

Caution and Hope

The Prevalence of Adverse Childhood Experiences in Globally Mobile Third Culture Kids

Prepared for TCK Training by
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Summary

In this white paper, we share data on demographics and ACE scores in 1,904 adult Third Culture Kids impacted by global mobility surveyed by TCK Training in our 2021 survey of Developmental Trauma in TCKs.

The term Third Culture Kid has its roots in research conducted in the 1950s-60s, and has been in use since the 1980s. For the purposes of this paper, a globally mobile Third Culture Kid lives outside their passport country for 1-18 years as a result of a parent's work or education (chosen relocation, without intent to immigrate permanently).

The ACE Score is a widely used measure of Adverse Childhood Experiences, with potential scores ranging from 0-10. A score of 4 or more is linked to high risk for various negative behavioral, psychological, and physical health outcomes.

Research in the US showed a rate of 12.5% of the population with an ACE score of 4+; in the Philippines it was 9%. In our non-random sampling of 1,904 TCKs, 21% had an ACE score of 4+, putting them at risk for negative health outcomes. In those experiencing high mobility (10+ locations, or 15+ houses) the rate of 4+ ACEs rose to 32% and 33% respectively. Mission Kids had lower ACE scores than those in other sectors, with 17% having 4+ ACEs compared to 26% of non-mission TCKs. This is still higher than the 4+ ACEs rates recorded in non-TCKs samples, however. Further research is indicated to replicate these results and provide additional data in this area.

A high ACE score does not condemn an individual to a difficult adulthood, but it is a risk factor worth noting. Positive Childhood Experiences (PCEs) are a proven way to prevent ACEs leading to negative health outcomes. The high ACEs experienced by TCKs in our sample indicate that deliberate implementation of PCEs by all globally mobile sectors is an important protective measure for the long-term health of families. We believe that knowledge and implementation of PCEs is a responsibility of those who send and care for globally mobile families, especially in the light of this data.

Introduction

Traditional Third Culture Kids experience international mobility during childhood. This experience can have positive impacts on development and adulthood, but it is not without risk. Factors such as mobility, exposure to extreme poverty, interrupted routine, and intense loss and grief, among others, create an environment where developmental traumas can be easily collected and overlooked. Without recognizing the types and prevalence of those traumas it can be difficult to advise on preventing them or their effects. As we seek to develop evidence-based, trauma-informed approaches to caregiving for the TCK population, it is critical that we investigate the risks this population encounters.

Since the 1990s, Adverse Childhood Experiences (ACE) studies have been conducted to determine how the rates of childhood neglect, abuse, and household dysfunction may impact an individual's mental, physical, and behavioral health in adulthood.¹ The ACE score is a number between zero and ten. Much higher rates of negative outcomes in adulthood are seen in the portion of the population with ACE scores of four or higher.

After observing the unique experiences of globally mobile TCKs and their exposure to grief and trauma in her work with hundreds of globally mobile families, Lauren Wells hypothesized that the prevalence of ACE scores would be higher in TCKs than in monocultural individuals.^{2a,3a}

While significant anecdotal evidence has been accumulated regarding developmental trauma causing PTSD and complex-PTSD among the children of internationally mobile families, there is a lack of quantitative data to back up these stories. Adverse Childhood Experiences provide an opportunity for comparable concrete data, as ACEs have been studied in multiple countries (both developed and developing) over several decades. We hypothesized that TCKs experiencing international mobility would have higher ACE scores than individuals in existing ACE research, as per the predictions in Wells' books.

