

The Hope Connection:
A Place of Hope for Children From the “Hard Places”

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The Adoption Project began in 1998 when adoptive families sought out researchers in the Developmental Research Lab at Texas Christian University (TCU). These loving families had adopted children from orphanages in Eastern Europe or from the custody of Child Protective Services. Although the parents were intensely devoted to their children, they were confused and dismayed by the persistence of their behavioral problems. A rich body of developmental research beginning from the 1940s documents significant behavioral, emotional, learning and attachment problems in children who experience deprivation of care and/or abuse (e.g., Bawkin, 1942; Goldfarb, 1944; Spitz, 1945), in addition to important contributions from the animal literature (e.g., Harlow, 1958; Suomi, 1977). This research, however, has not often been readily accessible to parents or translated into practical techniques for children struggling with developmental challenges. A notable example can be found in connections between early research from Bowlby, Ainsworth, and Suomi.

John Bowlby (1951), the progenitor of Attachment Theory, identified “competent pick-ups” and “affectionate holdings” as the foundation for the development of secure attachment in infants. His colleague, Mary Ainsworth (1965), posited that the loss of a mother’s touch was the greatest loss in maternal deprivation. Early comparative researchers such as Stephen Suomi found that primates deprived of maternal care demonstrated differential brain development in regions sensitive to sensory input. Given this foundation for attachment of being picked up and held (i.e., frequent vestibular activation) and being touched affectionately (i.e., tactile activation), it follows that by implementing this type of sensory

activity in a nurturing environment, attachment can be reactivated. However, this information had previously been unavailable to adoptive parents.

Many adoptive families have brought home children, believing that “love would be enough” to help their children heal the wounds of the past. Tragically, love alone was not enough, and both the children and their families continued to flounder (e.g., David, 1990; Deane, 1997; Fischer, Ames, Chisholm & Savoie, 1997; Fishman, 1993; Jay, 1996). Although there is a significant body of research on adopted children who experience deficit of care (e.g., Ames, 1997; Gunnar, 2001; Fischer, Ames, Chisholm, & Savoie, 1997; Marcovitch, Goldberg, Gold, Washington, Wasson, Drewewish & Handley-Derry, 1997; Verhulst, Althus, & Versluis-den Bieman, 1990), very little of the research is intervention-based (e.g., Day, 1982; DeGangi, Craft, & Castellan, 1991; Perry, 2001; Zeanah, 2001). Families who courageously shared their journey and their pain with us have been our inspiration. *The Adoption Project* has been focused for many years on finding research-based interventions for these children who have come from the “hard places.” Our greatest joy is in empowering adoptive parents to help heal the early wounds of their children.

The Hope Connection® Summer Day Camp

One of our most encouraging research findings during these past seven years has been the powerful relationship between sensory processing deficits (SPD) and behavioral, learning, and attachment problems in these adopted children. Our data are consonant with the correlations in previous research with adopted children about the relationships between SPD and behavior problems (e.g., Cermak,

1994; Cermak & Daunhauer, 1997; Cermack & Groza, 1998; DeGangi, 1991; Harandon, Bascon, Dragomir, & Scripcaru, 1994; Sweeny & Bascom, 1995). More importantly, our data confirm that dramatic positive changes are possible for children with SPD in an attachment-rich, sensory-rich environment. Our exploration of this relationship began in a summer day camp for adopted children, which was originally named Camp Celebration, but affectionately renamed *The Hope Connection*® by parents who found in it a renewed hope for their families and their children.

After our first meeting with adoptive parents, a day camp was planned for the following summer, in which researchers and parents would work together to understand the issues of these children. In camp preparation, parents and researchers began to combine their knowledge and experiences. Parents brought unique insights about their children, and researchers from our lab added insights from years of developmental training. In addition, three professionals provided two days of training to students and researchers as part of our preparation for camp. Kathleen Morris, a speech/language pathologist with expertise in issues of adoptive children, Kathy Baczynsky, a local child and family therapist who specializes in issues of attachment, and Dr. Ron Federici, an internationally recognized neuropsychologist, with expertise with post-institutionalized children, were among the team of professionals that generously devoted their time to train us and to help set our course for understanding how to help the children in our care.

During that two-day training, our small band of researchers and students were introduced to the issues of sensory integration, attachment and neurological development as well as their pragmatic applications. Attachment research and intervention is an area of focus to our lab, and we were familiar with tenets for facilitating behavioral change due to its venerable history of research and intervention (e.g., Bowlby, 1951, 1969; Ainsworth, 1965; Zeanah, 2000). However, although there is a rich literature on facilitating behavioral change through the use of sensory input (e.g., Ayres, 1964, 1972; Field, Schanberg, & Scafidi, 1986;

Fisher & Murray, 1991; Kranowitz, 1998; Wilbarger, 1984), that literature was unknown to us prior to our first summer camp.

