® on behavioral outcomes. At the onset of the study, this school in Texas had 23 teachers and a student population of 138 in grades 7 through 12 for the 2011-2012 school year. The student demographics were as follows: 49% white, 35% African-American, 12% Hispanic, and 4% other. All 138 students were economically disadvantaged and considered to be at risk for dropping out of school according to Texas Education Agency guidelines.

The implementation of TBRI® began in the month of August of 2011 with training and support for all residential staff and administrators. During the 2011-2012 school year, no campus-wide plan for TBRI® implementation existed. However, several staff members reported utilizing "a few of the empowering and connecting practices" of TBRI® including the use of gum as a stress reliever and making snacks available. In addition, the use of TBRI® language provided a common basis for communication. The staff worked on building relationships with students and sought opportunities to provide affirmation and to respond with "yes" answers. The student encounters with TBRI® strategies during this first year occurred more in the residential facilities than in the school setting.

Before the beginning of the second school year of 2012-2013, all of the teachers and behavioral support staff for the school attended two days of TBRI® training conducted onsite.

Additional training during the school year occurred in September with the return appearance of the sensory integration specialist. The superintendent, principal, and a behavioral specialist all attended an intense five day training at the TCU Institute of Child Development (now renamed the Karyn Purvis Institute) in October.

Three months into year two, the teachers and staff reported positive changes in the school. The researchers identified 13 components of TBRI® that were being used with the students. Five of the 13 principles fell in the "empowering" category and included the availability of things such as hydration, snacks, and fidgets. In addition, efforts were made to remove conflict triggers and a sensory room was developed. Water bottles or access to a water fountain were provided as instantaneous on-demand items. The school provided healthy snacks like crackers, beef sticks, and nuts for classroom baskets which typically were available to the students twice a day. Classrooms were supplied with five or six types of fidgets which student could request and use at any point in the day.

Another empowering approach involved the removal of conflict triggers. With the implementation of TBRI®, students no longer had to earn the right for free dress or for lunch outside on Fridays. Students were given the opportunity to wear headphones at lunch, which helped some of them stay calm in the often over stimulating environment of the cafeteria. Along those same lines, the campus created a sensory room where students can go with a support staff member. The room provides a sanctuary for the students from over (or under) stimulating environments, and gives them a place to calm down and reflect. Students can ask to go the sensory room if they feel they need to regulate their emotions or just want the security of that room. Teachers can refer students to the sensory room to support students as necessary. Additionally, students can check out things like fidgets or weighted lap pads to bring back to the classroom.

Some of the connecting principles practiced in the school included relationship building through healthy touch strategies and a constant effort to supply positive affirmations for students. The expectations for teachers moved away from immediate office referrals to a focus on building relationships and working through problems. The reduction in office referrals freed up some of the support staff so that they were available to consult with the teachers about preventive approaches and assist with students in need of immediate support

Finally, the correcting principles included a move away from automatic sanctions for specific violations to a management of incidents on a case by case basis. In fact, less serious classroom infractions came to be viewed as learning opportunities for the students. These minor incidents provided the students with the opportunity to practice their skills related to regulating their emotions and behaviors. Parris et al (2014) confirmed that the most commonly used terms at the school were "compromise" and "redo" which certainly would have supported this newly established learning culture.

The results after one year had been encouraging, but after the second year the number of behavioral incidents dropped precipitously. These changes in the number of referrals were recorded from the 2010-2011 school year to the 2012-2013 school year: 68% reduction for

physical aggression, 88% reduction for verbal aggression, and a 95% reduction for disruptive behavior. The authors noted that some of this decrease occurred because of an increased emphasis on building relationships in lieu of sending students to the office. Parris et al (2014) also noted that the extreme improvements may have been due in part because these students experienced TBRI® strategies in school and at their place of residence, so traditional schools may not see such large and immediate impact.

Healing Trauma at School

In the most recent article on TBRI® in schools, Mikhail (2017) chronicled the efforts of a counselor in Temple, Texas to bring TBRI ®to her school district. This counselor recognized through her TBRI® studies "to look beyond a child's behavior and see the [child's] need." The program began with a focus on the one percent of students who most frequently had difficulty regulating their behavior and emotions. This counselor's efforts as a single individual have grown over several years to include teachers, staff, and even bus drivers in the district.

