

**A QUANTITATIVE COMPARISON OF YOUNG ADULT “THIRD CULTURE
KIDS’ ” SOCIAL, EMOTIONAL, AND BEHAVIORAL HEALTH TO PEERS
WHO NEVER LIVED ABROAD**

A Dissertation

by

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Submitted to the Office of Graduate and Professional Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

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December 2019

Major Subject: School Psychology

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ABSTRACT

The purpose of this study was to quantitatively examine the similarities and differences between young adult Third Culture Kids (TCKs) and non-Third Culture Kids (non-TCKs) and to determine if and how particular factors related to the TCK experience are predictive of the young adult TCK social, emotional, and behavioral health.

Participants included 91 TCKs and 245 non-TCKs who were between the ages of 18 and 25 years old. All participants completed the PROMIS depression, anxiety, and anger scales as well as the Brief Resilience Scale (BRS) and the Interpersonal Support Evaluation List - 12 (ISEL-12). Additionally, TCK participants also answered questions regarding their TCK experience including total amount of time spent living abroad, reason for living abroad (e.g., military, religious, business), specific locations lived, amount of time spent living in each location, age when first moved to each location, the description of the location (i.e., rural, suburban, urban), number of furloughs or returns to passport culture, average length of furlough, and age of repatriation.

The current study found that when controlling for age, TCKs and non-TCKs did not differ significantly when comparing the group means of measures of resilience, interpersonal support, anxiety, depression, and anger. Results also indicate that the relationship between interpersonal support and resilience was different for non-TCKs as compared to TCKs. Findings suggested that for TCKs the number of locations lived was positively related to symptoms of depression and anxiety and the number of furlough (i.e., returns to passport culture) was negatively related to resilience. For TCKs, currently living

in their passport culture related to significantly more symptoms of depression than TCKs who have not returned to their passport culture. Finally, the current study found that interpersonal support, resilience, and number of locations lived were significant predictors of depressive symptoms. Resilience and number of locations were significant predictors of anxiety, and interpersonal support and resilience were significant predictors of anger. Results of this study reinforce the importance of considering factors in the TCK experience and recognizing how those factors may be impacting young adult TCKs' social, emotional, and behavioral mental health as they transition between cultures.

ACKNOWLEDGMENTS

There are countless people who deserve to be acknowledged in this section as huge contributors to my academic success, emotional stability, and spiritual growth over the past 6 years. My professors at Texas A&M University, especially Drs. Riccio, Rae, Simmons, and Blake, and Dr. Clemens who was formally at TAMU, you all have poured so much knowledge, life lessons, and grace on me during my time here and I am so thankful for the time and effort you have dedicated to teaching the next generation to become great psychologists. To my dissertation committee, thank you for your patience with me on this long journey. Dr. Riccio, you deserve hundreds of honors for your patience and your commitment to helping me finally finish. To my cohort and my closest source of interpersonal support over the past 6 years, the only women who truly understand the grit, determination, and little bit of crazy it takes to go through the program, thank you for being huge sources of laughter, motivation, and love these past few years.

To my family, thank you for not laughing or scoffing when I decided to pursue a doctorate and for your unwavering support and belief in me through all the years. Erin, thank you for getting excited with me about my accomplishments and my interests. Mom, thank you for not pressuring me to do too much and thank you for always being impressed by me. Dad, thank you for teaching me to aim high, to not be timid, and to not give up. Dad, you have taught me resilience through your words and actions and that is a life lesson that is invaluable. Mom and dad, thank you for being generous and supporting me financially through many years of school. Your sacrifice has not gone unnoticed.

To my church family at New Life Baptist Church, words cannot express the emotional and spiritual support you have provided since moving to College Station. Thank

you for being the reason I grew passionate about Third Culture Kids and for teaching me that my career can be a vessel to be involved in missions. Thank you for the countless friendships, shoulders to cry on, laughs, prayers, and support. Thank you for pouring into me spiritually through discipleship, serving, life group, sermons, and fellowship.

To my husband, Collin, you have been my best friend since dissertation proposal and you have been the most steady human rock in my life through all of the crazy that life threw at us since then. I am so thankful that this season of me stressing over dissertation is almost over. You deserve a PhD in Marriage just for putting up with me and all the cortisol that must have been coursing through my body the last 3 years. You have been so patient, kind, gentle, loving, and selfless towards me in this season and I am so grateful you married me.

To my God, the God of the Bible, maker of heaven and earth, and somehow also the God who cares about every one of my anxious thoughts and shed tears along the way, to you alone be the glory. I hope and pray that this humanly accomplishment will only be used to bring you honor, glory, and praise. In all of your wisdom and knowledge, you saw fit before you created anything to choose me to be your beloved child. Despite my rebellious heart, you created a way for me to be reconciled to you: by sending your Son to live a perfect life, die on the cross, and rise on the third day. Thank you for being a constant in my life, especially during these last 6.5 years filled with heartbreak, broken homes, dating, engagement, cancer, marriage, moving, and mourning. You, God, only You, have sustained me and provided for me. In Philippians 3:8-11, Paul recounts that all of his humanly accomplishments are worth nothing compared to knowing Christ Jesus. This dissertation and degree would be pointless and worthless if it didn't bring me to

understand you and love you more and if I didn't share that with the world. Father God, I pray that this is true in my life.

CONTRIBUTORS AND FUNDING SOURCES

Contributors

This work was supervised by a dissertation committee consisting of Dr. Cynthia Riccio (chair), Dr. Jeffrey Liew (co-chair), and Dr. Krystal Simmons of the Department of Educational Psychology at Texas A&M University, Dr. Christine Stanley of the Department of Educational Administration and Human Resource Development at Texas A&M University, and Dr. Nathan Clemens of the Special Education Department at the University of Texas at Austin.

Funding Sources

There are no outside funding contributions to acknowledge related to the research and compilation of this document.

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CHAPTER I

INTRODUCTION

As the globalization of our world increases, a growing level of diversity can be observed in the population of individuals seen in American schools, hospitals, and community mental health settings. According to the U.S. Census Bureau, between 2000 and 2010 the population of ethnic minority adults in America grew by 5%. Interestingly, these trends are even larger for children. Between 2000 and 2010, the population of minority children in America grew by 7%. In this reality, the need for practitioners to be culturally competent is of utmost importance. Mental health care professionals including those working with children and adolescents must seek to understand the diversity of individuals seen in their practice in order to provide effective services such as assessment, consultation, and therapy.

One unique and growing group of culturally diverse children and adolescents are “Third Culture Kids” (TCKs). As defined by Pollock and Van Reken (2009), a Third Culture Kid is a “person who has spent a significant part of his or her developmental years outside the parents’ culture” (pg. 13). The term was coined by Drs. Ruth Hill and John Useem during their time in India during the 1950s. They witnessed individuals who identified partially with their passport or parents’ culture (i.e., *first* culture), but having spent a significant amount of their developmental years in a different culture, they also identified partially with their host culture (i.e., *second* culture). What resulted from this combination of cultures is a type of *third* culture, interstitial in nature, and not fully aligned with any one culture (Pollock & Van Reken, 2009). A person’s passport culture is typically

the culture in which they were born and for which they have a passport. Some TCKs may have two passports if they have dual citizenship. Most often the TCKs passport culture aligns with one or both of their parents' cultures; however, this is not always the case. Definitions with regard to TCKs are often incomplete or do not fully describe all of the individuals that may consider themselves TCKs due to the great diversity often found in this population. Therefore, definitions should be considered helpful guidelines and not fixed or definitive rules. To be clear, TCKs can come from any culture and may be hosted by any other culture. This transition is not only from a higher socioeconomic status to a lower one or vice versa, but there are TCKs who have passports from all over the world and may be in a host culture all over the world.

Another defining feature of TCKs is that they often feel more connected to other Third Culture Kids than they do to individuals of a single culture, even if that single culture is one with which they are intimately familiar (Pollock & Van Reken, 2009). For example, a TCK born in America who grew up in China may feel as if they have more in common with another TCK who was born in India and grew up in Mexico than with someone who was born and raised in either America or China.

Across the literature, several other terms have been used to describe individuals with similar cross-cultural experiences, such as Cross-Cultural Kids (CCK; Van Reken & Bethel, 2005), missionary kids, military kids (or brats), and children of business expatriates. For clarity and consistency, the TCK term will be used to discuss the research literature in this area on children who lived cross culturally for a significant portion of their life before returning to their home culture or who have not yet returned to their first

culture. Individuals who did not have this third culture experience will be described as non-TCKs.

It is important to note that TCKs are a quite diverse population of individuals; however, research and information about TCKs may not best describe other diverse populations such as refugees, immigrants, migrants, or asylum seekers. Populations such as refugees or asylum seekers often are in a highly stressful situation that requires them to relocate due to fleeing war, persecution, or political turmoil. These individuals are not typically considered TCKs and are not the focus of the current research. Populations such as immigrants and migrants are often traveling and moving cross culturally as a permanent transition with little to no expectation of returning to their original culture. These individuals are also not typically considered TCKs and are not the focus of the current research. It is important to note that TCKs can be considered to have a higher level of privilege and opportunity compared to others who move cross culturally. TCKs' cross-cultural living is often by choice (e.g., missionary), as a result of privilege or status (e.g., business venture, political leader) and is seen as a positive opportunity (e.g., education). Therefore, the focus, findings, and implications of the current study cannot be overgeneralized to other populations living cross-culturally.

TCK Characteristics

There is evidence that TCKs and non-TCKs differ in systematic and significant ways (Dewaele & van Oudenhoven, 2009; Gerner, Perry, Moselle, Archbold, 1992; Selmer & Lam, 2004). The literature does not always agree upon the ways in which these groups differ and few studies have systematically measured both groups and compared the two (Dewaele & van Oudenhoven, 2009; Gerner et al., 1992; Selmer & Lam, 2004; Klemens &

Bikos, 2009). In general, across most studies, TCKs seem to have several areas of strength and sources of resilience, as well as other areas in which they may be at-risk for experiencing social and psychological difficulties.

Difficulties that TCKs may experience include problems with social relationships (Fail, Thompson, & Walker, 2004; Lijadi & Van Schalkwyk, 2014), family relationships (Gerner et al., 1992; Gillies, 1998), and emotional/behavioral problems (Choi & Luke, 2011; Dewaele & van Oudenhoven, 2009; Gilbert, 2008; Klemens & Bikos, 2009; Peterson & Plamondon, 2009). These problems experienced by TCKs as minors may put them at greater risk for emotional and behavioral difficulties as adults.

Strengths that TCKs may demonstrate include greater acceptance of others' cultures (Gerner et al., 1992), being better suited to work overseas (Selmer & Lam, 2004), positive relationships with family members (Peterson & Plamondon, 2009; Lijadi & Van Schalkwyk, 2014; Useem & Downie, 1976), and being more open minded (Dewaele & van Oudenhoben, 2009). These strengths and protective factors may result in higher resilience and positive outcomes for TCKs as they enter adulthood. Research of TCKs in adulthood, commonly referred to as Adult Third Culture Kids (ATCKs), and how they compare to their non-TCK adult peers is limited.

Gaps in Current Literature

TCKs are not a new group of children; however, the established definition and study of this group is relatively recent. As a result, the systematic research of this group is in its infancy. Much of the published research is based on individuals' observations, qualitative and narrative methodology, and frequent use of small groups or case studies. Although this information is helpful and beneficial, as the population grows, quantitative,

larger-sample research will be necessary. Additionally, few studies have directly compared TCKs with non-TCKs in terms of social, emotional, and psychological function and long-term outcomes. In order to understand and serve the TCK population more effectively, it is important to determine how TCKs compare and differ from individuals who did not have their unique cultural experience(s). Little research has focused on resilience and its role in TCKs' psychological well-being. Despite the clear need for additional research in this area and with the TCK population, the current literature in this field is plagued with limited methodologies and small sample sizes.

Purpose of Present Study

The characteristics of TCKs and ATCKs, both strengths and challenges, are likely to describe a unique population that may present with problems in our nation's schools, universities, and work places. With additional research and knowledge about this population, psychologists in school and community settings may be able to better serve TCKs and their families. For example, by understanding some of the specific challenges and risk-factors faced by TCKs, a school psychologist may be able to inform teachers and parents about the areas that may be of particular struggle for the student in order to prepare prior to departure. They may be able to suggest individual counseling or support groups with others of diverse cultural backgrounds following re-entry. Additionally, knowing some of the strengths and positive aspects of the TCK experience, mental health professionals may be able to draw from and use a strengths based perspective when working with a client to address their needs. Ultimately, the goal for the present study is to answer the following research questions:

Research Question 1.

Do young adult TCKs differ from a non-TCK young adult sample in their social/emotional/behavioral health functioning, resilience, and interpersonal support? It is hypothesized that TCKs and non-TCKs scores on measures of resilience, interpersonal support, anxiety, depression, and anger will be significantly different.

Research Question 2.

Does the relation between interpersonal support or resilience and social/emotional/behavioral health status differ depending on TCK or non-TCK status? Because of the difficulty TCKs have building long-term, deep relationships with peers, it is hypothesized that interpersonal support will have a stronger relation with social/emotional/behavioral health status in non-TCKs than in TCKs. Conversely, because of TCKs' frequent life changes and expected high level of resilience, it is hypothesized that resilience will have a stronger relation to social/emotional/behavioral health status in TCKs than in non-TCKs.

Research Question 3.