Following that brief training, a rag-tag band of college students and professors began a set of two three-week summer camps. The first camp would be for ten children under the age of ten, and the second camp would be for ten children age ten and older. The camp, called Camp Celebration, was hosted by the Child Study Center and was our first formal introduction to the dramatic efficacy of a sensory-rich, attachment-rich environment.

Daily Schedule

Following recommendations of our newfound friend and mentor, Kathleen Morris, we began each morning with a “crash-n-bump” course in which the children completed 15 or 20 minutes in a circuit of sensory-rich activities. The sensory activity was enriched by relationships with the camp staff. So, for example, as a child jumped ten times on a small trampoline in the crash-n-bump course, a university student “buddy” would playfully clap and count in synchrony with the child’s jumping, becoming a type of relational and sensorial “mirror” to the activity. This type of sensory-rich activity paired with warm, playful human interaction became the foundation of our camp work.

In addition to crash-n-bump, we planned major sensory activities every two hours. Playing outdoors, under the watchful eyes of their buddies, children participated in a variety of team and individual activities – all chosen for their sensory-richness. The camp classroom was replete with the ubiquitous presence of fidgets and other sensory items and activities. Bubble gum and sensory-rich snacks were available for asking; Fisher Price farm animals were buried in tubs of rice awaiting their discovery by small explorers; a four-foot wading pool filled with a hundred pounds of kidney beans were available for “sandbox play.” Children wore fanny packs filled with fidgets and were introduced to the principles of *The Alert Program – How Does Your Engine Run?* (Williams & Shellenberger, 1994). Numerous times during the day, camp workers would ask the little ones how their engines were running, and then would help the

children self-regulate with the aid of fidgets, deep breathing, and nurturing guidance from their camp buddies. Each activity, snack, exercise and interaction was designed with two goals in mind. It must be both sensory-rich and it must be attachment-rich!

Nestled in this gentle, enveloping sensory bath, the daily schedule directly addressed maladaptive behaviors, which the children had learned as survival mechanisms in their early harsh environments. For example, although children had continual access to items such as bubble-gum, to offer proprioception, they were only allowed to have bubble-gum after they asked their camp buddy “with respect.” In this way, the sensory activities were again paired with meaningful, warm, human relationship, and also with the teaching of “life-scripts” – mechanisms for behavioral change.

The daily schedule was filled with social skills groups, nurture groups, grief-process groups as well as playgroups. Prior to every group in which maladaptive behaviors would be challenged, we were certain to provide a nutritious snack to stabilize the children’s blood sugar, and to provide a calming sensory activity to help them organize their thinking. Snacks and playtimes incorporated sensory-rich activities replete with opportunities for practicing new behavioral scripts. Behavioral scripts are short phrases used to help children encode and remember appropriate behaviors. Scripts emphasize the necessity of using as few words as possible to communicate - a skill that is particularly important when working with children who have auditory processing deficits. Scripts include target phrases such as “Gentle and Kind”, “Showing Respect”, “Listen and Obey”. For example, little ones were allowed to make fruit milkshakes under close supervision of camp staff while talking about a behavioral camp script – “With permission and supervision, I can do special tasks.” Special tasks may not be the best example to use here, but would be the type of typically risky, dangerous tasks that appeal to our children. Can be as simple as using sharp scissors, turning on the blender to make the milkshakes. The focus here is that they must ask permission and accept supervision before getting to do those special tasks. Possibly a

different example would be clearer. For example, “Litters of puppies visited the camp classroom weekly and children were guided in holding and petting the puppies while staff encouraged them to use gentle touching through using the script “Be gentle and kind”.

Camp Anecdotes

By the end of the first week of camp, parents began telling remarkable stories of behavioral and attachment shifts in their children. Dropping off their children in the mornings, mothers reported exciting new behaviors. One mother reported tearfully that her son allowed her to rock him to sleep for the first time in the two years since his adoption. Another mother reported with tears that her son looked into her eyes when she woke him and then put chubby arms around her neck and whispered, “I love you” for the first time since his adoption. Something indescribable and miraculous was happening in our midst. Parents were reporting new attachment behaviors, prosocial behaviors, eye contact, and an explosion of language.

Urgent calls went out from the camp to medical doctors, child therapists, and internationally renowned adoption experts. Although all marveled at the dramatic changes, none could explain them. Some professionals described the changes as a spontaneous regression to infantile behaviors, which the children previously missed in their pre-adoptive, impoverished environments. Some professionals described the phenomenon as a “release mechanism” in which language and behaviors were released. By the end of that first three-week camp, we were smitten with the mystery of the dramatic changes in these at-risk little ones, and we were committed to continuing research that might elucidate new avenues of hope for families who adopt children from the hard places.

Research Findings

Note: Data reported here *in brief* are recorded in detail in Purvis (2001) and have been previously presented as papers and posters at numerous research symposiums (Purvis, et al.) and are currently under review in manuscript form by a developmental journal.

