

THE JOURNEY OF HEALING ADOPTED CHILDREN'S TRAUMA SYMPTOMS  
AND SELF-EFFICACY THROUGH HOPE CONNECTION CAMP 2.0

by  
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## ABSTRACT

Adverse early life events such as neglect, abuse, and family disruptions can have long-term negative effects (Felitti & Anda, 2010). Specifically, adopted children are at a higher risk for developing emotional and behavioral challenges as result of early life trauma. Hope Connection Camp 2.0 is a therapeutic camp for adopted children and their families to help children overcome early life trauma through Trust-Based Relational Intervention® (TBRI®). Participants in the 2022 session of Hope Connection Camp 2.0, included 10 families and 23 children, 10 of which were identified as the target child by the primary caregiver in each family. The purpose of this study is to examine the effectiveness of Hope Connection Camp 2.0 on improving adopted children's trauma symptoms. By decreasing their trauma symptoms, adopted children will be able to form healthier bonds with their caregiver and promote healthier life outcomes. The current study utilizes the Trauma Symptom Checklist for Young Children (TSCYC) to examine pre-post changes in the target children's trauma symptoms. Our data analysis demonstrated a positive difference in adopted children's anxiety, depression, dissociation, sexual concerns, and posttraumatic stress at the conclusion of camp. Based on this, our research indicates that adopted children's trauma symptoms were alleviated and caregivers successfully implemented TBRI after Hope Connection Camp 2.0.

## INTRODUCTION

Early childhood trauma refers to a frightening, dangerous, or violent event(s) that a child witnesses or experiences (NCTSN). Adverse childhood experiences include, physical, sexual, or psychological abuse; family or community violence; natural disasters; or traumatic events such as, suddenly losing a loved one and institutionalization. Current literature differentiates between type I, also known as acute trauma, which is the exposure to a single overwhelming event, and type II, or complex developmental trauma, which is the continuous exposure to traumatizing events (Bath, 2008).

Sustained exposure to complex trauma at an early age impacts a child's attachment formation and neurological development. Attachment is formed early in life and young children learn how to self-regulate through the proximity and relational interactions by their primary caregiver. Attunement is vital in forming attachment because an infant's ability to attune to their primary caregiver helps a child modulate their arousal and emotional responses and contributes to higher-level brain capacities later on in development (Champagne, 2011).

A secure child forms a healthy relationship with their primary caregiver and view their parent as available and comforting. In turn, they develop a positive sense of self and identity, self-regulation, and positive adult relationships. On the contrary, insecure attachment refers to a disturbance in the developmental process that occurs in early childhood and negatively affects their social engagement and functioning (Schore, 2001). The brain-based stress response systems in children who have experienced trauma become permanently changed as they tend to focus their attention on ensuring their safety rather than growth-promoting interests and activities that secure children find stimulating (Bath, 2008).

Furthermore, children who have experienced trauma are at risk for developing attachment issues or challenges forming healthy relationships or bonds with others, difficulty socializing with peers, inattention, trouble sleeping, learning difficulties, depression, conduct disorder, and substance abuse. Later in life they are at risk for developing posttraumatic stress intrusion, which includes nightmares, flashbacks, and upsetting or unwanted memories; posttraumatic stress arousal, a state of hyperarousal; and posttraumatic stress avoidance, the attempt to avoid distressing memories, thoughts, feelings, or external stimuli (Anthony R. et. al, 2022).

Research has shown that children who have been institutionalized or placed in foster-care have experienced complex developmental trauma, or multiple traumatic events (Purvis et. al, 2013). Institutionalization and foster-care are forms of out-of-home care that occur when a child is removed from their home by Child Protective Services (CPS) and there is a threat to their safety in the home (Pecora et. al, 2009). Foster-care placements can include relative or non-relative familial placements and institutionalization refers to residential treatment centers, mental health facilities, and the juvenile justice system. In 2005, Harvard University discovered that children in the United States foster system were experiencing PTSD at more than two times the rate of combat veterans (Purvis et. al, 2013).

Evidence of behavioral problems among post-institutionalization adopted children include internal and external behavioral problems, attention deficits, and cognitive and social issues (Purvis et. al, 2015). Unlike the general population of children who have experienced trauma, children who have been placed in foster care or institutionalized are at a higher risk for continuous trauma within those setting. The manifestations of the maladaptive behaviors adopted children present can hinder their ability to development healthy bonds with their adopted families, which serves as a challenge for both caregiver(s) and the child.

A variety of clinical treatments utilize the traditional medical approach, which is when the child works with a practitioner in their office and the caregiver is not actively involved in the treatment (Purvis et. al, 2013). Cognitive-Behavioral Therapy® (CBT®) and Theraplay are examples of the traditional medical approach.

Theraplay® is a dyadic child and family therapy that supports child/caregiver attachment. The core concepts of Theraplay are structure, nurture, engagement, and challenge. The goal is for parents to learn to play with their child in an effort to establish felt safety, increase social engagement, and support the development of self-esteem (The Theraplay Institute, 2023).