For young adult TCKs, do factors related to the Third Culture experience (i.e., total years spent living abroad, age when first moved abroad, number of locations lived abroad, number of furloughs, average length of furlough, and age of repatriation) correlate with the social/emotional/behavioral health functioning, resilience, or interpersonal support? It is hypothesized that TCK scores on measures of anxiety, depression, anger, resilience, and interpersonal support will be significantly related to the Third Culture experience factors.

Research Question 4.

For young adult TCKs, are interpersonal support and/ or resilience better predictors of social/emotional/behavioral health functioning than third culture experience factors? It is hypothesized that both resilience and interpersonal support will be a better predictor of social/emotional/behavioral health functioning than TCK experience factors.

CHAPTER II

LITERATURE REVIEW

The term Third Culture Kids (TCKs) was first coined in the 1950s. Drs. Ruth Hill and John Useem noticed individuals who were spending their developmental years living outside of their parents' culture. They recognized that these children identified partially with their passport or parents' culture (i.e., *first* culture), but having spent a significant amount of their developmental years in a different culture, also identified partially with their host culture (i.e., *second* culture). The result was a type of *third* culture that did not quite fully match any one culture (Pollock & Van Reken, 2009).

TCK Characteristics

Research supports a systematic and significant difference between TCKs and non-TCKs (Dewaele & van Oudenhoven, 2009; Gerner et al., 1992; Selmer & Lam, 2004); however, the differences between these groups is not found consistently across the literature and few studies have systematically measured both groups and compared the two (Dewaele & van Oudenhoven, 2009; Gerner et al., 1992; Klemens & Bikos, 2009; Selmer & Lam, 2004). In general, most studies find that TCKs have areas of both difficulties and strengths as compared to non-TCKs.

TCK Difficulties

Logically, there is reason to believe that TCKs can be significantly negatively affected by their experience adjusting to cultures. Some of these adjustments occur when moving from one non-passport culture to the next non-passport culture. This situation occurs most common in military families who may move overseas more frequently.

Additionally, these adjustments may occur when families return to their passport culture on furlough or short term breaks from their host culture, which often occurs for missionary families or business expatriate families who may return for a few months every few years. Other adjustments may occur during more permanent moves to their passport culture, such as when they return for college or once they graduate high school. Overall, the difficulties that TCKs experience can be grouped into several areas: social relationships, family relationships, and emotional/behavioral differences.

Social and Family Relationship Difficulties. Most researchers agree that with TCKs' frequent moves, language barriers, and cultural differences, building and maintaining close friendships can be difficult. In a sample of 11 former international school students, Fail et al. (2004) used narrative methodology to identify that a lack of sense of belonging and marginalized social identity are areas in which TCKs would experience the world differently than their non-TCK peers. Adults (ranging in age from 45 to 65 years) that are 20-50 years removed from their international education experience explain that feelings of not fitting in are a result of the tension between returning "home" to a culture in which they should be familiar, when in reality they may be feeling completely out of context. Furthermore, although their passport culture is technically where they are citizens, where they likely have lived or visited, and likely includes individuals who share physical attributes or speak a familiar language, TCKs often feel less at "home" in their passport culture. This creates a difficult challenge for new friends of the TCK to understand, and others may discount the amount of cultural stress TCKs experience because they physically, verbally, and legally blend in (Fail et al., 2004).

Another autobiographical, narrative study also found that TCKs experienced difficulties in social relationships. In a sample of 10 young adult TCKs (ages 18-22), Lijadi and Van Schalkwyk (2014) used collage making, story telling, and reflection to better understand TCKs social relationships. Although some of the TCKs interviewed described forming friendships quickly, they also reflected that their relationships were sometimes superficial and less meaningful due to their high frequency moves. On a related note, the authors found that the TCKs were withdrawn in their relationships, which was apparent in the TCKs' descriptions of their social interactions, self-doubt, and fear of abandonment. The same authors in an exploratory 2018 study found that in the 21st century, international schools may be more difficult for TCKs. Using narrative from 33 ATCKs reporting on their experience in primary and secondary international schools, Lijadi and Van Schalkwyk (2018) found that due to more local involvement in international schools, ATCKs continued to feel like an outcast in a setting that typically would be more comfortable for them.

In a study of 15 female TCK college students, Choi, Bernard, and Luke (2013) explored the friendships these women had by asking them to rank a set of characteristics describing their closest friends. They found that three friendship types emerged: functionally connected, socially connected, and emotionally connected. The most common friendship group for this sample was the functionally connected type. The functionally connected type of friend was described as being used as a resource and having a low level of closeness with the TCK. This is in contrast to the least common type of friendship described by young adult TCK women, the emotionally connected type. The emotionally connected type of friend was described as a nurturer with a high level of closeness with the

TCK. This finding supports the idea that TCKs may have a difficult time building strong and deep friendships with non-TCKs.

In a sample of nine missionary kids, Kortegast and Yount (2016) explored the relationship between faith, family, and TCK transition to college after attending a transition seminar, a camp like experience that is meant to help TCKs transition back to the United States at college. Through a series of interviews, one student shared that she was surprised to see so many peers when transitioning to college because she was used to being around adults. Another student reported that peers did not know her that well because they did not have the full story, which made it difficult to bond with others at college. One student shared that she thought she would “connect well with international students or other TCKs but found that was just really inaccurate” (Kortegast & Yount, 2016, p. 236). Participants also reported a positive change in their relationships within their family members.

The family unit is also an aspect of the TCK life that can be negatively affected by the transitions and added stressors of a third culture experience. Some researchers have found that the stress of moving and demands that the new setting places on the family system can be detrimental (Gerner et al., 1992; Gillies, 1998). For example, a child who does not meet the standards of the new culture or a child with challenging behavior might be the cause of much frustration and disappointment. Gillies (1998) explains that the additional pressure of representing a company or country in a foreign land, in the case of a businessperson or government official, can lead to stressed family relationships.

Emotional/Behavioral Difficulties. Several studies have found a relation between TCKs and increased risk for emotional/behavioral difficulties. For example, in a study

utilizing a phenomenological qualitative methodology, Choi and Luke (2011) found that frequent psychological symptoms described by a sample of six TCKs (18-25 years old) included loneliness, depression, withdrawal, and anxiety. In a qualitative study of 11 adult missionary kids (mean age = 31; SD = 9.02) of Korean descent and adults who worked closely with missionary kids, Kim, Cheon, Hyun, Chang, and Yoo (2016) found that a common theme in the TCKs' interviews was mental health concerns such as depressive symptoms, suicidality, anxiety, trauma-related experiences.

Smith and Kearney (2016) used qualitative methods to explore the repatriation of United States TCKs in college and what factors impacted that experience. Twenty participants aged 18 to 35 years old participated in semi-structured interviews and a drawing about his or her experience in college. They found that several themes emerged from the participants: difficulty with cultural differences, tendency to gravitate towards others with similar cross cultural experiences, feelings of anger and depression, and a desire to share their story. Smith and Kearney (2016) describe the participants' feelings of anger and depression as being part of a grief process related to the loss associated with a mobile and cross cultural lifestyle.

There is also evidence that the magnitude of these negative symptoms experienced by TCKs is greater than non-TCK peers. For example, in a study of 41 TCKs and 38 non-TCKs aged 13-15 living in the United Kingdom, Dewaele and van Oudenhoven (2009) found that TCKs were significantly more likely to score lower on a measure of emotional stability. Using a personality measure focused on multicultural stressors, the authors found that this difference in emotional stability was more accurately attributed to the TCKs level

of language dominance, specifically the acculturative process of language acquisition, and not simply the change in location.

Working with a subset of the TCK population (missionary kids), Klemens and Bikos (2009) found that in their sample of 63 TCKs between the ages of 18 and 25 years, TCKs scored significantly lower on measures of psychological well-being as compared to a sample of 63 non-TCK peers. Similar to previous findings, Klemens and Bikos (2009) attributed lower psychological well-being to acculturation level.

Related to acculturation level, some studies have focused on factors related to the third culture experience, such as number of repatriations (i.e., returns to home culture), and how they negatively affect psychological well being. For example, in a survey study of 170 TCKs (ages 18-25) who had returned to America (their passport country), Peterson and Plamondon (2009) found that for both men and women total number of locations lived was negatively related to authoritarianism in both men and women. This finding is not surprising when considering that cross cultural living often seems to be opposed to authoritarianism, a personality trait that is closely linked with prejudice, low openness, and discrimination. The authors found that repatriations (i.e., returns to passport culture) appear to be a more negative and highly stressful experience than the initially moving cross culturally because repatriation threatens TCKs worldviews. Specifically, for women, number of repatriations had a positive relationship with authoritarianism. These traits would be especially problematic for TCKs who are consistently surrounded by those of different backgrounds. According to Peterson and Plamondon (2009), terror management theory (Greenberg, Solomon, & Pyszczynski, 1997) explains the relationship between these factors in women. Terror management theory “suggests that cultural rootedness

diminishes personal terrors of dying, and threats to cultural identity results in increased anxiety” (Peterson & Plamondon, 2009, pg 756). For men the number of repatriations had a direct relation with less positive affect. Positive affect was measured by a self-report rating scale that used both adjectives (e.g., enthusiastic, optimistic) and statements (e.g., My future looks good) scored on a 5-point Likert scale.

In addition to acculturation and number of repatriations, the amount of grief and the efforts made to process grief also play a major role in the psychological well being of TCKs. Using a qualitative, naturalistic methodology with 43 adult TCKs ages 19 to 61 years, Gilbert (2008) uncovered several themes of grief including tangible losses such as pets, friends, and possessions as well as intangible losses such as security, consistency, and identity. Gilbert explains that these losses often go unresolved in a TCKs’ life because they remain unrecognized as a loss and/or friends or family members do not address the loss appropriately, not allowing the TCK to grieve. Moreover, these feelings of grief can last for years, long after the loss occurred.

Long-term Negative Effects. Poor social and family relationships as well as poor emotional and behavioral health may negatively affect the TCK during the transition and while abroad, but these difficulties also can have longitudinal detrimental effects. A lack of sense of belonging and a marginalized social identity, areas identified by Fail et al. (2004), have been found to be related to depressed mood. For example, a lack of sense of belonging has been identified as significantly related to greater severity of depression, hopelessness, and suicidality in a sample of clinically depressed patients (Fisher, Overholser, Ridley, Braden, & Rosoff, 2015). Fisher and colleagues also posit that a sense of belonging is likely related to the etiology and longevity of depressive symptoms.

Additionally, marginalized social identity is significantly related to greater depressed mood because a poor social identity influences the way individuals interpret the world (Cruwys, South, Greenaway, & Haslam, 2015). Additionally, TCKs' superficial relationships with peers (Lijadi & Van Schalkwyk, 2014) has been found to be positively related to internalizing symptoms (depression and anxiety) as well as negatively related to resilience, a protective factor against mental health disorders (Taylor, Doane, & Eisenberg, 2013). The increased likelihood of TCKs to experience these factors (i.e., poor sense of belonging, poor social identity, superficial relationships, loss and grief) and the relation between these factors and increased internalizing symptoms are reasons to believe that TCKs may be at greater risk for depression and related psychological disorders than individuals without third culture experience.

TCK Strengths

Although many researchers have focused on the difficulties faced by TCKs, some researchers have identified positive aspects of the TCK experience. Exposure to new cultures and languages, developing supportive relationships with family members, and frequent opportunities to build new friendships are factors that may have a positive influence on long-term social and emotional health in TCKs.

In a sample of 1,076 adolescents from the United States including 222 non-TCKs as well as 489 TCKs living in Thailand and 365 TCKs living in Egypt, Gerner et al. (1992) found that TCKs had a greater interest in learning other languages, traveling, and living abroad in the future. Additionally, TCKs self-reported greater acceptance of other cultures as compared to their non-TCK peers (Gerner et al., 1992).

In their qualitative study of Korean TCKs, Kim et al. (2016) found that participants described their resilience as a personal strength. They reported that adaptability, flexibility, and broadened worldview resulted in their resilience. They also found that positive relationships with peers who shared their cross cultural experience was a positive coping mechanism for these TCKs.

Other research has hypothesized that because of these unique positive characteristics, TCKs might be the best suited for work overseas in the future (Selmer & Lam, 2004), thus affording them unique career opportunities. Specifically, in a sample comparing Hong Kong non-TCK adolescents (n = 103), British non-TCK adolescents (n = 88), and British TCKs currently living in Hong Kong (n = 63), Selmer and Lam found that TCKs both felt as if they are more “international,” and had more positive feelings about living internationally in the future. These findings are consistent with other reports comparing TCKs and non-TCKs (Gerner et al., 1992; Lam & Selmer, 2004).

Another area of strength observed in some studies is enhanced relationships in TCK families (Gillies, 1998). Despite the negative results on the family unit that some concluded (Gerner et al., 1992; Gillies, 1998), Peterson and Plamondon (2009) found a positive relation between a healthy relationship with parents and level of acculturation. Additionally, some researchers hypothesized that because the family unit experiences so many changes, the only common thread throughout the changes is the family unit themselves (Useem & Downie, 1976). This common thread along with the feeling of isolation when first moving to a new place that may have a language barrier and likely has a cultural barrier, results in the family relying on its own members as their support system. This reliance on the family creates stronger bonds between family members such as

siblings, which may not have occurred without the drastic or frequent changes of a cross-cultural lifestyle (Lijadi & Van Schalkwyk, 2014). Theoretically, being in an area where one shares a language only with one's family would lead to more time spent with one's family members than if located somewhere with a common language. By contrast, Gerner et al. (1992), in a study comparing United States internationally mobile (IM) children to United States non-IM children, found that there was not a difference in closeness of the family members between these two groups.