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Background

Third Culture Kids: Definitions

John Useem and Ruth Hill Useem are credited with the earliest use of the phrase 'Third Culture' from their work with expatriate Americans in India in the 1950s and 1960s. Their early work was focused on cultural engagement which might but did not necessarily require international mobility.^{4,5} Ruth Hill Useem then began to engage with the experiences of children raised outside their passport countries. In a 1973 paper she used the terms "third culture children" and "third culture teenagers" but not the capitalized term Third Culture Kid with the accompanying acronym TCK.⁶

This term was in use soon after, however. David Pollock was instrumental in expanding the term to embrace all children who grew up in the Third Culture, not just those in a specific location, as well as ongoing work in the field.⁷ An early working definition of Third Culture Kids was proposed at the 1987 International Conference on Missionary Kids (ICMK) held in Quito, Ecuador:

"The general working definition for [a Third Culture Kid] is a young person who has spent a sufficient period of time in a culture other than his own, resulting in integration of elements from both the host culture and his own culture into what we have called a third culture."⁸

It is worth noting that at the same time (in the early 1980s) Norma McCaig coined the term Global Nomad for which she developed a similar definition: "a person of any age or nationality who has lived a significant part of his or her developmental years in one or more countries outside his or her passport country because of a parent's occupation."

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"...a young person who has spent a sufficient period of time in a culture other than his own, resulting in integration of elements from both the host culture and his own culture into what we have called a third culture."

In 1993 Ruth Hill Useem described the progressive use of TCK terminology this way, including a similar definition for TCKs:

“...we began to use the term "third culture" as a generic term to cover the styles of life created, shared, and learned by persons who are in the process of relating their societies, or sections thereof, to each other. The term "Third Culture Kids" or TCKs was coined to refer to the children who accompany their parents into another society.”¹⁰

The most prominent work in the TCK field is the book *Third Culture Kids: Growing Up Among Worlds* by David Pollock and Ruth Van Reken, first published in 1999.¹¹ The third edition, published in 2017, includes David's son Michael Pollock as a third co-author.¹² The original definition of a Third Culture Kid from the 1999 publication was as follows:

“A Third Culture Kid (TCK) is a person who has spent a significant part of his or her developmental years outside the parents' culture.”^{11a}

By the time the 3rd Edition was published in 2017, a revised definition was included which specified international mobility, putting it more in line with McCaig's definition of a Global Nomad:

“A traditional TCK is a person who spends a significant part of his or her first 18 years of life accompanying parent(s) into a country that is different from at least one parent's passport country(ies) due to a parent's choice of work or advanced training.”^{12a}

The use of “traditional TCK” contrasted with “domestic TCK,” a term coined to include those experiencing cultural dislocation within their own country, while contrasting this with global mobility in “traditional Third Culture Kids.”¹² This is part of Ruth Van Reken's Cross Cultural Kid model, which illustrates some of the many ways a young person can be impacted by multiple cultures.^{12a} Other subtypes include ethnic, religious, or linguistic minority groups, as well as those making permanent international relocations, as migrants or refugees.

Tanya Crossman builds on this by discussing cross-cultural intersectionality: the layering of multiple cross-cultural experiences and identities.^{13,14}

While there is dispute among scholars and caregivers over definitions and best usage, we chose to follow the CCK model, which classes both

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domestically mobile and internationally mobile TCKs as sub-types of cross-cultural childhood experience. For the purpose of this study, with limited resources available and interest in the impact of international movement, we surveyed only those who had experienced global mobility.

Third Culture Kids: Literature

Literature concerning Third Culture Kids has developed over time, with a large increase in content over the past 15 years. The first category of TCK literature is memoir and other methods of sharing individual stories and perspectives. An early well-known example in this field is *Unrooted Childhoods* (2004), a memoir collection edited by Eidse and Sichel.¹⁵ Other notable examples include: *Home Keeps Moving* (2010) by Heidi Sand-Hart, *Letters Never Sent* (2012) by Ruth Van Reken, *Hidden In My Heart* (2013) by Taylor Murray, *Between Worlds* (2014) and its sequel *Worlds Apart* (2018) by Marilyn Gardner.^{16,17,18,19,20} Often these works served as catharsis and validation for Third Culture Kids who had similar experiences, as well as eye-opening narrative for caregivers.