Cognitive Behavioral Therapy (CBT) is another form of treatment that is effective in treating depression, anxiety disorders, conduct disorders, posttraumatic stress disorder (PTSD), and severe mental illnesses. The core principles of CBT address faulty thinking patterns and behaviors and implements strategies that help a child find healthier coping mechanisms and change their thinking patterns and behaviors (APA, 2017).

While both of these therapeutic interventions are effective in treating children who have experienced trauma, they may not be tailored to post-institutionalized children. (Purvis et. al, 2013). Additionally, these interventions are not specific to adopted children who have experienced complex trauma and do not address all the aspects of complex trauma, such as attachment systems, regulation, dissociation, physiology, behavioral control, and self-concept (Cook et. al, 2003).

Trust-Based Relational Intervention® (TBRI®) is an attachment-based, trauma-informed intervention that trains caregivers to provide support and treatment for adopted children (Purvis et al., 2013). Unlike CBT and Theraplay, TBRI treatment happens within the child's environment when the challenges occur. Furthermore, the TBRI model focuses on a child's

attachment systems, physiological needs, emotional needs, sensory processing, and regulation techniques (TBRI, 2023). Research regarding TRBI has suggested significant improvements adopted children's executive functioning, attention deficits, self-regulation, and pro-social behavior (Purvis et al., 2013). TBRI practitioners utilize three principles, Empowering, Connecting, and Correcting, that address a child's physical and emotional needs to correct maladaptive behaviors and build healthy relationships with adults.

The Empowering Principle addresses the external and internal needs of the child. The internal, or physiological needs of a child include adequate food, water, sleep, and physical activity. The external, or ecological, needs of a child refer to importance of creating felt safety within a child's environment such as rituals, routines, daily transitions, and scaffolding (caregiver guided support that aids the child's learning process). The Connecting Principle address relational and attachment needs, and focuses on awareness, engagement, and attunement. Finally, the Correcting principle builds a child's social competence, which is only successful after establishing a foundation of empowerment and connection. The Correcting Principle models CBT, which effectively treats a plethora of childhood disorders, including depression, aggression, and posttraumatic stress disorder. (Purvis et al., 2013). This principle uses proactive behavioral training, which improves a child's social problem-solving and conflict management skills.

Derived from the original Hope Connection created by Dr. Karyn Purvis and Dr. David Cross, Hope Connection Camp 2.0 is a therapeutic camp for adopted children and their families in which camp staff and volunteers utilize TBRI to build connections and nurture healthy relationships. It consists of two weekend sessions that involves group and individual activities. The camp activities are structured around addressing the physical, behavioral, and relational

needs of the children in an environment filled with sensory activities and social skills groups (Purvis et al., 2013). Prior literature has found that the Hope Connection Camp reducing cortisol, a stress chemical, and negative behaviors, while significantly improving positive behaviors in a child (Purvis et al., 2007).

The TBRI principles are embedded into the camp's structure and address all of the challenges associated with complex developmental trauma. Camp buddies are volunteers that are paired with one child throughout the duration of camp, and they actively engage with the child during camp activities, which coincides with the Connecting Principle of TBRI. The Empowering Principle is incorporated within the camp by ensuring providing multiple snacks and meals throughout the day, giving water bottles to the children to ensure they are hydrated, and by providing schedules to ensure the child knows what is expected throughout each day. Additionally, the Correcting Principle is applied in the camp through regulation, play, and peer activities

Based on the effectiveness of TBRI and the original Hope Connection Camp, this study will explore prior conclusions about TBRI improving trauma symptom's in adopted children. By alleviated their trauma symptoms, adopted children have the potential to develop healthier relationships with their caregivers and mitigate the long-term effects of complex trauma. The examination of change in trauma symptoms over time is beneficial in evaluating the effectiveness of Hope Connection Camp 2.0 in reducing behavioral problems and trauma symptoms among vulnerable children. The purpose of this exploratory study is to examine pre-camp and post-camp changes in children's trauma symptoms after participating in Hope Connection Camp 2.0. My hypotheses include:



1a. Adopted children participating in Hope Connection Camp 2.0, will show a decrease in trauma symptoms.

1b. Adopted children participating in Hope Connection Camp 2.0, will have an increase in self-efficacy.