In the previously mentioned Dewaele and van Oudenhoven (2009) study involving UK adolescents, positive personality factors also were found to be associated with TCKs. Specifically, in the dimension of "Openmindedness," TCKs obtained significantly higher scores than non-TCKs. Interestingly, there was no relation ($p < .07$) found between the dimension measuring cultural empathy and TCKs.

Strengths of culturally mobile individuals and families discussed previously can be beneficial while in the midst of the constant change and transition, but also can affect long-term positive mental health and functioning. For example, Ittel and Sisler (2012) found that TCKs who reported greater social support from friends had fewer problems with cross-cultural adjustment. They also found that a family that fosters high self-efficacy in TCKs could minimize the negative effects of cross-cultural adjustment. These protective factors (i.e., social support, family support, self-efficacy), may lead to a buffering of the negative effects of cross-cultural adjustment previously mentioned and actually lead to benefits that non-TCKs do not experience. For example, TCKs have been found to graduate college at higher rates than non-TCKs, which will likely continue to benefit TCKs for years (Useem & Cottrell, 1993). The success of many TCKs in college and in the work force in light of

the incredible stressors experienced in their lives suggest that TCKs may be more resilient compared to non-TCKs; however, quantitative research comparing TCKs with non-TCKs is lacking. Although the relation between stressful situations and well-being as explained by level of resilience in children has been well documented with the general population (Smith & Carlson, 1997), it has not extensively been examined with TCKs specifically.

Adult TCKs and Longitudinal Effects

Third culture kids who have reached adulthood are commonly called adult third culture kids or ATCKs. ATCKs, although commonly living in their passport culture, face a variety of identity and transition issues, regardless of when reentry has occurred. These struggles can remain present and constant for years or diminish initially only to resurface after some time (Fail et al., 2004; Gilbert, 2008). Similarly, ATCKs that have returned to live in their passport culture years ago can still struggle with similar issues as their counterparts that transitioned more recently.

Although many TCKs return to their passport culture and face reentry difficulties while they are minors, it is also common for reentry to occur after high school graduation and just before attending college. The difficulties of transitioning to college and the factors that affect social-emotional adjustment in college for the general population are widely documented (Azmitia, Syed, & Radmacher, 2013; Brannan, Biswas-Diener, Mohr, Mortazavi, & Stein, 2013; Johnson, Gans, Kerr, & LaValle, 2010). Unfortunately, very little research has investigated ATCKs specifically and how they compare to their non-TCK adult counterparts in terms of transition and adjustment during their college and young adult years.

CHAPTER III

METHODS

The current study used a self-report survey to collect both quantitative (e.g., Likert scale items, total score, number of life experiences) and qualitative information (e.g., associated company) from the participants about their own past life experiences and current social, emotional, and behavioral health functioning. An a priori power analysis using G*Power 3.1 program (2009) was conducted to determine necessary sample size. Based on a *t*-test, an assumed conservative effect size (f^2) of .60, an error probability of .05, and a power of .95, a sample size of 122 was required with 61 in each group.

Participants and Recruitment

The present study included participants between the ages of 18 and 25 years old, who could read English. In order to be eligible for the TCK group, the participants had to have lived outside the home culture of their parents' for at least 6 months before reaching the age of 18. For the non-TCK group, participants only needed to be between the age of 18 and 25 inclusive, and read English. An overall sample of 120 participants was targeted, including TCKs and non-TCKs.

TCKs were recruited through various means such as social media groups and email listservs. Following University IRB approval, recruitment blurbs were posted in various TCK focused Facebook groups. TCK participants also were recruited through email listservs (following moderator permission) such as TCKresearch.com, as well as organizations such as Mu Kappa, a college fraternity with a focus on young adults who grew up in a missionary context. The survey also was sent out through an alumni listserv

of Faith Academy, an international school in the Philippines. Further, the recruitment blurb was shared with staff members at several missionary organizations (e.g., Barnabas International, Black Forest Academy, To Every Tribe) with intentions of them sharing the blurb to their members. Non-TCK recruitment occurred using various means. Recruitment blurbs were sent using email listservs that reach a variety of current Texas A&M University students and employees (e.g., Campus General Interest Email List). Additionally, non-TCK recruitment occurred through personal networking. The advertisements used for TCK and non-TCK recruitment can be found in Appendix A.

Inclusion/Exclusion Criteria

To be included in the study, individuals were required to be 18 to 25 years old and to agree to the consent form. No other exclusion criteria were used. Participants who did not consent to participate prior to starting the online survey, or who indicated on a preliminary question that they were younger than 18 or older than 25 years old were not permitted to continue completing the survey. With all the efforts for recruitment, a sample of 480 participants consented to participate. Of these, 91 TCKs and 245 non-TCKs completed the survey. Descriptive data are provided in Chapter IV.

Measures

All measures were completed by participants as part of an online survey. The following measures were included in the online format.

Participant Demographics Survey

In an effort to maintain confidentiality of the participants, participants were only asked to provide their age. Due to the sensitive nature of the emotion related questions, confidentiality was a top priority in this study.

PROMIS Domain Specific Measures

Three scales were administered to measure the levels of emotional distress (i.e., anger, depression, anxiety) participants were experiencing at the time of the survey. These measures came from the Patient-Reported Outcomes Measurement Information System (PROMIS; HealthMeasures.net) network and included a short form used to measure depression (PROMIS Short Form v1.0 – Depression 8b), anxiety (PROMIS Short Form v1.0 - Anxiety 7a), and anger (PROMIS Short Form v1.1 – Anger 5a). All three scales used the same 5-point scale (never, rarely, sometimes, often, always) that measured frequency of symptoms and all three scales asked the participant to report status across the past seven days. Higher scores on the PROMIS measures indicate more symptoms of the measured domain.

Funded by the National Institutes of Health, these scales have been developed using well-supported item development methodology and psychometric testing (Riley, Pilkonis, & Cella, 2011). The anger scale is comprised of five items, the anxiety scale is comprised of seven items, and the depression scale is comprised of eight items. Originally each scale included a larger bank of items (28 items for depression, 29 for both anxiety and anger); however, Cella and colleagues (2010) determined that the shorter scales each reached a correlation of 0.96 with their longer forms. Additionally, the short scales demonstrated correlations ranging from 0.51 to 0.83 with other established measures such as the Aggression Questionnaire (Buss & Perry, 1992), the Mood and Anxiety Symptom Questionnaire (Watson & Clark, 1991), and the Center for Epidemiologic Studies-Depression Scale (Radloff, 1977). Intercorrelations among the scales ranged from 0.59 to 0.81 (Cella et al., 2010). Test-retest reliability of the depression scale has been reported as

excellent ($r = .80$) and of the anger and anxiety scales have been reported to be in the good range (anger $r = .65$; anxiety $r = .73$; Narrow et al., 2013).

The internal consistency of the PROMIS domain scales for the dataset were calculated. All three scales in the sample, depression ($\alpha = .93$), anxiety ($\alpha = .91$), and anger ($\alpha = .89$) had high internal consistency, indicating that the items and the total score on the PROMIS domain scales consistently measure the same construct.

Interpersonal Support Evaluation List

The Interpersonal Support Evaluation List (ISEL-12; Cohen, Mermelstein, Kamarck, & Hoberman, 1985) is a 12-item scale of social support. This rating scale has four response options: definitely true, probably true, probably false, and definitely false. Higher scores on the ISEL-12 indicate higher levels of interpersonal support.

In a study evaluating the psychometric properties of the ISEL-12 in a Hispanic population, Merz and colleagues (2014) found that the ISEL-12 was negatively related to self-reported stress and poor affect ($r_s = -.39$ to $-.35$, $p < .001$) as well as positively related to the extent of valued activities and number of social roles ($r_s = .33$ - $.40$, $p < .01$). The ISEL-12 includes three subscale scores that measure Tangible Support, Belonging Support, and Appraisal Support. The internal consistency reliability of the ISEL-12 was above .70 in a Hispanic sample (Merz et al., 2014). Cronbach's alpha in a sample of cardiovascular, osteoarthritis, and cancer patients was acceptable at .86 (Cohen, 2008).

The internal consistency of the ISEL for the dataset were calculated. The ISEL's 12 items had high internal consistency ($\alpha = .88$), indicating that the items and the total score on the ISEL scale consistently measure the same construct.

Brief Resilience Scale

The Brief Resilience Scale (BRS; Smith, Dalen, Wiggins, Tooley, Christopher, & Bernard, 2008) is a measure of an individual's ability to recover from stress. The BRS includes six items that ask about an individual's ability to bounce back after difficult events and the respondent selects from one of five response options: strongly disagree, disagree, neutral, agree, and strongly agree. Higher scores on the BRS indicate more resilience.

In a review of resilience scales, Windle, Bennet, and Noyes (2011) examined 19 scales and found the BRS to be in the top three in terms of its psychometric properties including content, criterion, and construct validity, internal consistency, reproducibility, interpretability, responsiveness, and floor and ceiling effects. Smith et al. (2008), in a sample of young adults (mean age = 20), found that the BRS had a positive relation to personal characteristics such as optimism ($r = 0.45, p < .01$), coping ($r = 0.40, p < .01$), and social support ($r = 0.28, p < .01$). In a sample of college students, test-retest reliability (Intraclass Correlational Coefficient; ICC) one month apart was 0.69 and internal consistency (Cronbach's alpha) was 0.87.

The internal consistency of the BRS for the dataset was calculated. The BRS's six items had high internal consistency ($\alpha = 0.87$), indicating that the items and the total score on the BRS scale consistently measure the same construct.

TCK/non-TCK Sorting Item

The following sorting question was used in the survey to identify TCKs and non-TCKs: "Did you spend more than 6 months living outside of your passport country before the age of 18?" Participants who answered "yes" to this sorting question were routed to additional questions in the online survey relating to their experience abroad, which is

described in the following section. Participants who answered “no” to this question were routed to the conclusion of the survey.

TCK-Specific Items

TCK participants answered a series of questions related to their experience abroad. These questions included total amount of time spent living abroad, reason for living abroad (e.g., military, religious, business), specific organization affiliated with living abroad (e.g., the army, Exxon Mobil, International Mission Board), specific locations lived, amount of time spent living in each location, age when first moved to each location, the description of the location (i.e., rural, suburban, urban), number of furloughs or returns to passport culture, average length of furlough, and age of repatriation. This portion of the survey is included in Appendix B.

Procedures

IRB approval was obtained from Texas A&M University. Eligible participants were recruited through Facebook groups and email list-serves. Upon recruitment, participants were directed to complete the online survey via a link provided in the recruitment paragraph. All measures were completed electronically using Texas A&M University’s survey platform, Qualtrics®. All participants were asked to read a consent form that informs them of the risks associated with participating (e.g., thinking about previous experiences and negative emotions), potential benefits (i.e., informing understanding of young adults’ social and emotional health), confidentiality, their option to skip items they do not feel comfortable in answering, and their option to stop the survey at any time. Next, participants were asked to consent to participate in the survey. The consent document can be found in Appendix C. Permission was obtained from measures’ (i.e.,

PROMIS, BRS, ISEL-12) authors and documentation of this permission can be found in Appendix D, Appendix E, and Appendix F.

Sections of the survey progressed in the following order: (1) participant demographics, (2) PROMIS- Depression, (3) PROMIS-Anxiety, (4) PROMIS-Anger, (5) ISEL-12, (6) BRS, (7) TCK sorting question, and (8) TCK specific items. The first page of the survey included the consent form and space to indicate consent. The second page of the survey included confirming the participant was between 18 and 25 years old. The third page asked the participant to specify their age and included the PROMIS depression and anxiety measures. The fourth page included the PROMIS anger measure. The fifth page included the ISEL-12. The sixth page included the BRS. A seventh page asked the TCK sorting question. The eighth page asked why the participant was abroad, what company or organization they were affiliated with, and total time spent living abroad. The ninth page asked about details of the locations abroad, amount of furloughs, and length of furloughs. The tenth page asked if the participant had returned to their passport culture. The last page was reached after the tenth page for TCK participants or if the participant answers “no” to the TCK sorting question. The last page included the following statements: “Thank you for participating in the survey. If you feel upset, please contact the HelpLine (979-845-2700), a service that can help support you with trained peers and graduate assistants.”

Data Analyses

After data collection was complete, descriptive statistics were examined for all variables (i.e., years spent abroad, PROMIS-Anger, PROMIS-Anxiety, PROMIS-Depression, BRS, ISEL-12). Variable scores were evaluated for normality, including the Shapiro-Wilk test statistic, W (Shapiro & Wilk, 1965). Variable scores were considered to

be normally distributed ($p > .05$). Results of normality testing were confirmed using a Q-Q plot (Wilk & Gnanadesikan, 1968). Planned analyses included Multivariate Analysis of Variance (MANOVA), correlational analyses, and multiple regression. These are described in more detail in Chapter IV.

CHAPTER IV

RESULTS

Initial Data Cleaning

Initial data cleaning included identifying missing data and identifying which participants to include in the final analysis of data. In total, 480 people agreed to participate after reading the consent information. Of these people, 412 participants answered that they were between the ages of 18 and 25 years inclusive. Sixty-eight participants either answered 'No' or did not answer the question of whether they were between the ages of 18 to 25 inclusive; these 68 were eliminated from the dataset.