All camp participants ($n = 19$) were children with histories of early neglect and/or abuse. Most were adopted from orphanages in the Eastern European Bloc ($n = 16$). Two were adopted from the custody of Child Protective Services, and one was living with one biological parent and an adoptive step-parent. Camp data were gathered from three primary sources including child-report, parent-report and occupational therapist-report. Child-report measures included self-drawing (Fury, Carlson & Sroufe, 1997) and family drawings (Kaplan & Main, 1986). Parent-report measures included the Randolph Attachment Disorder Questionnaire (Randolph, 1997), Beech Brook Attachment Questionnaire (Moss, 1997), Child Behavior Checklist (Achenbach, 1991), Sensorimotor History Questionnaire for Parents (Balzer-Martin, 1998), TCU Survey of the International Adoption Experience (Purvis, Cross & Ware, 2001) and semi-structured Exit Interviews. Occupational therapist (OT) reports included screenings for deficits in four domains, including tactile, proprioceptive, hand-eye, and coordination. Measures were gathered at both pre- and post-camp with exception of OT screenings and TCU Survey, conducted only at pre-test, and Parent Exit Interviews conducted only at post-test.

With the ending of that first summer, we began formal analyses on the behavioral and physiological data we had gathered during camp. In addition to the anecdotal parent reports, we now had quantitative data confirming the strong connection between SPD and behavioral and attachment problems. In all measures of functioning, including attachment, behavior and sensory processing, these children were confirmed to be at significantly increased risk with many children scoring in the clinical or borderline clinical range for the Child Behavior Checklist (CBCL) and many children scoring in the attachment disorder range on both measures of attachment. On both attachment instruments, parents reported high levels of problem behaviors (e.g., Child refuses affectionate touch; Child does not believe that the parent will care for them). On the Child Behavior Checklist (Achenbach, 1991), children were found to have high levels of both internalizing behaviors (e.g.,

withdrawn, depressed) and externalizing behaviors (e.g., aggression, inattentiveness). Children's drawings exhibited correspondingly high levels of attachment-related problems (e.g., omitting the self from the family drawing, drawing the self on the opposite side of the page) and global pathology (e.g., bizarre features such as floating heads; body and size distortion).

On the Sensorimotor History Questionnaire for Parents (Balzer-Martin, 1998), parents reported the greatest number of deficits in attention (63%), followed by muscle-tone (54%), visual processing (29%), coordination (26%), tactile (23%), vestibular (23%) and finally, olfactory functioning (16%). In OT Screenings, eye-hand coordination yielded the greatest level of dysfunction (67%), followed by proprioceptive (44%), vestibular (33%) and finally, tactile deficits (28%).

Significant correlations (Purvis, et al.) emerged between parent reports of their children's behavior on the Sensorimotor History Questionnaire for Parents (Balzer-Martin, 1998) and parent reports of negative attachment behaviors on the Beech Brook Attachment Questionnaire (Moss, 1997). Relationships were found between occupational therapist's report of vestibular deficits and parents' report of attachment problems in the Randolph Attachment Disorder Questionnaire (Randolph, 1997), and between occupational therapist's report of vestibular deficits and negative features of children's drawings of their families.

An interesting relationship between SPD and behavior change emerged in the post-camp data. Most categories of behavior analyzed (CBCL; Achenbach, 1991) were statistically related with parent reports of tactile deficits. Behaviors that indicated the greatest change included Internalizing, Externalizing, Anxious/Depressed, Thought Problems, Attention Deficits, and Aggression.

Qualitative data gathered after the end of camp confirmed our statistical research (Purvis, et al.). In Exit Interviews, numerous new behaviors were reported by parents including seeking proximity (seen in 50% of child-campers), improved eye contact (40%), increase in spontaneous affection (60%); new awareness of their own behaviors, thoughts and

actions (50%); vocabulary advance (40%); increase in empathy (30%); increase in compliance (40%); and other positive behaviors (60%). In addition, three parents reported spontaneous infantile regression by their child during the camp intervention. Infantile regression was defined as spontaneous emergence of novel attachment behaviors such as seeking proximity, bids for affection, willingness to make valuing eye contact (e.g., eye contact simply for connection or communication without appearance of manipulation), and ability to trust (e.g., willingness to allow the parent to bathe, hold or rock them). These expressions of attachment behavior were coupled with verbal language in all three children.

Three Themes

What emerged in camp data from that first summer were three enduring themes, which have guided much of our work in these seven years. The first theme was that children who had the greatest number of sensory deficits also had the greatest number of attachment and behavioral problems. A second theme was that there were particular correlations between those sensory and behavior deficits. Finally, and possibly the most exciting theme, was the fact that children with the greatest number of sensory processing deficits made the greatest gains in the attachment-rich, sensory-rich environment, evidencing dramatic positive behavioral and attachment gain in a very short three-week intervention. These findings provide great hope for adopted children and their families.

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