2. Adopted children who show improvements in depression and anxiety, will have higher ratings of self-efficacy.

### PARTICIPANTS

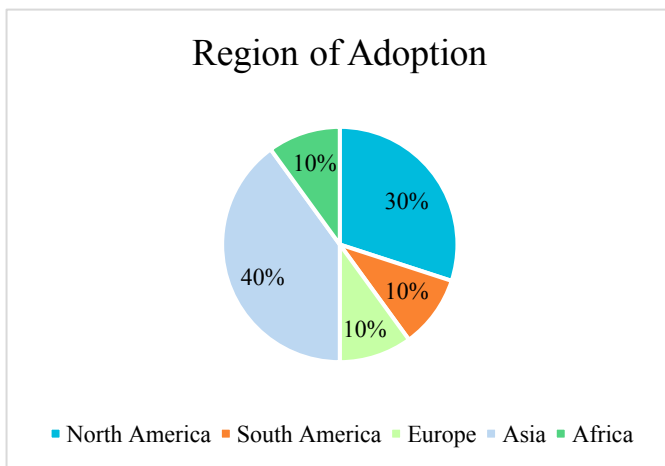
The study participants included ten families and 23 children. The average family size was 4.3 and there was one target child per family. Participant population included 7 males and 3 females. The ages of the target children ranged from 6-12 years old with an average age of 8.7 and a standard deviation of 2.60. The average age of adoption was 2.3 and had an SD of 2.3. Target children had an average of 1.3 siblings, including adopted and/or biological. Table 1 highlights the demographics of the participants. Additionally, 70% of participants were Asian, lived in Texas, and identified their mother as their primary caregiver. Figure 1 and Figure 2 show the distribution of the region of adoption and state of residence.

**Table 1**

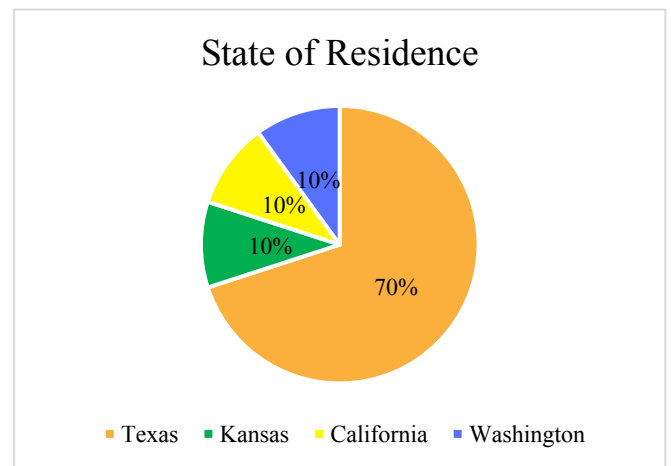
Participant Demographics

|                           | MALE     | FEMALE   | TOTAL      |
|---------------------------|----------|----------|------------|
| <b>AGE (YRS.)</b>         |          |          |            |
| Number                    | 7        | 3        | 10         |
| Mean (SD)                 | 9 (2.36) | 7 (8.73) | 8.7 (2.60) |
| Minimum                   | 6        | 6        | 6          |
| Maximum                   | 12       | 9        | 12         |
| <b>AGE OF ADOPTION</b>    |          |          |            |
| Mean                      | 3.8      | 2.8      | 3.5        |
| Standard Deviation        | 2.8      | 0.3      | 2.3        |
| <b>RACE</b>               |          |          |            |
| Caucasian                 | 1        | 0        | 1          |
| Asian                     | 1        | 3        | 4          |
| Black                     | 2        | 0        | 2          |
| Hispanic                  | 1        | 0        | 1          |
| Two or more races         | 2        | 0        | 2          |
| <b>STATE OF RESIDENCE</b> |          |          |            |
| In-State                  | 4        | 3        | 7          |
| Out of State              | 3        | 0        | 1          |
| <b>PRIMARY CAREGIVER</b>  |          |          |            |
|                           | 3        | 7        | 10         |

**Figure 1**



**Figure 2**



## PROCEDURES

Participants in Hope Connection Camp 2.0 were recruited online via email and social media. Prospective families completed an online application including a demographic questionnaire, family history, and family goals for camp. Families who were eligible to participate in camp had to have at least one adopted child in their family between the ages of 5-15 years old; the adopted child had to be finalized and legally adopted in their family for at least one year; caregivers completed the online pre-training; and all families living in the household were able to attend camp. Moreover, the primary caregiver in each family that was deemed eligible for participation was emailed a Qualtrics Survey that included consent and assessment forms. On the consent form, caregivers can either select “I agree” to participate or “I disagree” to end the survey. After the consent forms were completed, the caregiver was prompted to fill out the assessment forms. Participation in the camp was completely voluntary and participants had the opportunity to withdraw at any time. If caregivers chose to withdraw, they were removed from the study and all of the data collected from them was deleted. As an incentive for completing the assessments families received family games valued at \$25 via mail. Caregivers who completed assessments at all three time points (pre-assessment, post-assessment, 6-month follow-up) received a total of \$75 worth of family games.

Families who were excluded from participating included adopted children with severe emotional/behavioral challenges that posed a threat to themselves or others; parents who had marital problems; family members who were unwilling to complete research protocols; and family members who were unable to attend both camp weekends. Based on the criteria above ten families and 23 children participated in the 2022 camp session of Hope Connection Camp 2.0.