Of the 412 participants who began the survey, 37 participants did not indicate a specific age and were eliminated from the dataset as there was no way to confirm they were between the ages of 18 to 25. Of the remaining 375 participants, 26 did not answer the question about whether or not they had lived abroad. Due to the comparison nature of this study between those who had lived abroad and those who have not, this was a required piece of data and those 26 participants were eliminated. Upon examination of the remaining 349 participants, it was determined that 13 participants did not complete the study or left a disproportionate amount of items blank compared to the majority of participants and these 13 participants were eliminated. Therefore, 336 total participants' data were included in the final analyses.

Descriptive Statistics

Of the 336, 91 identified as TCK; the remaining 245 comprised the non-TCK group. Following data collection and considering the difference in group sizes for the

sample, an additional power analysis was conducted. Using the ratio between the group sizes (non-TCK to TCK ratio = 2.69), an effect size d of 0.6, an error probability of .05, and a power of .95 required at least 50 in one group and 136 in the other group resulting in a total sample size of 186 participants.

See Table 1 for the descriptive information by group. The means and standard deviations were calculated for age of participant, scores on the PROMIS scales, BRS, and the ISEL-12. These were calculated for the group as a whole as well as the TCK and non-TCK groups separately (see Table 1). There were no issues with skewness or kurtosis or other indicator that data did not meet assumptions of normality for these variables.

Table 1
Descriptive Information for All Variables

<i>Variable</i>	<i>TCK Group</i> <i>N=91</i>		<i>Non-TCK Group</i> <i>N=245</i>		<i>Total Sample</i> <i>N=336</i>	
	<i>Mean (SD)</i>	<i>Range</i>	<i>Mean (SD)</i>	<i>Range</i>	<i>Mean (SD)</i>	<i>Range</i>
Age (Years)	21.78 (2.28)	18-25	21.20 (2.20)	18-25	21.36 (2.23)	18-25
PROMIS Depression	17.27 (6.83)	8-37	18.15 (7.18)	8-40	17.91 (7.09)	8-40
Anxiety	17.67 (5.69)	7-33	18.64 (6.36)	7-35	18.38 (6.19)	7-35
Anger	11.53 (4.14)	5-23	11.88 (4.48)	5-25	11.79 (4.39)	5-25
BRS	20.42 (5.18)	6-30	19.82 (5.04)	8-30	19.98 (5.08)	6-30
ISEL-12	22.79 (6.98)	12-43	22.08 (7.35)	12-47	22.27 (7.25)	12-47

Note. TCK = Third Culture Kid; PROMIS = Patient-Reported Outcomes Measurement Information System; BRS = Brief Resilience Scale; ISEL-12 = Interpersonal Support Evaluation List – 12.

Additional descriptive statistics were calculated for the questions specific to the TCK group (see Table 2). Information is provided based on the number of participants who responded to each question. It was noted that two of the variables (i.e., number of furloughs before age 18 and average length of furloughs) had a skewness over positive three and a kurtosis over positive 3. This may have been due to extreme values provided by two participants.

Table 2
Descriptive Data for TCK Group

<i>Descriptives</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>Minimum</i>	<i>Maximum</i>
Total time living abroad (months)	90	108.10	74.14	6	273
Number of furloughs before age 18	74	5.15	8.11	0	50
Average length of furloughs (months)	69	9.18	23.47	0	144
If returned, age (years) returned to passport culture?	55	14.71	5.60	1.0	25
Number of Locations lived	80	2.39	1.84	1	8
Age when first moved	77	4.44	4.92	.5	18

Note. TCK = Third Culture Kid.

A wide range of responses were received regarding the question of how long respondents lived abroad. The most often length of time spent living abroad was between three and six years (23.3%); however, this sample appears to have a wide degree of variance of time spent abroad ranging from only 6 months to almost 23 years. Considering

the participant age range between 18 and 25 years, the participants who have spent more than 18 years living abroad likely either have not returned to their passport culture or have returned in only the last few years (see Table 3).

Table 3
Time Spent Living Abroad Frequency

<i>Time spent living abroad (n = 90)</i>	<i>Frequency</i>	<i>%</i>
6 – 36 months (3 years)	19	21.1
39 – 72 months (3 years and 3 months to 6 years)	21	23.3
77 – 108 months (6 years and 5 months to 9 years)	11	12.2
110 – 144 months (9 years and 2 months to 12 years)	11	12.2
147 – 180 months (12 years and 3 months to 15 years)	8	8.9
185 – 216 months (15 years and 5 months to 18 years)	13	14.4
222 - 273 months (18 years and 6 months to 22 years and 9 months)	7	7.8

The reasons for living abroad are detailed in Table 4. Initial answer choice options for this question included Business, Religious, Military, and “other” with a response box to explain. Based upon the explanations for the “other” box, as well as the question regarding affiliated organization, the researcher re-coded their responses to fit into several other categories: Education (e.g., boarding school, study abroad) and Family/Personal (e.g., parents decided to move, born abroad). Additionally, participants who indicated they lived abroad because of associations with the government (e.g., State Department, Ministry of Foreign Affairs) were added to the Military category.

Table 4

Reasons for Living Abroad

<i>Reason for living abroad (n = 90)</i>	<i>Frequency</i>	<i>%</i>
Business	27	30.0
Religious	24	26.7
Education	10	11.1
Military	13	14.4
Family/Personal	8	8.9
Birth	4	4.4
Government	4	4.4

Table 5

Number of Furloughs Frequency

<i>Number of Furloughs before age 18 (n = 74)</i>	<i>Frequency</i>	<i>%</i>
0	13	17.6
1	11	14.9
2	11	14.9
3	10	13.5
4-6	16	21.6
7-11	6	8.1
15+	7	9.5

As can be seen in Table 5 (and Figure 1), the majority (60.8%) experienced less than four furloughs (i.e., return to the passport culture) prior to age 18. For example, if a

TCK with an American passport is living in the Philippines, each return to America while living in the Philippines would be considered a furlough. A minimum length of a trip to qualify as a furlough was not defined. The range is large (from 0 to 50) furloughs for this sample of TCKs.

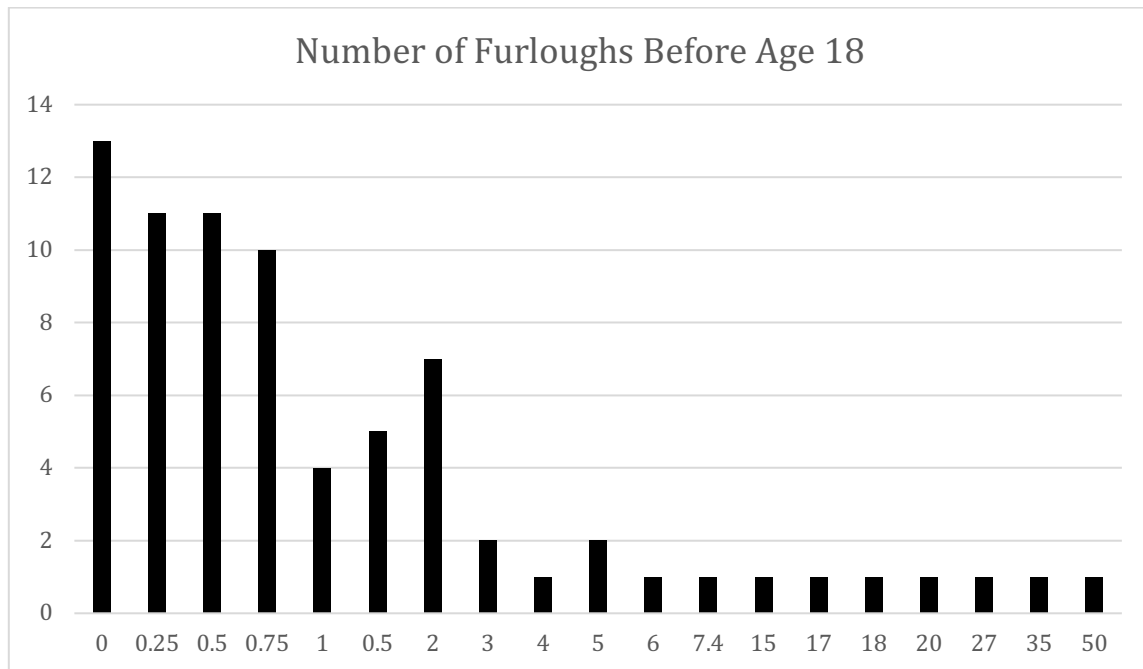


Figure 1. Number of Furloughs Before Age 18

For the 69 participants who answered, the average length of furloughs in months ranged from 0 months to 144 months (see Table 6). The most common response was one month in length.

For this sample, the majority (80%) were in three or less locations. Frequency data by number of locations is presented in Table 7.

Table 6

Average Length of Furloughs in Months Frequency

<i>Average length of furloughs in months (n = 69)</i>	<i>Frequency</i>	<i>%</i>
<1 month	13	18.8
1 month	17	24.6
1.5 months – 2 months	10	14.5
3 months – 6 months	10	14.5
7 – 10 months	6	8.7
10.5 – 12 months	6	8.7
24 – 144 months	7	10.1

Table 7

Number of Locations Frequency

<i>Number of locations (n = 80)</i>	<i>Frequency</i>	<i>%</i>
1	37	46.25
2	14	17.5
3	13	16.25
4	7	8.75
5	3	3.75
6	1	1.25
7	2	2.5
8	3	3.75

Participants also answered questions about the type of locations they lived in (e.g., rural, suburban, urban). The most common type of location lived in was suburban (See Table 8). Participants also provided information on city and country. For the first location which 79 participants reported, the most frequently mentioned countries were the Philippines (n = 8), Germany (n = 8), the USA (n = 6), the United Kingdom (n = 5), Japan (n = 4), Indonesia (n = 3), and Guam (n= 3). Only 1 or 2 participants reported other locations. All continents with the exception of Antarctica were represented in the first locations listed. For the second location, which only 42 participants reported the city and country lived, the most commonly mentioned countries were the Philippines (n = 7), Japan (n = 4), Thailand (n = 3), Germany (n = 3), and China (n = 3). For the third location, which only 28 participants reported, the most common response was Japan (n = 6), all other responses provided only by 1 or 2 participants. For the fourth location, which only 16 participants reported, the USA was the most common response (n = 3). For the fifth location, which nine participants reported, the most common response was Germany (n = 3). For locations 6, 7, and 8, all responses were provided by only 1 participant.

Table 8

Type of Locations Frequency

<i>Type of Location</i>	<i>Frequency</i>	<i>%</i>
Location 1 (<i>n</i> = 79)		
Urban	31	39.24
Suburban	35	44.30
Rural	13	16.46
Location 2 (<i>n</i> = 41)		
Urban	16	39.02
Suburban	17	41.46
Rural	8	19.51
Location 3 (<i>n</i> = 27)		
Urban	9	33.33
Suburban	14	51.85
Rural	4	14.81
Location 4 (<i>n</i> = 14)		
Urban	2	14.29
Suburban	10	71.43
Rural	2	14.29
Location 5 (<i>n</i> = 9)		
Urban	3	33.33
Suburban	6	66.67
Rural	0	0
Location 6 (<i>n</i> = 5)		
Urban	1	20
Suburban	4	80
Rural	0	0
Location 7 (<i>n</i> = 4)		
Urban	2	50
Suburban	2	50
Rural	0	0
Location 8 (<i>n</i> = 2)		
Urban	1	50
Suburban	1	50
Rural	0	0

Only 82 participants responded to the item on returning to their passport culture. The majority (76.83%) reported that they have returned to their passport culture (see Table 9).

Table 9
Return to Passport Culture Frequency

<i>Returned to passport culture frequency (n = 82)</i>	<i>Frequency</i>	<i>%</i>
Have returned	63	76.83
Have not returned	19	23.17

Fifty-five participants reported the age they returned to their passport culture. Of those who returned to their passport country, the most common response for age returned to passport culture was in later adolescence, between 15 and 18 years old (See Table 10).

Table 10
Age Returned to Passport Culture

<i>Age returned frequency (n = 55)</i>	<i>Frequency</i>	<i>%</i>
Between 1 and 6 years old	6	10.9
Between 7 and 12 years old	12	21.8
Between 15 and 18 years old	27	49.1
Between 19 and 25 years old	10	18.2

Results by Research Question

Research Question 1: *Do young adult Third Culture Kids differ from a non-TCK young adult sample in their social/emotional/behavioral health functioning, resilience, and interpersonal support?* It was hypothesized that TCK and non-TCK scores on the ISEL-12, BRS, PROMIS-Anxiety, PROMIS-Depression, and PROMIS-Anger measures would be significantly different.

An independent samples *t*-test was conducted to determine if the TCK and non-TCK group differed significantly based on age. There was a significant difference in the means for TCK age ($M = 21.78$, $SD = 2.28$) and non-TCKs age ($M = 21.20$, $SD = 2.20$); $t(334) = 2.13$, $p = 0.03$. Thus, despite the very similar mean and standard deviation for each group, the differences in sample size between the groups resulted in significant differences in ages by group; this may be a function of the significantly larger sample size of the non-TCK group. The effect size (Cohen's *d*) for this analysis is $d = 0.23$, which is considered small.