As awareness and interest in the field grew, more resources were created, building on the seminal work by Pollock and Van Reken, to discuss and share care strategies for parents, educators, and other caregivers. Pioneers in this field include: Ettie Zilber's *Third Culture Kids - The Children of Educators in International Schools* (2009), Tina Quick's *The Global Nomad's Guide to University Transition* (2010), Julia Simens' *Emotional Resilience and the Expat Child* (2011), Lois Bushong's *Belonging Everywhere and Nowhere* (2013), and

Doug Ota's *Safe Passage* (2014).^{21,22,23,24,25} Later additions which have greatly added to the field include *Third Culture Kids: A Gift to Care For* (2019) by Ulrika Ernvik, *Raising Global Teens* (2020) by Anisha Abraham, and Lauren Wells' books *Raising Healthy Third Culture Kids* (2020) and *The Grief Tower* (2021).^{26,27,28,29}

A third category of literary works are integrative, combining narrative through memoir or qualitative research with practical resources, either for caregivers or for Third Culture Kids themselves. Notable examples of this type include: *Slurping Soup and Other Confusions* (2013) by Tonges et al; *Arrivals, Departures and the Adventures In Between* (2014) by Christopher O'Shaughnessy; *Misunderstood* (2016) by Tanya Crossman; *Growing Up in Transit* (2017) by Danau Tanu; and *The Third Culture Teen* (2020) by Jiwon Lee.^{29,30,31,32,33}

There is also an emerging field of fiction for Third Culture Kids, centering on children with globally mobile experiences. Fictional stories of Third Culture Kid experiences have existed for a very long time. *The Little Princess* (1905) and *The Secret Garden* (1911) by Frances Hodgson Burnett are classic examples of repatriating Third Culture Kid fiction, and *When Africa Was Home* (1994) by Karen Lynn Williams is a later example of a Third Culture Kid picture book.^{34,35,36} Modern TCK fiction is generally aimed at providing empathy and validation for the emotions of Third Culture Kids in transition, not only validating but also equipping these children with tools for overcoming struggles such as culture shock, homesickness, and reverse culture shock. Notable examples include *B at Home* (2014) by Valerie Besanceney and two books by Emily Steele Jackson: *Home, James* (2018) and *See Ya Later, Allie Rader* (2021).^{37,38,39}

Much of the literature published in the categories we have labeled 'care strategies' and 'integrative' relies largely on qualitative research, whether interviews with subjects or surveys asking qualitative questions. Quantitative research available to cite is often too specific to apply, or not specific enough, such as research about child development in general without reference to Third Culture Kids. Thousands of scholarly articles concerning the Third Culture Kid experience have been published, making use of both qualitative and quantitative research, yet most draw from limited pools of respondents,

certain sub-groups or nationalities. In many cases, results contain a mix of caution and hope: both positive outcomes overall, but also potential difficulties to be aware of.^{40,41,42,43} Results like this are the reason we believe strongly in preventive care, and research-based awareness of potential struggles to equip caregivers and Third Culture Kids of all ages for lifelong thriving.

As TCK literature moves forward, we hope to see less need to rely on anecdotal evidence (albeit anecdotal evidence built up through decades of hands-on practice) because plenty of helpful and applicable research will be available to back up what practitioners and caregivers are seeing in those they support.

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Adverse Childhood Experiences

The concept of Adverse Childhood Experiences (ACEs) and ACE scores was first explored in the 1990s by Dr. Vincent Felitti, along with the Centers for Disease Control and Prevention (CDC).¹ The purpose of the original study was to determine whether a link existed between difficult events and experiences in an individual's developmental years and their physical, emotional, and mental health as adults. The 10 factors that make up the ACE score are arranged as a series of yes or no questions leading to a score of 0-10, “which has repeatedly demonstrated a strong, graded, dose-response relationship to numerous health and social outcomes.”⁴⁴

From the earliest studies, high ACE scores have been associated with higher risk of disease, depression, alcoholism, and obesity.¹ High ACE scores have since been connected with an increased risk of autoimmune disease, chronic lung disease, liver disease, in addition to poor performance in school, unemployment and high-risk behaviors, such as smoking, illicit drug use and promiscuity.⁴⁵ There is also a high risk for negative mental health outcomes, and even premature death.^{46,47} People with high ACE scores are more likely to be violent, to have more marriages, more broken bones, more drug prescriptions, more depression, and more autoimmune diseases.⁴⁸