In August 2022, the primary caregiver in each family completed the pre-assessment for T1 data collection, which served as a pre-camp baseline assessment. They were emailed a Qualtrics Survey that included assessment about their adopted child's trauma symptoms and executive functioning, their own mindfulness, their relationship with their adopted children, and their sensory processing. Children who were 12 or older completed assessments about their own self-efficacy, which is relative to their self-confidence.

In September 2022, parents completed the online pre-training that included three videos, *Children from Hard Places and the Brain*, *Trust-Based Parenting*, and *Attachment: Why it Matters*. These videos are part of the KPICD's Healing Families Series and caregivers completed study guide questions that were associated with each of the videos. Completion of the pre-training took an average of 8-10 hours during a six-week time period. Additionally, parents completed Adult Attachment Interviews (AAIs) via telephone. The AAI measures the caregivers the verbal account of their attachment experiences in their own mind (Bakermans-Kranenburg & van Ijzendoorn, 2009).

Participants attended camp on Texas Christian University's (TCU) campus on October 7-9 and November 11-13 of 2022. In December 2022, the primary caregiver completed the post-assessment which served as the T2 data collection. The total duration of participation occurred over a 5-month period from recruitment until T2 data collection from the post-assessment. The protocol for Hope Connection Camp 2.0 was approved by the Institutional Review Board (IRB) on November 8, 2021.

## MEASURES

Demographics were collected in the participants initial application. Data collected from the demographics included caregiver name's, date of birth, state of residence, income level, number of children in the family, number of adopted children, ages of their child(ren), country where the child was adopted from, and the number of years the child has lived in the home. Sex and gender of the family members were two separate questions. Sex was defined as their biological classification at birth and gender was defined as how they express their identity. Additionally, adopted children were identified as either domestically or internationally adopted. Children who were internationally adopted were born outside the United States and domestically adopted children were born within the United States.

One of assessment in the Qualtrics Survey that was completed pre-camp and post-camp was the Trauma Symptom Checklist for Young Children (TSCYC). The TSCYC is a standardized self-reporting measure used to screen children ages 3-12 years old for posttraumatic stress symptoms and evaluates behaviors, feelings, and experiences of children who have experienced trauma. It is a 90-item scale and consists of nine clinical subscales (Anxiety, Depression, Anger, Posttraumatic Stress-Intrusion, Posttraumatic Stress-Avoidance, Posttraumatic Stress-Arousal, Dissociation, and Sexual Concerns).

The Response Level subscale was not used to identify trauma symptoms relative to the child, rather this subscale reflected the extent of which the caregiver denied behaviors, thoughts, or feelings in his or her child that most caregivers would report in some degree (Briere, 2005). Response Level items included "whining" or "not doing something he or she was supposed to do." These are normal childhood behaviors and higher scores on this scale indicate the caregiver

is unwilling to acknowledge common behaviors children exhibit. Atypical Response was another subscale that measured the caregiver's behavior (Briere, 2005). Items for this scale included "not sleeping for two or more days" and "hearing voices telling him or her to hurt someone." Higher scores on this subscale reflect a caregiver overreporting their child's symptomology and general desire to make their child appear to be especially dysfunctional or distressed as a "cry for help" regarding their child. These subscales served as a measure of validity of the caregiver's reports (Briere, 2005).

The Anxiety scale evaluated the level of worry or fear observed in their child (Briere, 2005). Items included statements such as "Worrying that bad things would happen in the future" and "Crying at night because he or she was frightened." Depression was defined as the adopted child's feelings, cognitions, and behaviors that were associated with sadness or unhappiness (Briere, 2005). Statements for this subscale included "Looking sad" and "Not laughing or being happy like other children." Scores on the Anger subscale indicated the extent of aggressive behavior that was observed in the adopted child (Briere, 2005). Statements like "Hitting adults (including parents)" and "Intentionally hurting other children or family members" were associated with this subscale. Dissociation refers to the child's detachment, preoccupation, or non-responsiveness (Briere, 2005). Statements for this subscale included "Staring off into space" and "Not paying attention because he or she was in his or her own world." Sexual Concerns evaluated the amount of sexual distress observed in the child (Briere, 2005). Even though sexual thoughts and feelings are not abnormal, when they are present in young children this is atypical. Statements like "Touching other children's or adults' private parts (under or over clothing)" and "Worrying that someone might be sexual with him or her" were associated with this subscale.