Due to the finding that age differed significantly, initial planned analyses were adapted to use age as a covariate. In order to test hypotheses and compare the means of the TCK group to the non-TCK group on the BRS, ISEL-12, PROMIS-Anxiety, PROMIS-Depression, and PROMIS-Anger measures, a Multivariate Analysis of Covariance (MANCOVA) was conducted using age as a covariate. MANCOVA indicated significant group differences for age (Wilks' Lambda $F = 2.93$, $p = .01$), but not for TCK status (Wilks' Lambda $F = 0.88$, $p = .49$). In other words, TCKs and non-TCKs, when controlling for age, did not significantly differ in their means on the measures of depression, anxiety, anger, interpersonal support, and resilience. Univariate results are presented in Table 11 for the variables of interest.

Table 11
Univariate Results for TCK Status with Age as a Covariate

<i>Variable</i>	<i>F</i>	<i>p</i>	<i>Partial eta²</i>
By Age			
PROMIS Depression	0.23	.63	.001
PROMIS Anxiety	0.19	.66	.001
PROMIS Anger	0.09	.77	<.001
ISEL-12	12.61	<.01	.036
BRS	0.29	.592	.001
By TCK status			
PROMIS Depression	0.89	.35	.003
PROMIS Anxiety	1.72	.19	.005
PROMIS Anger	0.39	.54	.001
ISEL-12	1.48	.22	.004
BRS	1.04	.31	.003

Notes. TCK = Third Culture Kid; PROMIS = Patient-Reported Outcomes Measurement Information System; BRS = Brief Resilience Scale; ISEL-12 = Interpersonal Support Evaluation List – 12; * $p < .05$, ** $p < .01$; $n = 336$

Research Question 2. *Does the relation between interpersonal support or resilience and social/emotional/behavioral health status differ depending on TCK or non-TCK status?* This question aims to determine if the relationship between interpersonal support and social/emotional/behavioral health status as well as the relationship between resilience and social/emotional/behavioral health status is the same in TCKs as non-TCKs. It was hypothesized that interpersonal support would have a stronger relation with social/emotional/behavioral health status in non-TCKs than in TCKs. Conversely, it was

hypothesized that resilience would have a stronger relation with social/emotional/behavioral health status in TCKs than in non-TCKs.

Partial correlational analyses were run between the PROMIS-depression, PROMIS-anxiety, PROMIS-anger, ISEL-12, and BRS for the TCK and non-TCK population separately. Due to the finding that age was a covariate between the TCK and non-TCK group, the correlational analyses were run using partial correlations which controlled for age. These partial correlations can be found in Table 12 (TCKs) and Table 13 (non-TCKs). The pairs of correlational coefficients found in the TCK and non-TCK population were then compared using the Fisher's z transformation method of comparing correlational coefficients as described by Steiger (1980). The Fisher's Z -statistic for each pair can be found in Table 14.

As shown in Table 12, for Third Culture Kids partial correlations between the PROMIS, ISEL-12, and BRS measures ranged from nonsignificant to moderately statistically significant. PROMIS Depression was positively correlated with PROMIS Anxiety, Anger, and interpersonal support and was negatively correlated with resilience. As symptoms of depression increased, symptoms of anxiety and anger also increased. Additionally, as symptoms of depression increased feelings of interpersonal support increased and resilience decreased. The PROMIS anxiety measure was positively correlated with anger and negatively correlated with resilience. In other words, as symptoms of anxiety increased, symptoms of anger increased and resilience decreased. Correlations between anxiety and interpersonal support failed to reach statistical significance. The PROMIS anger measure was positively correlated with interpersonal

support and negatively correlated with resilience. Correlations between interpersonal support and resilience failed to reach statistical significance.

Similar to the results in Table 12 describing Third Culture Kids, non-Third Culture Kids correlations (Table 13) between the PROMIS, ISEL-12, and BRS measures varied and some differences from the TCKs were noted. The PROMIS measures (depression, anxiety, and anger), as well as the interpersonal support measure, were all positively correlated with each other and all reached statistical significance. Additionally, the BRS was statistically significantly negatively correlated with all four other measures (i.e., PROMIS depression, anxiety, anger, and ISEL-12).

Table 12
Correlations (r_s) Between Scales in TCK Sample Controlling for Age

(r_s)	PROMIS Depression	PROMIS Anxiety	PROMIS Anger	ISEL-12	BRS
PROMIS Depression	1	.73**	.60**	.25*	-.55**
PROMIS Anxiety		1	.46**	.13	-.51**
PROMIS Anger			1	.33**	-.40**
ISEL-12				1	-.04
BRS					1

Notes. TCK = Third Culture Kid; PROMIS = Patient-Reported Outcomes Measurement Information System; BRS = Brief Resilience Scale; ISEL-12 = Interpersonal Support Evaluation List – 12.; * $p < .05$, ** $p < .01$; $n = 91$.

Table 13

Correlations (r_s) Between Scales in non-TCK Sample Controlling for Age

(r_s)	PROMIS Depression	PROMIS Anxiety	PROMIS Anger	ISEL-12	BRS
PROMIS Depression	1	.73**	.58**	.39**	-.54**
PROMIS Anxiety		1	.60**	.19**	-.50**
PROMIS Anger			1	.24**	-.37**
ISEL-12				1	-.30**
BRS					1

Notes. TCK = Third Culture Kid; PROMIS = Patient-Reported Outcomes Measurement Information System; BRS = Brief Resilience Scale; ISEL-12 = Interpersonal Support Evaluation List – 12.; * $p < .05$, ** $p < .01$. $n = 245$

Table 14 displays the Fisher's Z statistic for the pairs of the two correlational coefficients. For Fisher's Z statistic, numbers greater than the absolute value of 1.96 are considered statistically significant. In other words, when the Z-statistic is greater than the absolute value of 1.96, the difference between the two compared correlation coefficients is statistically significant. The only pair of correlations that was statistically significantly different from each other was for the ISEL-12 and the BRS ($z = 2.17$). All other pair differences did not reach statistical significance (i.e., $z < 1.96$). Therefore, the TCK sample and the non-TCK sample did not differ in how their interpersonal support or resilience related to their symptoms of depression, anxiety, and anger; however, the TCK and non-TCK sample did significantly differ in how their interpersonal support correlated with their resilience. Specifically, in a non-TCK sample, the correlation between interpersonal support and resilience is significantly stronger in a negative direction than in a TCK

sample. Thus, an inverse relationship between interpersonal support and resilience is stronger in the non-TCK group.

Table 14
Fisher's Z-statistic Between Partial Correlations (r_s) of TCKs and non-TCKs

(Z)	PROMIS Depression	PROMIS Anxiety	PROMIS Anger	ISEL-12	BRS
PROMIS Depression	0	0	.246	-1.26	-.11
PROMIS Anxiety		0	-1.57	-.50	-.11
PROMIS Anger			0	.79	-.28
ISEL-12				0	2.17*
BRS					0

Notes. TCK = Third Culture Kid; PROMIS = Patient-Reported Outcomes Measurement Information System; BRS = Brief Resilience Scale; ISEL-12 = Interpersonal Support Evaluation List – 12; * $p < .05$, ** $p < .01$.

Research Question 3. *For young adult TCKs, do factors related to the Third Culture experience (i.e., total years spent living abroad, age when first moved abroad, number of locations lived abroad, number of furloughs, average length of furlough, and age of repatriation) correlate with the social/emotional/behavioral health functioning, resilience, or interpersonal support? It was hypothesized that TCK scores on the PROMIS-Anxiety, PROMIS-Depression, PROMIS-Anger, BRS, and ISEL-12 measures would be significantly related to the Third Culture experience factors.*

In order to test these hypotheses, a correlational matrix was computed for those variables that were ordinal. On the data that were determined to be normal (i.e., skewness

and kurtosis within acceptable range), Pearson's r was used (see Table 15); however, on the few items where skewness or kurtosis were not within the acceptable range Spearman's rho was used (e.g., number of furloughs and length of furloughs; See Table 16).

Several notable correlations were found. The BRS was negatively correlated to the number of furloughs before age 18 of our participants. As the number of trips back to their passport culture increased, the total score on the BRS (resilience) decreased. Additionally, the number of locations the participants lived was positively correlated with both the scores on the PROMIS depression and PROMIS anxiety measures. As the number of locations increased, the scores measuring depression and anxiety symptoms also increased. All other correlations failed to reach statistical significance.

Table 15
Correlations (r_s) Between Scales and TCK Related Factors

(r_s)	PROMIS Depression	PROMIS Anxiety	PROMIS Anger	ISEL-12	BRS
Total time living abroad (Months; n=90)	.14	-.01	-.002	-.06	-.20
Number of Locations Lived (n = 80)	.29**	.35**	.01	-.08	-.12
Age when first moved from passport culture (n = 77)	-.19	-.08	-.22	-.001	.13
Return to passport culture (n = 81)	-.22	-.11	-.14	.14	-.003
Age of return to passport culture (n = 55)	.01	-.03	-.23	-.16	.05
Reason for living abroad (n = 90)	.05	.06	.05	.03	.03

Notes. TCK = Third Culture Kid; PROMIS = Patient-Reported Outcomes Measurement Information System; BRS = Brief Resilience Scale; ISEL-12 = Interpersonal Support Evaluation List – 12.; * $p < .05$, ** $p < .01$.

In summary, for our sample of TCKs, some TCK experience factors (e.g., amount of locations lived, number of furloughs) were significantly associated with their resilience, anxiety, and depression. Notably, measures of anger and measures of interpersonal support did not significantly correlate with any of the TCK experience factors.

Table 16
Correlations (Spearman's Rho) between Scales and TCK Related Factors

Rho	PROMIS Depression	PROMIS Anxiety	PROMIS Anger	ISEL-12	BRS
Length of furloughs (months; n = 69) Used Spearman's Rho	.07	-.01	-.05	-.05	-.14
Number of Furloughs before age 18 (n = 74) Used Spearman's Rho	.22	.14	.17	-.01	-.39**

Notes. TCK = Third Culture Kid; PROMIS = Patient-Reported Outcomes Measurement Information System; BRS = Brief Resilience Scale; ISEL-12 = Interpersonal Support Evaluation List – 12.; * $p < .05$, ** $p < .01$

To examine differences across the PROMIS variables, ISEL-12, and BRS in relation to nominal variables, group comparisons were conducted. For whether or not the individual had returned to their passport culture (yes/no), Analysis of Variance (ANOVA) was used for the 82 TCKs who had completed this question. Results in Table 17 indicate that for most measures (i.e., anxiety, anger, interpersonal support, and resilience) results were not statistically different between groups. There was a statistically significant difference between groups on results of the PROMIS depression as determined by one-way ANOVA [$F(1, 80) = 4.10, p = .046$]. In other words, TCKs who have returned to their passport culture have a significantly higher score on the PROMIS depression than those who have not returned to their passport country; however, the effect size is small.

Table 17

Comparison of TCKs Who Have and Have Not Returned to Their Passport Country

	Returned (N = 63) Mean (SD)	Have not Returned (N= 19) Mean (SD)	<i>F</i>	<i>p</i>	<i>Partial Eta</i> ²
PROMIS Depression	17.81 (6.92)	14.32 (5.31)	4.10	.05	.05
Anxiety	17.63 (6.08)	16.57 (3.70)	.50	.48	.01
Anger	11.81 (4.33)	10.47 (4.01)	1.44	.23	.02
ISEL-12	21.96 (6.57)	23.74 (7.80)	.97	.33	.01
BRS	20.54 (5.25)	20.68 (5.27)	.01	.92	<.001

Notes. TCK = Third Culture Kid; PROMIS = Patient-Reported Outcomes Measurement Information System; BRS = Brief Resilience Scale; ISEL-12 = Interpersonal Support Evaluation List – 12.; * $p < .05$, ** $p < .01$.

For reason for living abroad, (i.e., business, religious, education, military/government, family/personal), Analysis of Variance (ANOVA) was used. Results in Table 18 describe the mean and standard deviations of the PROMIS, ISEL-12, and BRS for each of the five groups of TCKS. Table 19 includes the results of the ANOVA for this data. The ANOVA failed to reach statistical significance on any measure. In other words, how participants responded on measures of depression, anxiety, anger, interpersonal support, and resilience was not significantly related to the reason they were living abroad (e.g., religious, business).

Table 18

Means and Standard Deviations of TCKs Based on Reasons for Living Abroad

Mean (SD)	Business (N = 27)	Religious (N= 24)	Education (N = 10)	Military/Gov (N =17)	Family/Pers (N = 12)
PROMIS Depression	18.00 (7.05)	16.33 (6.08)	18.60 (7.12)	16.64 (7.04)	17.00 (8.17)
Anxiety	18.41 (5.51)	15.52 (4.82)	21.10 (6.56)	18.12 (5.10)	16.25 (6.47)
Anger	11.74 (4.71)	10.50 (3.90)	13.30 (3.77)	11.53 (4.16)	11.33 (3.60)
ISEL-12	24.49 (8.36)	20.48 (6.43)	23.20 (5.73)	21.88 (5.90)	25.17 (6.21)
BRS	19.11 (5.40)	21.33 (5.02)	20.30 (6.02)	22.12 (5.25)	19.75 (3.65)

Notes. TCK = Third Culture Kid; PROMIS = Patient-Reported Outcomes Measurement Information System; BRS = Brief Resilience Scale; ISEL-12 = Interpersonal Support Evaluation List – 12; Gov = Government; Pers = Personal; * $p < .05$, ** $p < .01$.