Another school district that has been involved with TBRI® implementation is the Fort Worth ISD with 86,000 students (Mikhail, 2017). The district joined forces with TCU to conduct a study on the impact of nurture groups on 4th and 5th graders. They noted that students involved in nurture groups reported a greater reduction of trauma symptoms. For the 2015-16 school year, Fort Worth ISD expanded the use of the TBRI® nurture groups to all of its elementary campuses.

Conclusion

Both the Oklahoma school and Texas residential care school studies that have been reported in detail in the literature and reviewed here indicate a positive change in behaviors with the implementation of TBRI®. These promising results have been further supported with early results from school districts in Missouri, and in Temple and Fort Worth, Texas. The use of TBRI in schools is only a few years old, but holds great promise.

The principal of the Oklahoma school noted that his faculty connected with TBRI® because it allowed them to be kind to the students. For example, a third grade teacher shared that her new approach gave children choices and allowed for effective negotiation that kept the learning experiences moving. This principal concluded by saying that when the students feel loved, safe, and successful, learning can take place.

If a teacher can provide a safe, nurturing, and predictable environment, the "cloak of fear" can be removed (Purvis, Milton, Harlow, Paris, and Cross, 2014). When a child feels like their needs will be met and their voice will be heard, they begin to believe they can succeed, and their bodies will reflect this. The fight, flight, and freeze behaviors will subside to more regulated responses as they can access reason in their prefrontal cortex where executive thinking resides. Children in a safe environment will also be able to become social with their peers, and can interact with others. All of these improvements will result in a happier child who will undoubtedly be a more productive learner.

References

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* DSM-5(5th ed.). Arlington, VA: American Psychiatric Association.

Bath, H. (2008). The three pillars of trauma-informed care. *Reclaiming Children and Youth*, 17, 17-21.

Beers, S. R., & De Bellis, M. D. (2002). Neuropsychological function in children with maltreatment-related posttraumatic stress disorder. American Journal of Psychiatry, 159, 483-486.

Call, C., Purvis, K, Parris, S., & Cross, D. (2014). Creating trauma-informed classrooms. *Adoption Advocate*, 75, 1-10.

Call, C. D., Purvis, K. B., DeLuna, J. H., Howard, A. R. H., Hall, J. S., Cross, D. R., ... & Parris, S. R. (2016). Decrease in behavioral problems and trauma symptoms among at-risk adopted children following web-based trauma-informed parent training intervention. Journal of Evidence-Informed Social Work, 13, 165-178.

Cassidy, J. (2001). Truth, lies, and intimacy: An attachment perspective. *Attachment and Human Development*, 3, 121-155.

Cole, S. F., O'Brien, J. G., Gadd, M. G., Ristuccia, J., Wallace, D. L., & Gregory, M. (2005). *Helping traumatized children learn: supporting school environments for children traumatized by family violence*. Boston: Massachusetts Advocates for Children.

Copeland, W. E., Keeler, G., Angold, A., & Costello, E. J. (2007). Traumatic Events and posttraumatic stress in childhood. *Archives of General Psychiatry*, 64, 577-584.

Day, A. G., Somers, C. L., Baroni, B. A., Wester, S. D., Sanders, L., & Peterson, C. D. (2015). Evaluation of a trauma-informed school intervention with girls in a residential facility school: Student perceptions of school environment. *Journal of Aggression, Maltreatment, & Trauma*, 24, 1086-1105.

Egeland, B., Sroufe, L. A., & Erickson, M. (1983). The developmental consequences of different patterns of maltreatment. *Child Abuse & Neglect*, 7, 459-469.

Jaycox, L. (2004). CBITS: *Cognitive Behavioral Intervention for Trauma in Schools*. Santa Monica: RAND Corp.

Jaycox, L., Langley, A. K., Stein, B. D., Wong, M., Sharma, P., Scott, M., & Schonlau, M. (2006). Support for students exposed to trauma: A pilot study. *School Mental Health*, 1, 49-60.

Layne, C. M., Pynoos, R. S., Saltzman, W. R., Arslanagić, B., Black, M., Savjak, N., & ... Houston, R. (2001). Trauma/grief-focused group psychotherapy: School-based postwar intervention with traumatized Bosnian adolescents. *Group Dynamics: Theory, Research, and Practice*, 5, 277-290.