Posttraumatic Stress-Intrusion evaluated the extent of which the child relives posttraumatic memories, including nightmares, reenacting trauma memories, and flashbacks (Briere, 2005). “Being bothered by memories of something that happened to him or her”, “Drawing pictures about an upsetting thing that happened to him or her”, and “Crying when he or she was reminded of something from the past” are examples of the items associated with PTS-I. Posttraumatic Stress-Avoidance measured the level of which the child avoids traumatic memories such as being unwilling to talk about the trauma and displaying a reduced emotional response to the event(s) (Briere, 2005). Statements for this subscale included “Not wanting to go somewhere that reminded him or her of a bad thing from the past” and “Saying that something bad didn’t happen to him or her even though it did happen.” Posttraumatic Stress-Arousal measured the extent to which their child is hyperactive, easily startled, and tense (Briere, 2005). “Flinching or jumping when someone moved quickly or there was a loud noise” and “Watching out everywhere for possible danger” are example questions that were associated with the subscale. The Posttraumatic Stress-Total did not have individual questions associated with it, however, it served as a cumulative score of the sums for Posttraumatic Stress-Intrusion, Posttraumatic Stress-Arousal, and Posttraumatic Stress Avoidance.

For each item on the TSCYC, the caregiver reported their adopted child’s symptoms on a qualitative scale (Never, Sometimes, Often, Very Often). Qualitative data was converted to numerical measures that correlated to their responses (1= Not at All, 2= Sometimes, 3= Often, 4 = Very Often). Then, using the TSCYC Manual questions were divided into their associated subscales and the TSCYC Scoring Sheet was used to calculate the sum of each subscale, except for Response Level. Response Level was calculated based on the number of “1’s” (Not at All) the caregiver reported for each item associated with this subscale.

The Self-Efficacy Questionnaire for Children (SEQ-C) was utilized to measure target children's', who were 12 or older, intrapersonal competencies. Self-efficacy refers to an individual's belief in his or her capacity to execute behaviors necessary to produce specific performance and attainments (Bandura, 1986). It reflects one's confidence in their ability to exert control over one's motivation, behavior, and social environment (Bandura, 1997). The SEQ-C consists of 24-items and three sub scores (academic self-efficacy, social self-efficacy, and emotional self-efficacy). The child rated individual questions on a scale of 1 = Not at All and 5 = Very Well. Questions on the SEQ-C included, "How well can you study for a test?", "How well can you control your feelings?", and "How well can you tell other children that they are doing something that you don't like?" Lower scores on the SEQ-C indicated higher levels of self-doubt, or low confidence in their own abilities. Evidence has also found a negative correlation between SEQ-C scales and measures of depression (RAND, 2020). On the contrary, higher scores on the SEQ-C indicate more self-confidence in their own abilities.

### ANALYTICAL PLAN

Each target child was given a random identification number to protect their privacy and ensure none of data collected contained personal identified like their name or date of birth. Using Microsoft Excel, the initial pre-TSCYC assessment and post-TSCYC assessment qualitative data were divided into separate worksheets to minimize data collection errors. Then, the pre- and post-assessments were copied into two more worksheets to convert the qualitative data to their corresponding numerical values. After quantifying the TSYC pre- and post-assessments, the TSCYC Manual was used to identify individual items to their respective subscale. Using the



TSCYC Scoring Sheet, the sum of each subscale was calculated based on the numerical value of all the items associated with the scale for the pre- and post-TSCYC assessments and were recorded in Excel worksheets. For each target child, the total for each subscale was recorded for T1 and T2. Descriptive statistics consisted of the mean and standard deviation of the participant population for each subscale at T1 and T2 using the Excel AVERAGE and STDEV functions.

Inferential statistical analysis was conducted to assess the improvement in trauma symptoms at T1 and T2. A paired one-tailed two sample equal variance t-test was calculated using the Excel TTEST function. This test was deemed appropriate for the study because it determines the mean difference between two data sets. In this case, the t-test measured the mean difference between T1 and T2 of the TSCYC subscales. The t-test also determined the p-value, degrees of freedom, and t-statistic for each subscale. The probability value, or p-value, determines the level of significance of a statistical hypothesis. A p-value greater than 0.05 indicates statistical significance and the hypothesis is correct, whereas a p-value less than 0.05 is indicative of a small level of significance and the hypothesis is rejected based on the data. The t-statistic value measures the amount of standard errors the coefficient is away from 0. A higher t-statistic implies more confidence that the coefficient is a predictor of a certain variable. For our purposes, the t-test will determine the magnitude between Hope Connection Camp 2.0 and improving trauma symptoms. The degrees of freedom (DF) make inferences about population parameters based on the data (University of Texas at Austin, 2015). The DF correlates to the sample size, therefore, a higher degree of freedom signifies a larger sample size and more power to reject a hypothesis or find a significant result.

Out of the ten participants, one was excluded from the final analysis of improvements in trauma symptoms because their primary caregiver did not complete the pre-camp TSCYC

assessment. The mean and standard deviation (SD) of the TSCYC subscales were compared between T1 and T2.

For the SEQ-C analysis, initial responses for the pre-assessment and post-assessment were recorded in an Excel spreadsheet. Statistical analyses for the assessment only included the mean. Four participants were ten or older and completed the SEQ-C questionnaire. Three participants were excluded from the analysis because they did not complete the pre-camp and/or post-camp SEQ-C questionnaire. The final analysis included one participant and the mean for T1 and T2 were compared to assess improvements in self-confidence. When analyzing the relationship between higher ratings of self-confidence and anxiety and depression, only the participant who completed both the pre- and post-assessments of the SEQ-C. The means for anxiety and depression at T1 and T2 were calculated with the Excel AVERAGE function. The means for the SEQ-C, ANX, and DEP at T1 and T2 were recorded in an Excel spreadsheet.