Table 19

ANOVA Between Groups of TCKs Based on Reason for Living Abroad

	<i>F</i>	<i>p</i>	<i>Partial Eta²</i>
PROMIS Depression	.313	.87	.02
Anxiety	2.22	.07	.10
Anger	.84	.50	.04
ISEL-12	1.51	.21	.07
BRS	1.14	.35	.05

Notes. TCK = Third Culture Kid; PROMIS = Patient-Reported Outcomes Measurement Information System; BRS = Brief Resilience Scale; ISEL-12 = Interpersonal Support Evaluation List – 12.; * $p < .05$, ** $p < .01$.

Research Question 4. *For young adult TCKs, are interpersonal support and/ or resilience better predictors of social/emotional/behavioral health functioning than third culture experience factors?* Following from the third research question, this question seeks to determine if resilience and/or interpersonal support are better predictors of social/emotional/behavioral health status than TCK experience factors. It was hypothesized that both resilience and interpersonal support would be a better predictor of social/emotional/behavioral health functioning than TCK experience factors.

In order to test these hypotheses, three multiple regression analyses were conducted. Separate regression models were run for each outcome variable (i.e., PROMIS-Depression, Anxiety, and Anger scales) with both non-TCK experience predictor variables (i.e., interpersonal support and resilience). All analyses included the third culture experience factors (i.e., total years spent living abroad, age when first moved abroad, number of locations lived abroad, number of furloughs, average length of furlough, reason for living abroad, and repatriation status) as independent variables. Figure 2 depicts the regression model predicting PROMIS Depression in which the dark arrows represent hypothesized statistically significant relation while the light arrows represent relations failing to reach statistical significance. Figure 3 depicts PROMIS Anxiety and Figure 4 predicts PROMIS Anger.

Figure 2. Regression Model Predicting PROMIS Depression

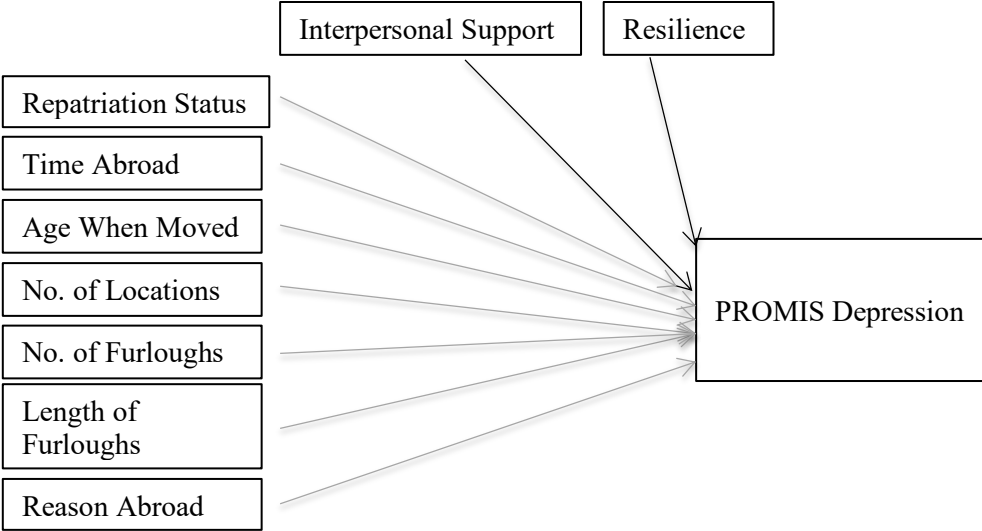
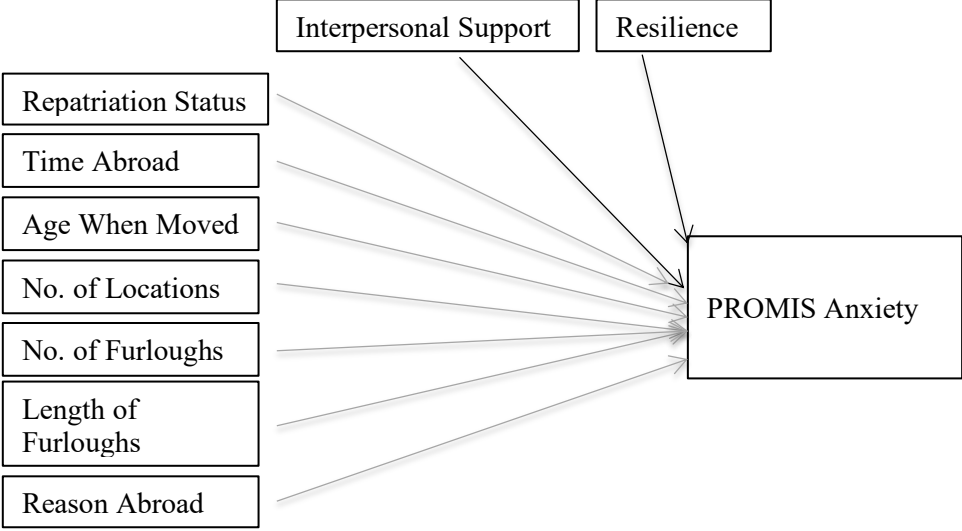


Figure 3. Regression Model Predicting PROMIS Anxiety



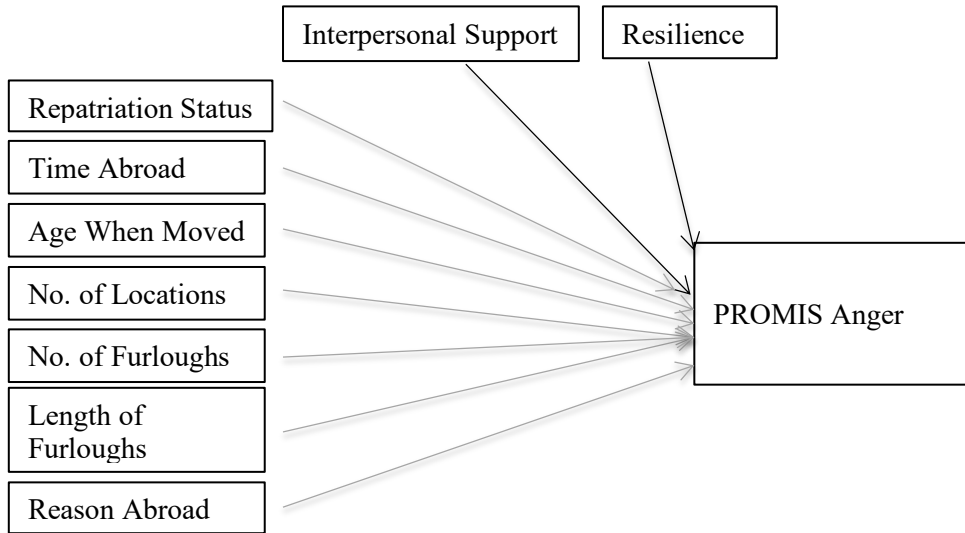


Figure 4. Regression Model Predicting PROMIS Anger

A multiple regression was run to predict PROMIS Depression total scores (See Table 20). The first model included only the ISEL-12 and BRS as predictors. The second model also included reason for living abroad, total time spent living abroad, age when first moved abroad, number of locations lived abroad, number of furloughs, average length of furlough, and repatriation status. The results of the regression indicated that the second model predictors explained 57.9% of the variance in PROMIS depression [$F(9, 51) = 7.79, p < .01, R^2 = .58$]. Three predictors reached statistical significance in predicting PROMIS depression: ISEL-12 ($\beta = .28, p < .01$), BRS ($\beta = -.53, p < .01$), and number of locations ($\beta = .30, p < .01$).

Table 20
Predictors of PROMIS Depression

Variable	PROMIS Depression		
	Model 1 <i>B</i>	Model 2 (with TCK Factors)	
		<i>B</i>	95% CI
Constant	26.35**	27.54**	18.13, 36.96
Interpersonal Support	.29**	.28**	-1.24, 33.47
Resilience	-.60**	-.53**	-.95, -.45
Reason for Living Abroad		.05	-.77, 1.34
Time Abroad (months)		-.11	-.4, .02
Number of Furloughs		-.19	-.32, .02
Average length of furloughs		-.05	-.07, .04
Repatriation status		-.14	-5.48, .96
Number of Locations		.30**	.18, 2.19
Age at First Move		-.18	-.60, .09

Notes. TCK = Third Culture Kid; PROMIS = Patient-Reported Outcomes Measurement Information System; BRS = Brief Resilience Scale; ISEL-12 = Interpersonal Support Evaluation List – 12.; * $p < .05$, ** $p < .01$. N = 61.

A multiple regression was run to predict PROMIS anxiety total scores (See Table 21). The first model included only the ISEL-12 and BRS as predictors. The second model also included reason for living abroad, total time spent living abroad, age when first moved abroad, number of locations lived abroad, number of furloughs, average length of furlough, and repatriation status. The results of the regression indicated that the second model predictors explained 44.7% of the variance in PROMIS anxiety [$F(9, 51) = 4.59, p < .01, R^2 = .45$]. Two predictors reached statistical significance in predicting PROMIS anxiety: BRS ($\beta = -.42, p < .05$), and number of locations ($\beta = .33, p < .05$).

Table 21
Predictors of PROMIS Anxiety

	PROMIS Anxiety		
		Model 2 (with TCK Factors)	
Variable	Model 1 <i>B</i>	<i>B</i>	95% CI
Constant	24.35**	23.30**	14.72, 31.87
Interpersonal Support	.18	.19	-.02, .31
Resilience	-.51*	-.42*	-.66, -.20
Reason for Living Abroad		-.05	-1.16, .77
Time Abroad (months)		-.25	-.04, .01
Number of Furloughs		.18	-.04, .27
Average length of furloughs		.03	-.04, .06
Repatriation status		-.11	-4.31, 1.55
Number of Locations		.33*	.13, 1.95
Age at First Move		.02	-.29, .34

Notes. TCK = Third Culture Kid; PROMIS = Patient-Reported Outcomes Measurement Information System; BRS = Brief Resilience Scale; ISEL-12 = Interpersonal Support Evaluation List – 12.; * $p < .05$, ** $p < .01$. $N = 61$.

A multiple regression was run to predict PROMIS anger total scores (See Table 22). The first model included only the ISEL-12 and BRS as predictors. The second model also included reason for living abroad, total time spent living abroad, age when first moved abroad, number of locations lived abroad, number of furloughs, average length of furlough, and repatriation status. The results of the regression indicated that the second model predictors explained 46.2% of the variance in PROMIS anger [$F(9, 51) = 4.86, p < .01, R^2 = .46$]. Two predictors reached statistical significance in predicting PROMIS anxiety: ISEL-12 ($\beta = .47, p < .01$), and BRS ($\beta = -.38, p < .01$).

Table 22
Predictors of PROMIS Anger

Variable	PROMIS Anger		
	Model 1 <i>B</i>	<i>B</i>	95% CI
Constant	12.67**	13.27**	6.90, 19.64
Interpersonal Support	.40**	.47**	.14, .39
Resilience	-.43**	-.38**	-.46, -.12
Reason for Living Abroad		.14	-.28, 1.15
Time Abroad (months)		-.01	-.02, .02
Number of Furloughs		.06	-.09, .14
Average length of furloughs		-.13	-.06, .02
Repatriation status		-.15	-3.66, .70
Number of Locations		-.06	-.81, .54
Age at First Move		-.24	-.44, .03

Notes. TCK = Third Culture Kid; PROMIS = Patient-Reported Outcomes Measurement Information System; BRS = Brief Resilience Scale; ISEL-12 = Interpersonal Support Evaluation List – 12.; * $p < .05$, ** $p < .01$. N = 61.

CHAPTER V

DISCUSSION AND CONCLUSIONS

The purpose of this study was to determine the extent to which Third Culture Kids (TCKs) and non-Third Culture Kids (non-TCKs) may differ in adulthood and to examine some of the previously identified strengths and weaknesses of Adult Third Culture Kids (ATCKs) and how those may relate to their mental health status differently than their non-TCK peers. Additionally, one goal of this study was to determine if any factors of their cross-cultural experience might predict their mental health in young adulthood. Although the existing literature qualitatively discussed some of these issues, there is little research that has quantitatively examined these relationships between variables.

It was hypothesized that TCKs and non-TCKs would significantly differ on measures of resilience, interpersonal support, anxiety, depression, and anger. In the current study, age was determined to be a covariate between the two groups. The current study determined that when controlling for age and comparing the means of measures of resilience, interpersonal support, anxiety, depression, and anger, TCKs and non-TCKs did not differ significantly. This finding is in contrast to the expected result of significant differences based on the qualitative report in many studies in current literature (Dewaele & van Oudenhoven, 2009; Klemens & Bikos, 2009). This difference may be due to differences in the samples studied. Additionally, the current study aimed to quantify any differences between the TCK and non-TCK population based on self-report data rather than relying on qualitative data most commonly found in previous literature. The current study included 91 TCKs and 245 non-TCKs for a total sample of 336 participants. The TCKs were diverse in a variety of factors including age, time spent living abroad, reasons

for living abroad, number of furloughs, length of furloughs, number of locations lived abroad, and repatriation status. The diversity within the TCK group may have mitigated the difference between the TCK group and non-TCK group. In other words, the diversity of the TCK group (e.g., variety of passport cultures, variety of host cultures, differences in amount of time abroad) may have impacted the group's ability to be viewed appropriately as a homogenous group. The group may have been too heterogeneous to be considered a single group and one or more factor may have been able to divide the group into two or more groups that would have been more effectively compared and contrasted to the non-TCK group.