Layne, C. M., Saltzman, W. R., Poppleton, L, Burlingame, G. M., Pasalic, A., Durakovic, E., & Pynoos, R. S. (2008). Effectiveness of a school-based group psychotherapy program for war-exposed adolescents: A randomized controlled trial. *Journal of the American Academy of Child & Adolescent Psychiatry*, 47, 1048-1062.

McKenzie, L. B., Purvis, K. B., & Cross, D. R. (2014). A trust-based home intervention for special-needs adopted children: A case study. *Journal of Aggression, Maltreatment, & Trauma*, 23, 633-651.

Mikhail, G., Crawley, R. D., & Call, C. (2017, September). Healing trauma at school: Trust based relational intervention for students. *Fostering Families Today*, 28-29.

Nadeem, E., Jaycox, L. H., Kataoka, S. H., Langley, A. K., & Stein, B. D. (2011). Going to scale: Experiences implementing a school-based trauma intervention. *School Psychology Review*, 40, 549-568.

O'Neill, L., Guenette, F., & Kitchenham, A. (2010). 'Am I safe here and do you like me?'Understanding complex trauma and attachment disruption in the classroom. *British Journal of Special Education*, 37, 190-197.

Parris, S. R., Dozier, M., Purvis, K. B., Whitney, C., Grisham, A., & Cross, D. R. (2015). Implementing trust-based *relational intervention in a charter school at a residential facility for at-risk youth. Contemporary School Psychology, 19*, 157-164.

Perry, B. D. (2009). Examining child maltreatment through a neurodevelopmental lens: Clinical applications of the neurosequential model of therapeutics. *Journal of Loss and Trauma, 14*, 240-255.

Proctor, A. M. (2017). *Teachers' ability to detect symptoms of trauma in children* (Master's thesis). Available from ProQuest Dissertations and Theses database. (UMI no. 10603666)

Purvis, K. B., & Cross, D. R. (2005). The hope connection: A place of hope for children from the "hard places". *SI Focus*, 2.

Purvis, K. B., & Cross, D. R. (2006). Improvements in salivary cortisol, depression, and representations of family relationships in at-risk adopted children utilizing a short-term therapeutic intervention. *Adoption Quarterly*, 10, 25-43.

Purvis, K. B., Cross, D. R., Federici, R., Johnson, D., & McKenzie, L. B. (2007). The hope connection: a therapeutic summer day camp for adopted and at-risk children with special socio-emotional needs. *Adoption & Fostering*, 31, 38-48.

Purvis, K. B., McKenzie, L. B., Cross, D. R., & Razuri, E. B. (2013). A spontaneous emergence of attachment behavior in at-risk children and correlation with sensory deficits. *Journal of Child and Adolescent Psychiatric Nursing*, 26, 165-172.

Purvis, K. B., McKenzie, L. B., Razuri, E. B., Cross, D. R., & Buckwalter, K. (2014). A trust based intervention for complex developmental trauma: A case study from a residential treatment center. *Child and Adolescent Social Work Journal*, 31, 355-368.

Purvis, K. B., Milton, H. S., Harlow, J. G., Paris, S. R., & Cross, D. R. (2015). The importance of addressing complex trauma in schools: Implementing trust-based relational intervention in an elementary school. *The International Journal of Research and Practice on Student Engagement,* 1. Retrieved from http://www.dropoutprevention.org/engage backup/the-importance-of-addressing-complex-trauma-in-schools-implementing-trust based-relational-intervention-in-an-elementary-school-2/

Rubin, P.B., & Tregay, J. (1989). Play with them—Theraplay groups in the classroom: A technique for professionals who work with children. Springfield, IL: Charles C. Thomas.

Saltzman, W. R., Steinberg, A. M., Layne, C. M., Aisenberg, E., & Pynoos, R. S. (2001). A developmental approach to school-based treatment of adolescents exposed to trauma and traumatic loss. *Journal of Child and Adolescent Group Therapy*, 11, 43-56.

Shonk, S. M., & Ciccheti, D. (2001). Maltreatment, competency, deficits, and risk for academic and behavioral maladjustment. *Developmental Psychology,* 37, 3-17.