## RESULTS

The following results are associated with Hypothesis 1: Adopted children participating in Hope Connection Camp 2.0, will show a decrease in trauma symptoms. Table 2 outlines mean and SD of the TSCYC subscales for the pre-assessment and the post-assessment. Figure 3 illustrates the comparison of the mean and SD of Response Level (RL), Atypical Response (ATR), Anxiety (ANX), Depression (DEP), Anger (ANG), Dissociation (DIS), and Sexual Concerns (SC). For Anxiety, Depression, Dissociation, and Sexual Concerns the mean and standard deviation were in the expected direction, showing a trend toward improvement. Anger showed no difference in mean between T1 and T2, however, the SD did increase from 4.93 to

6.95, respectively. Additionally, Response Level and Atypical Response showed an increase in mean and standard deviation between T1 and T2.

Table 2

| Trauma Symptom Checklist Subscales    | Pre-Assessment |                    | Post-Assessment |                    |
|---------------------------------------|----------------|--------------------|-----------------|--------------------|
|                                       | Mean           | Standard Deviation | Mean            | Standard Deviation |
| <b>Response Level</b>                 | 1.11           | 0.78               | 1.68            | 2                  |
| <b>Atypical Response</b>              | 9.68           | 0.87               | 9.79            | 0.97               |
| <b>Anxiety</b>                        | 16.89          | 4.20               | 15.68           | 4.12               |
| <b>Depression</b>                     | 15.22          | 3.96               | 12.79           | 3.70               |
| <b>Anger</b>                          | 18.57          | 4.93               | 18.57           | 6.95               |
| <b>Posttraumatic Stress-Intrusion</b> | 13.22          | 2.54               | 13.79           | 3.96               |
| <b>Posttraumatic Stress-Avoidance</b> | 15.44          | 4.03               | 14.57           | 3.94               |
| <b>Posttraumatic Stress-Arousal</b>   | 23.11          | 6.57               | 21.68           | 4.92               |
| <b>Posttraumatic Stress-Total</b>     | 51.79          | 11.71              | 50              | 9.81               |
| <b>Dissociation</b>                   | 16.79          | 5.74               | 15.11           | 4.51               |
| <b>Sexual Concerns</b>                | 9.68           | 1.32               | 9.57            | 0.73               |

Figure 3

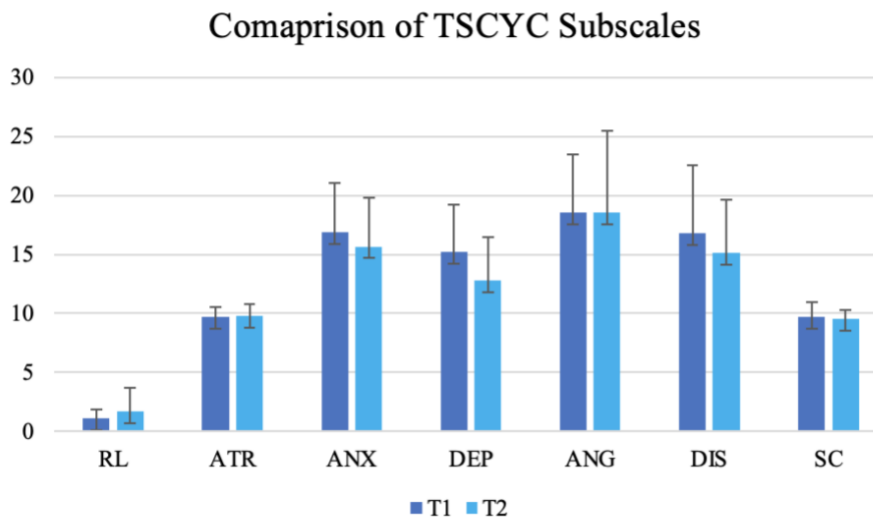
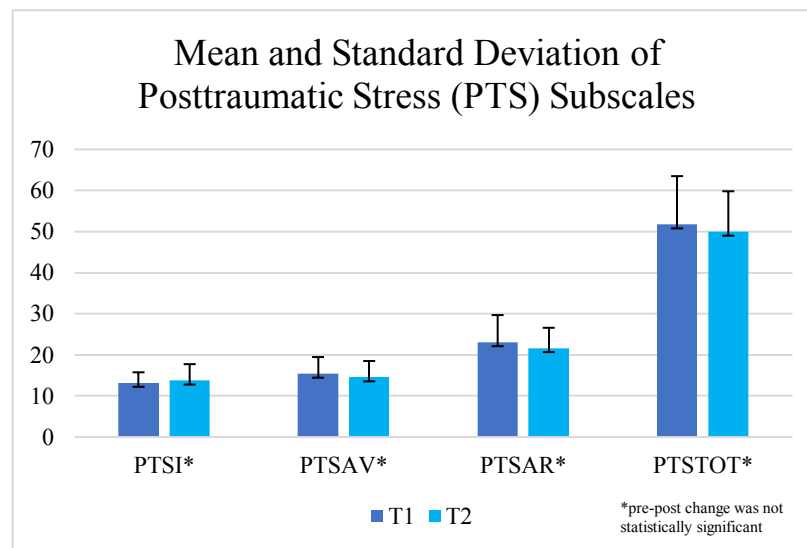