The current study also predicted that interpersonal support and resilience would relate to depression, anxiety, and anger in a different way for TCKs than it would for non-TCKs. It was hypothesized that interpersonal support would have a stronger relation with mental health status in non-TCKs than in TCKs. Conversely, it was hypothesized that resilience would have a stronger relation mental health status in TCKs than in non-TCKs. Findings suggest that interpersonal support and resilience relate to depression, anxiety, and anger in similar strengths regardless of TCK or non-TCK status; however, the current study did find that the negative relationship between interpersonal support and resilience for non-TCKs was significantly different in TCKs. In other words, in a non-TCK sample, the relationship between interpersonal support and resilience is significantly stronger in a negative direction than in a TCK sample which found no significant relationship. As interpersonal support increases, resilience decreases, and vice versa. This relationship is present only in non-TCKs. The explanation for this finding is unclear and warrants additional research. It is possible that for non-TCKs high interpersonal support may

preclude the need for the young adults to develop resilience, resulting in low resilience scores. Additionally, as resilience increases, non-TCKs may feel less need for high amounts of interpersonal support. The TCK experience (e.g., frequent moves, loss of friendships, high levels of change) appears to negate this relationship causing the variables to be relatively independent of each other.

When considering only the TCK sample, the current study hypothesized that TCK scores on the PROMIS-Anxiety, PROMIS-Depression, PROMIS-Anger, BRS, and ISEL-12 measures would be significantly related to the Third Culture experience factors. Findings suggest that number of locations lived is positively related to symptoms of depression and anxiety. In other words, as TCKs experience more new locations, they are more likely to experience symptoms of depression and anxiety. Number of locations lived was not related to measure of resilience, which is consistent with previous literature (LaBass, 2015). Additionally, the current study found that the number of times they furloughed (i.e., returned to their passport culture) was negatively related to their resilience. In other words, the more often they returned to their passport culture, the less resilient they were. Other research has found similar relationships between more returns to passport culture and less positive outcomes (Peterson & Plamondon, 2009). In addition, the current study found that TCKs who have returned to live in their passport country have significantly more symptoms of depression than TCKs who have not yet returned to their passport culture. These findings are consistent with previous literature that returning to passport culture can be related to in negative feelings (Smith & Kearney, 2016). This may suggest that those who have returned to their passport culture struggle to adapt and change in an environment they may feel less comfortable which has affected their mental health;

however, it is also possible and may be likely that TCKs living abroad who are experiencing mental health problems such as depression may be more likely to return to their passport culture in order to experience respite, retreat, healing, or treatment.

Lastly, the current study sought to determine if interpersonal support and/or resilience were better predictors of depression, anxiety, or anger than TCK experience factors (e.g., time abroad, number of furloughs). It was hypothesized that both resilience and interpersonal support would be a better predictor of mental health functioning than TCK experience factors. Findings support that when predicting depressive symptoms, interpersonal support, resilience and number of locations lived were significant. Resilience and number of locations were significant predictors of anxiety, and interpersonal support and resilience were significant predictors of anger. These findings were not surprising considering the strong relationship between many of these factors.

Implications

The findings of the present study indicate that when controlling for age, the TCK and non-TCK population may not differ in such systematic ways as some of the previously reported qualitative data may suggest. This data gives further evidence that the qualitative case studies of previous literature is not sufficient to drive the understanding of how TCKs differ from non-TCKs.

The current study does indicate that one major difference between the TCK sample and the non-TCK sample was that non-TCKs experienced a negative relationship between interpersonal support and resilience that was not present in the TCK population. Parents, teachers, and caregivers of TCKs should be encouraged that despite the difficulty of cross cultural living and more frequent major transitions, TCKs develop both interpersonal

support and resilience through these experiences. In the non-TCK sample, they were more likely to develop only one at the expense of the other. It appears that for TCKs, the apparent added difficulty with building deep and strong friendships may change the way they build resilience as well.

For the TCK sample specifically, the current study found that number of locations lived is related to symptoms of depression and anxiety. Organizations, parents, and caregivers should consider this information carefully when deciding how frequently to move, if this is something they have control over. If the number of moves is not within their control, adults in the TCKs lives should be conscious of the stress that moving can add to their children's lives. Adults should aim to notice any changes in the emotional well being of their TCKs and take measures to ensure these children transition well and deal with the difficulty appropriately. Being involved with a counselor, allowing for an appropriate outlet for difficult feelings, and ensuring the children feel connected to other people with similar experiences may help alleviate some of these negative feelings.

The current study also found that the number of furloughs (returns to passport culture) was negatively related to level of resilience. This finding should inform caregivers to be contentious about how frequently they return to their passport culture. Similarly, the current study found that participants who have returned to live in their passport culture experience more symptoms of depression. This should be a major focus of the repatriation process and ensuring the TCKs or ATCKs are successful when returning for college or to enter the workforce. Steps should be taken to limit the impact of these depressed symptoms and to hasten the return to emotional well being. Steps may include participation in a counseling group or in a one-on-one setting, being involved in a social group of other

people who may share similar experiences or have similar cultural background, and continued positive relationship with the support system (i.e., family, friends from back home).

Overall, the current research has vast relevance for those providing services and working with young adult individuals who have had a TCK experience. Specifically, higher education institutions such as colleges, universities, trade schools, and graduate schools would benefit from understanding the population of their students who may need additional support transitioning into this phase of their life. Counseling centers especially would benefit from understanding the TCKs that may be experiencing distress upon their transition back to their passport culture. Additionally, institutions of higher education may choose to benefit this population by facilitating connections between TCKs by hosting events, clubs, and other extracurricular activities specifically aimed at bringing those who have similar experiences together. Additionally, ensuring that academic advisors, professors, and other staff members are well aware of the resources (e.g., counseling opportunities) available to their students would benefit this population in their adjustment period.

Limitations and Future Directions

One of the limitations of the current study is the limited demographic information gathered. Information regarding participants' gender, religious affiliation, ethnicity, and passport culture would have added depth to the research and may have shed light on some of the findings. Additionally, gender may have been able to play a role as a covariate that might have explained some of the significant and not significant findings. Peterson and Plamondon (2009) found mixed results about the differences in how men and women

TCKs may or may not respond differently to their experiences. They found that for men the number of repatriations was negatively related to positive affect, but for women this was positively related to levels of authoritarianism. By contrast, they found that the relationship between the number of locations and authoritarianism was similar across genders.

Another limitation is the lack of information about if and when a TCK participated in any formal transition preparation prior to returning to the passport culture. A re-entry retreat or transition seminar is a short (typically 1-2 weeks) training and opportunity to meet with other TCKs returning to their passport culture. The retreats often teach participants things about the culture they may be unfamiliar with (e.g., pop culture, setting up a bank account, etc.) in order to ease the transition back to their passport culture. Research shows that transition seminars may affect the levels of depression, anxiety, and stress in the lives of TCKs (Davis et al., 2010). Additional information regarding whether TCKs in the sample participated in a transition seminar may have shed light on differences within the TCK sample.

Differences in group sizes between the TCK sample and the non-TCK sample was another limitation. Ideally, sample sizes would have been larger to allow for smaller effect sizes to reach clinical significance and the group sizes would have been more similar.

Another limitation of the current research is that it is cross-sectional in nature. More longitudinal data, especially data collected at the times of transition (e.g., returns to passport culture for furlough, more permanent moves, college, leaving home) or shortly after each participant transitioned would have provided a richness of data that the current study was not able to provide. Additionally, longitudinal data would provide more

information about how TCKs experiences and perceptions change as they age.

The diversity found across TCKs (e.g., reason for being abroad, length of time, passport culture) makes it almost impossible to efficiently and effectively explore all factors related to the TCK experiences; however, future research would benefit from a large-scale, systematic and quantitative exploration of these factors.

Conclusions

The current study adds to the literature on TCKs, if and how they differ systematically from non-TCKs, and how their TCK experiences relate to their social, emotional, and behavioral mental health. Although several studies explore the qualitative nature of some of these factors in the TCKs lives, very few studies aim to take a systematic approach to qualitatively compare and explore the relationship between these factors. Results from this study indicate that TCKs and non-TCKs do relate differently in regards to interpersonal support and resilience. Additionally, for TCKs the number of locations lived and number of furloughs can relate to their current mental health. Future research should continue to focus on the relationship between these factors and how to best ameliorate the mental health of TCKs if they do experience these feelings.

REFERENCES

- Azmitia, M., Syed, M., & Radmacher, K. (2013). Finding your niche: Identity and emotional support in emerging adults' adjustment to the transition to college. *Journal of Research on Adolescence, 23*, 744-761.
- Brannan, D., Biswas-Diener, R., Mohr, C. D., Mortazavi, S., & Stein, N. (2013). Friends and family: A cross-cultural investigation of social support and subjective well-being among college students. *The Journal of Positive Psychology, 8*(1), 65-75.
- Buss, A. H., & Perry, M. (1992). The aggression questionnaire. *Journal of Personality and Social Psychology, 63*(3), 452.
- Cella, D., Riley, W., Stone, A., Rothrock, N., Reeve, B., Yount, S., ... & Cook, K. (2010). Initial adult health item banks and first wave testing of the patient-reported outcomes measurement information system (PROMIS™) network: 2005–2008. *Journal of Clinical Epidemiology, 63*, 1179.
- Choi, K. M., Bernard, J. M., & Luke, M. (2013). Characteristics of friends of female college third culture kids. *Asia Pacific Journal of Counseling and Psychotherapy, 4* (2), 125-136. doi: 10.1080/21507686.2013.779931
- Choi, K. M., & Luke, M. (2011). A phenomenological approach to understanding early adult friendships of third culture kids. *Journal of Asia Pacific Counseling, 1*(1), 47-60.
- Cohen, S. (2008). Basic psychometrics for the ISEL 12 item scale. *Pittsburgh, PA: Carnegie Mellon University.*
- Cohen, S., Mermelstein, R., Kamarck, T., & Hoberman, H. M. (1985). Measuring the functional components of social support. In *Social support: Theory, research and applications* (pp. 73-94). Springer, Dordrecht.

- Cruwys, T., South, E. I., Greenaway, K. H., & Haslam, S. A. (2015). Social identity reduces depression by fostering positive attributions. *Social, Psychological, and Personality Science*, 6(1), 65-74.
- Dewaele, J. M., & Van Oudenhoven, J. P. (2009). The effect of multilingualism/multiculturalism on personality: no gain without pain for Third Culture Kids?. *International Journal of Multilingualism*, 6(4), 443-459.
- Fail, H., Thompson, J., & Walker, G. (2004). Belonging, identity and Third Culture Kids Life histories of former international school students. *Journal of Research in International Education*, 3(3), 319-338.
- Fisher, L. B., Overholser, J. C., Ridley, J., Braden, A., & Rosoff, C. (2015). From the outside looking in: Sense of belonging, depression, and suicide risk. *Psychiatry: Interpersonal and Biological Processes*, 78(1), 29-41.
- Gerner, M., Perry, F., Moselle, M. A., & Archbold, M. (1992). Characteristics of internationally mobile adolescents. *Journal of School Psychology*, 30(2), 197-214.
- Gilbert, K. R. (2008). Loss and grief between and among cultures: The experience of third culture kids. *Illness, Crisis & Loss*, 16(2), 93-109.
- Gillies, W. D. (1998). Children on the move: Third culture kids. *Childhood Education*, 75(1), 36-38.
- Greenberg, J., Solomon, S., & Pyszczynski, T. (1997). Terror management theory of self-esteem and cultural worldviews: Empirical assessments and conceptual refinements. In *Advances in experimental social psychology* (Vol. 29, pp. 61-139). Academic Press.

- Ittel, A., & Sisler, A. (2012). Third Culture Kids: Adjusting to a Changing World. *Diskurs Kindheits-und Jugendforschung*, 7(4).
- Johnson, V. K., Gans, S. E., Kerr, S., & LaValle, W. (2010). Managing the transition to college: Family functioning, emotion coping, and adjustment in emerging adulthood. *Journal of College Student Development*, 51(6), 607-621.
- Kim, P. Y., Cheon, H., Hyun, J. H., Chang, E. S., & Yoo, H. D. (2016). Psychological experiences of Korean missionary “kids” (MKs): A qualitative inquiry. *Mental Health, Religion, & Culture*, 19, 1013-1027. doi: 10.1080/13674676.2017.1310830
- Klemens, M. J., & Bikos, L. H. (2009). Psychological well-being and sociocultural adaptation in college-aged, repatriated, missionary kids. *Mental Health, Religion and Culture*, 12(7), 721-733.
- Kortegast, C. and Yount, E.M. (2016). Identity, Family, and Faith: U.S. Third Culture Kids Transition to College. *Journal of Student Affairs Research and Practice* 53(2), 230-242.
- LaBass, C. (2015). Resilience in relation to consistency in self-concept in Adult Third Culture Kids (ATCKs). *Dissertations & Theses*. 216.
- Lijadi, A. A., & Van Schalkwyk, G. J. (2014). Narratives of third culture kids: Commitment and reticence in social relationships. *The Qualitative Report*, 19(25), 1.
- Lijadi, A. A., & Van Schalkwyk, G. J. (2018). The international schools are not so international after all: The educational experiences of Third Culture Kids. *International Journal of School & Educational Psychology*, 6 (1), 50-61, doi: 10.1080/21683603.2016.1261056

- Merz, E. L., Roesch, S. C., Malcarne, V. L., Penedo, F. J., Llabre, M. M., Weitzman, O. B., ... & Johnson, T. P. (2014). Validation of interpersonal support evaluation list-12 (ISEL-12) scores among English-and Spanish-speaking Hispanics/Latinos from the HCHS/SOL Sociocultural Ancillary Study. *Psychological Assessment, 26*(2), 384.
- Narrow, W. E., Clarke, D. E., Kuramoto, S. J., Kraemer, H. C., Kupfer, D. J., Greiner, L., & Regier, D. A. (2013). DSM-5 field trials in the United States and Canada, Part III: development and reliability testing of a cross-cutting symptom assessment for DSM-5. *American Journal of Psychiatry, 170*(1), 71-82.
- Peterson, B. E., & Plamondon, L. T. (2009). Third culture kids and the consequences of international sojourns on authoritarianism, acculturative balance, and positive affect. *Journal of Research in Personality, 43*(5), 755-763.
- Pollock, D. C., & Van Reken, R. E. (2009). *Third culture kids: Growing up among worlds* (Rev. ed.). Boston and London: Nicholas Brealey Publishing.
- Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement, 1*(3), 385-401.
- Riley, W. T., Pilkonis, P., & Cella, D. (2011). Application of the National Institutes of Health Patient-Reported Outcomes Measurement Information System (PROMIS®) to mental health research. *The Journal of Mental Health Policy and Economics, 14*(4), 201-208.
- Selmer, J., & Lam, H. (2004). "Third-culture kids" future business expatriates?. *Personnel Review, 33*(4), 430-445.