Figure 4 illustrates the comparison of the mean and SD of Posttraumatic Stress-Intrusion (PTS-I), Posttraumatic Stress-Avoidance (PTS-AV), Posttraumatic Stress-Arousal (PTS-AR), and Posttraumatic Stress-Total (PTS-TOT). PTS-AV, PTS-AR, and PTS-TOT means, and standard deviations were also in the expected direction, showing a trend toward improvement. However, PTS-I showed an increase in both the mean and SD at T2 when compared to T1.

**Figure 4**

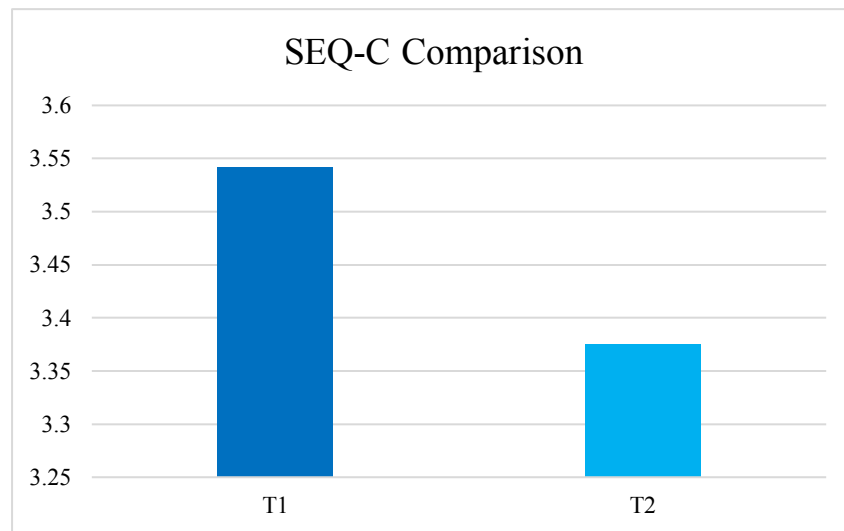


The p-value and t-stat scores for the TSCYC subscales are as follows: RL ( $p = 0.16$ ,  $t(8) = -1.04$ ), ATR ( $p = 0.36$ ,  $t_8 = -0.35$ ), ANX ( $p = 0.08$ ,  $t_8 = 1.47$ ), DEP ( $p = 0.08$ ,  $t_8 = 1.50$ ), ANG ( $p = 0.5$ ,  $t_8 = 0$ ), DIS ( $p = 0.11$ ,  $t_8 = 1.27$ ), SC ( $p = 0.36$ ,  $t_8 = 0.35$ ), PTS-I ( $p = 0.24$ ,  $t_8 = -0.70$ ), PTS-AV ( $p = 0.29$ ,  $t_8 = 0.54$ ), PTS-AR ( $p = 0.14$ ,  $t_8 = 1.10$ ), and PTS-TOT ( $p = 0.26$ ,  $t_8 = 0.64$ ). All of the TSCYC subscales had a p-value greater than 0.05, which indicated that these changes were statistically insignificant.

Results for Hypothesis 1b: Adopted children participating in Hope Connection Camp 2.0, will have an increase in self-efficacy were also obtained. T1 showed an average rating of 3.54

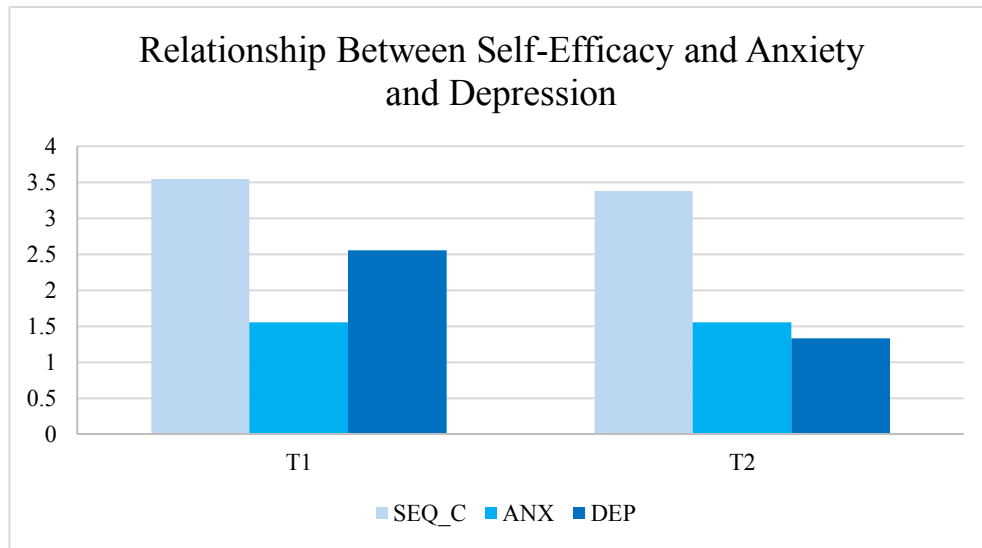
and T2 had an average of 3.38. Figure 5 highlights the comparison of the mean of the SEQ-C at T1 and T2. The SEQ mean scores were not in the expected direction and did not trend toward improvement.

**Figure 5**



The final set of results relate to Hypothesis 2: Adopted children who show improvements in depression and anxiety, will have higher ratings of self-efficacy. The average rating of anxiety was 1.55 at T1 and T2. Depression had an average of 2.55 at T1 and 1.33 at T2. For depression the mean did show improvement and the trend was in the expected direction, however, the mean for anxiety was stagnate, no change between T1 and T2. The average rating of self-confidence did decrease at T2 compared to T1, therefore, the relationship between self-efficacy and anxiety and depression can't be determined. Figure 6 illustrates the comparison of the means for self-efficacy, depression, and anxiety.

Figure 6



## DISCUSSION

The purpose of this study is to examine the effectiveness of Hope Connection Camp 2.0 on improving adopted children's trauma symptoms and sense of self-efficacy. Our findings indicated that trauma symptoms related to anxiety, depression, hyperactivity, avoidant behaviors, dissociation, and sexual concerns showed a trend toward improvement. Trauma symptoms related to anger and intrusive thoughts or feelings did not show a trend of improvement. Furthermore, the p-values and t-stat values for the subscales were statistically insignificant. Based on these factors, our findings do not support Hypothesis 1. The increase in Anger and PTS-I could potentially be caused by the child remembering memories that were suppressed and they are expressing their internal state of dysregulation through their emotions and behaviors. Another possible explanation is that the caregiver's could also be more aware of their child's needs and are more likely to report subtle expressions of anger after completing TBRI training.

The unexpected trends in these trauma symptoms do not imply a negative outcome.

Alternatively, it could be indicative of the caregiver's efforts to see and meet their child's needs and the caregiver is more aware of their child's needs after TBRI training.

Self-efficacy, was also evaluated in participants ages 10 and older. Self-efficacy refers to an individual's belief in their abilities to reach specific goals. An individual's ability to believe in their own success dictates how they think, act, and feel about their place in the world. Individuals who have higher feelings of self-efficacy are able to be successful and accomplish goals, even when faced with impending failure (Fratturar, 2018). On the contrary, individuals who doubt their own capabilities are more likely to avoid challenging task and surrender when failure is inevitable (Fratturar, 2018). The increase in the mean rating on the SEQ-C could potentially indicate that the child is confronting specific life obstacles that are negatively affecting their own beliefs of their abilities. The results from the SEQ-C did not support Hypothesis 1b, as self-efficacy ratings trended in an unexpected direction. However, the comparison of self-efficacy only represents one child's experience and may not reflect all of the children who participated in Hope Connection Camp 2.0.

Hypothesis 2 was also not supported by our findings. Even though depression showed improvements, anxiety remained the same and self-efficacy seemingly declined. As a result, our findings did not appear to show a relationship between trauma symptoms and self-efficacy. This analysis was also limited to one participant and does not prove the possibility of a relationship between anxiety, depression, and self-efficacy. Prior literature has found a significant relationship between lower ratings of self-efficacy and mental health issues like anxiety and depression (Tahmassian, 2011).

The small sample size of this study contributed to the limited power to detect differences in trauma symptoms. There was also limited generalizability due to the caregivers being predominantly Caucasian, educated, and of the financial status that allowed them to participate in the camp. As a result of our small sample size, it is difficult to generalize our findings to the broader population of children who have experienced complex trauma. Furthermore the TSCYC is a self-reported assessment completed by the primary caregiver and reported scores might not accurately reflect the child's trauma symptoms and the SEQ-C could allow for self-reporting bias. Future research should include a larger sample size and compare TSCYC subscale scores between the sample population and the general population.

Overall, our findings suggest that the implementation of TBRI in Hope Connection Camp 2.0 may improve scores on the TSCYC. Healing from trauma is a complex and difficult journey for both caregivers and the adopted children. It is not a straightforward process, but by implementing TBRI into the family systems, caregivers and their adopted children are able to nourish a healthy relationship and build better connections with one another.



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