- Shapiro, S. S., & Wilk, M. B. (1965). An analysis of variance test for normality (complete samples). *Biometrika*, 52(3/4), 591-611.
- Smith, C., & Carlson, B. E. (1997). Stress, coping, and resilience in children and youth. *The Social Service Review*, 231-256.
- Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: assessing the ability to bounce back. *International Journal of Behavioral Medicine*, 15(3), 194-200.
- Smith, V.J., and Kearney, K.S. (2016). A qualitative exploration of the repatriation experiences of US Third Culture Kids in college. *Journal of College Student Development* 57 (8), 958-972
- Steiger, J. H. (1980). Tests for comparing elements of a correlation matrix. *Psychological Bulletin*, 87(2), 245.
- Taylor, Z. E., Doane, L. D., & Eisenberg, N. (2014). Transitioning from high school to college: Relations of social support, ego-resiliency, and maladjustment during emerging adulthood. *Emerging Adulthood*, 2(2), 105-115.
- Useem, R. H., & Cottrell, A. B. (1993). TCKs four times more likely to earn bachelor's degrees. *NewsLinks-The Newspaper of International Schools Services*, 7(5).
- Useem, R. H., & Downie, R. D. (1976). Third-Culture Kids. *Today's Education*, 65(3), 103-5.
- Van Reken, R., & Bethel, P. (2005). Third culture kids: Prototypes for understanding other cross-cultural kids. *Intercultural Management Quarterly*, 6 (4), 3-9.

- Watson, D., & Clark, L. A. (1991). The mood and anxiety symptom questionnaire. *Unpublished manuscript, University of Iowa, Department of Psychology, Iowa City.*
- Wilk, M. B., & Gnanadesikan, R. (1968). Probability plotting methods for the analysis for the analysis of data. *Biometrika*, 55(1), 1-17.
- Windle, G., Bennett, K. M., & Noyes, J. (2011). A methodological review of resilience measurement scales. *Health and quality of life outcomes*, 9(1), 1.

APPENDIX A

TCK Recruitment Advertisement

“Did you live part of your childhood or adolescence in a foreign country? If you lived more than 6 months outside the home culture of your parents before reaching the age of 18 and you are between the ages of 18 and 25, please consider participating in a survey addressing the unique experience of being raised cross-culturally. You are invited to participate in a study evaluating the factors of an individual’s life that may impact their social, emotional, and behavioral health as adults by Dr. Jeffrey Liew at Texas A&M University, Department of Educational Psychology. The study involves taking a 15-20 minute survey. Contact Emily Greene at emilyanngreene@tamu.edu for more information or follow this link to begin the survey” followed by the survey link.

Non-TCK Recruitment Advertisement

“You are invited to participate in a study evaluating the factors of an individual’s life that may impact their social, emotional, and behavioral health as adults by Dr. Jeffrey Liew at Texas A&M University, Department of Educational Psychology. The study involves taking a 15-20 minute survey. If you are between the ages of 18 and 25, contact Emily Greene at emilyanngreene@tamu.edu for more information or follow this link to begin the survey” followed by the survey link.

APPENDIX B

TCK Specific Items

1. Why were you living abroad?

- Military
- Religious
- Business
- Other, please describe: _____

2. What organization(s) were you/your parents affiliated with while living abroad (i.e., the army, the International Mission Board, Exxon Mobil, etc.)?

3. How much total time did you spend living abroad? ____years, ____months.

4. Please provide the information asked for each location you lived abroad.

	Location		Description			Age (in years) when you first moved to this location	Length of time at this location
	City	Country	Rural	Suburban	Urban	*	**
Location 1			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Location 2			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Location 3			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Location 4			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Location 5			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

*Drop down menu options include: less than 1 and 1 - 18 inclusive.

** Drop down menu options include: less than 6 months, 6-11 months, 1-2 years, 2-3 years, . . . 17-18 years

5. How many furloughs (returns to your passport culture) did you make before you turned 18 years old?

6. On average, how long were your furloughs? Please answer in number of months.

7. Have you returned to your passport culture? Yes No

If yes, at what age? _____ years

APPENDIX C

TEXAS A&M UNIVERSITY HUMAN RESEARCH PROTECTION PROGRAM INFORMATION SHEET DOCUMENT

Project Title: A Quantitative Comparison of Young Adult “Third Culture Kids” Social, Emotional, and Behavioral Health To Peers Who Never Lived Abroad

You are invited to take part in a research study being conducted by Emily Greene, a researcher from Texas A&M University. The information in this form is provided to help you decide whether or not to take part. If you decide to take part in the study, you will be asked to sign this consent form. If you decide you do not want to participate, there will be no penalty to you, and you will not lose any benefits you normally would have. You may choose to withdraw from the study at any time without penalty.

NOTE: If you are employed then it is your responsibility to work with your employer regarding work leave for participation in this study if during work hours.

Emily Greene emilyanngreene@tamu.edu

Why Is This Study Being Done?

The purpose of this study is to understand the factors of an individual’s life that may impact their social, emotional, and behavioral health as adults.

Why Am I Being Asked To Be In This Study?

You are being asked to be in this study because you are between the ages of 18 and 25 years old.

How Many People Will Be Asked To Be In This Study?

Overall, a total of 1200 people will be invited to participate.

What Are the Alternatives to being in this study?

The alternative to being in the study is to not be in the study.

What Will I Be Asked To Do In This Study?

You will first be asked to answer questions about your demographics. You will be asked to answer questions about your current emotional, social, and behavioral health. You may also be asked to answer questions about your childhood. Your participation in this study will last approximately 15 to 20 minutes.

Are There Any Risks To Me?

The things that you will be doing are no greater than risks than you would come across in everyday life. Although the researchers have tried to avoid risks, you may feel that some questions that are asked of you will be stressful or upsetting. You do not have to answer anything you do not want to.

Will There Be Any Costs To Me?

Aside from your time, there are no costs for taking part in the study.

Will I Be Paid To Be In This Study?

You will not be paid for being in this study.

Will Information From This Study Be Kept Private?

The records of this study will be kept private. No identifiers linking you to this study will be included in any sort of report that might be published. Research records will be stored securely and only protocol director, Emily Greene, and principal investigator, Dr. Jeffrey Liew, will have access to the records. Information about you will be stored in computer files protected with a password.

Representatives of regulatory agencies such as the Office of Human Research Protections (OHRP) and entities such as the Texas A&M University Human Research Protection Program may access your records to make sure the study is being run correctly and that information is collected properly.

Information about you and related to this study will be kept confidential to the extent permitted or required by law.

Who may I Contact for More Information?

You may contact the Principal Investigator, Jeffrey Liew, PhD, to tell him about a concern or complaint about this research at Jeffrey.liew@tamu.edu. You may also contact the Protocol Director, Emily Greene at emilyanngreene@tamu.edu.

For questions about your rights as a research participant, to provide input regarding research, or if you have questions, complaints, or concerns about the research, you may call the Texas A&M University Human Research Protection Program (HRPP) by phone at 1-979-458-4067, toll free at 1-855-795-8636, or by email at irb@tamu.edu. The information sheet and all study materials should include the IRB number, approval date, and expiration date. Please contact the HRPP if they do not.

What if I Change My Mind About Participating?

Your participation in this research is voluntary. You may decide to not begin or to stop participating at any time.

If you feel upset during or after completing the survey, please contact the HelpLine (979-845- 2700), a service that can help support you with trained peers and graduate assistants.

Signature and Acknowledgement: By checking the box “I agree to participate” you are electronically signing this form and agreeing to participate in this research study. You are also indicating that you have read the above information and agree to participate in the study until you decide otherwise. You may end your participation at any time.

IRB NUMBER: IRB2017-0284D

IRB APPROVAL DATE: 10/26/2017

IRB EXPIRATION DATE: 10/25/2018

APPENDIX D

Permission to Use PROMIS Measures



HealthMeasures <help@healthmeasures.net>
to me ▾

Jun 26, 2019, 11:16 AM (5 days ago)



Type your response ABOVE THIS LINE to reply

Emily Greene

Subject: Copyright permissions for PROMIS measures

JUN 26, 2019 | 04:16PM UTC

NIH Toolbox Support replied:

Hello Emily,

Thank you for your inquiry and interest PROMIS measures. You are correct, permission is not needed and we do ask that you adhere to our Terms of Use and Guidelines for the Appearance of Health Measures.

http://www.healthmeasures.net/images/PROMIS/Terms_of_Use_HM_approved_1-12-17_-_Updated_Copyright_Notices.pdf

Best Regards,

David Ortiz
HealthMeasures Support Team

APPENDIX E

Permission to Use ISEL-12 in Dissertation Research

Tue, Jun 25, 6:30
PM

Sheldon Cohen <scohen@cmu.edu>

to me

You are welcome to use the ISEL in your research. sc

From: Emily Greene [mailto:emilyanngreene@tamu.edu]

Sent: Tuesday, June 25, 2019 5:23 PM

To: Sheldon Cohen

Subject: permissions to use the ISEL-12

Hello Dr. Cohen,

I'm writing to obtain an email verification of the copyright permissions that will allow me to have used the ISEL-12 measure in my personal dissertation research. I know your website said we did not need express permission for non-profit academic research, but my current guidance recommends I reach out to you.

I've credited you and your colleagues appropriately and did not change the content of the scale. If I need to obtain permissions from other individuals or a journal, please let me know and I'd be happy to reach out to them as well. Thank you for creating such an effective and helpful tool.

I look forward to hearing from you,

Emily Ann Brewer, M.Ed.
School Psychology Doctoral Candidate
Texas A&M University
emilyanngreene@tamu.edu

APPENDIX F

Permission to use BRS in dissertation research

Bruce Smith <bws0513@gmail.com>

Wed, Jul 10, 2019 at 1:37
PM

To: Emily Greene <emilyanngreene@tamu.edu>

Hi Emily,

Thanks for your interest in the Brief Resilience Scale. I am sorry that I couldn't reply sooner. I was on summer vacation. You are welcome to use it free of charge and for as much as you like.

I have attached (1) our original validation article, (2) a file with the instructions, items, scoring, and suggested cut-offs for high and low resilience, (3) an article on the relationship between the BRS and various outcomes, (4) an article showing how the BRS can be adapted for specific stressors, and (5) an article on the validated Spanish translation of the BRS. As far as we know, there are also many other translations of the BRS including German, Dutch, Italian, Chinese, Japanese, Turkish, Finnish, Croatian, and Serbian translations.

In addition, there is also now a large number of articles reporting results when examining the BRS as a predictor, outcome, and/or mediator of other variables, intervention studies showing that it often increases during interventions, and also how much of the BRS scores may be accounted for by genetics (10% or so). You can generally find these articles by searching google scholar using the key words "brief resilience scale bruce smith."

Please let me know what you learn from using the scale if you can. I wish you the best in your work!

Warm Regards,

Bruce

On Tue, Jun 25, 2019 at 3:25 PM Emily Greene

<emilyanngreene@tamu.edu> wrote:

Hello Dr. Smith,

I'm writing to obtain a email verification of the copyright permissions that will allow me to have used the BRS measure in my personal dissertation research. I've credited you and your colleagues appropriately and did not change the content of the scale. If I need to obtain permissions from other

individuals or the journal, please let me know and I'd be happy to reach out to them as well. Thank you for creating such an effective and helpful tool.
I look forward to hearing from you,

Emily Ann Brewer, M.Ed.
School Psychology Doctoral Candidate
Texas A&M University
emilyanngreene@tamu.edu

--

Bruce W. Smith, Ph.D.
Department of Psychology
University of New Mexico
Albuquerque, NM 87131-1161
505-277-0643

5 attachments



3 Smith BW - BRS Predicting Outcomes.pdf
118K



1 Smith BW - BRS Original Validation Article.pdf
94K



4 Rodriguez-Rey R - BRS Spanish Version Validation.pdf
224K



2 Smith BW - BRS Instructions, Items, Scoring, & Cut-offs.pdf
389K



5 Cantero-Garcia M - BRS Adapting for Specific Stressors.pdf
364K