The more ACEs an individual has, the higher their risk for negative outcomes.⁴⁹ People with an ACE score of six or higher are at risk of their lifespan being shortened by an average of 20 years.⁵⁰ Adults with an ACE score of four or more are 32 times more likely to have a learning or behavioral issue compared to adults with a score of 0.⁵¹ They are also twice as likely to develop heart disease or cancer, seven times more likely to develop alcohol dependence, and have a nearly 400% greater risk of emphysema or chronic bronchitis.¹ They are also four times more likely to suffer from depression and 12 times more likely to attempt suicide.⁵² The risk of suicide skyrockets to 35% for those with an ACE score of 7 or more.⁵³ High-risk behaviors account for nearly 50% of these increased risks.⁵⁴ These unhealthy coping strategies are the logical place for hurting individuals to turn when they have not been adequately equipped with healthy coping strategies. As Felitti himself wrote in 2009:

“Many of our most intractable public health problems are the result of compensatory behaviors like smoking, overeating, and alcohol and drug use, which provide immediate partial relief from the emotional problems caused by traumatic childhood experiences. Those experiences are generally unrecognized and become lost in time, where they are protected by shame, by secrecy, and by social taboos against exploring certain areas of human experience.”⁵⁵

Moreover, “the stress of ACEs can inhibit natural, positive methods of coping.”⁴⁵ When those with high ACE scores seek treatment for drug or alcohol addiction, they are also less likely to complete treatment, and more

likely to require additional support to achieve sobriety.⁵⁶

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ACE research has also been conducted in developing countries. In 2002-2003, a study using some of the ACE⁵⁷ factors was done in Nigeria. In 2010, an ACE study of 1,068

individuals was done in Manila, Philippines.⁵⁸

Adverse Childhood Experiences may look different or be contextualized differently when experienced by globally mobile Third Culture Kids. As Lauren Wells writes:

“When talking with college-age TCKs, I’ll ask about sexual abuse, and often they’ll say they’ve never experienced that. But when I go a step further and ask if they’ve ever been touched inappropriately, they’ll say, “Well, I mean, I was grabbed on the behind or front anytime I walked through a marketplace, but that’s just to be expected because I’m light-skinned and stand out.” Just because it is seemingly common does not mean that it isn’t impactful and worthy of being a block on the Grief Tower or an ACE score.”

The purpose of ACE score data is not to risk-assess certain situations as bad for children, for the purpose of removing children or families. It is not to condemn certain individuals as having inevitable bad outcomes as adults. Instead, ACE score data allows us to identify individuals at risk of unhealthy outcomes so that we can apply research into protective factors, and make informed choices during the developmental years. For example, having a supporting adult to turn to during difficult times helps reset stress activation in children, and lacking that support leads to toxic continuous stress.⁵⁹ Thus the presence of supportive adults is crucial for children living in stressful (or potentially stressful) situations.

In 2017, Robert D Sege and Charlyn Harper Browne developed a holistic care practice that mitigates the risks that come from high ACE scores, known as HOPE.⁶⁰ They found that being in nurturing, supportive

relationships; living, developing, playing, and learning in safe, stable, protective, and equitable environments; having opportunities for constructive social engagement and connectedness; and learning social and emotional competencies all contributed to a child’s well-being in adulthood and counteracted many negative effects of the children’s ACE scores.

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In 2019, research was conducted on the concept of Positive Childhood Experiences (PCEs).⁶¹ This research looked at those who reported high ACE scores and sought to discover why some in that population had fewer related adverse experiences in adulthood compared to others with the same number of ACE scores. Their research revealed seven PCEs that act as protective factors and explain how someone with a high ACE score can still thrive in adulthood.

“ Having higher counts of PCEs was associated with 72% lower odds of having depression or poor mental health overall as an adult. ”

Bethell and her coworkers found that having higher counts of PCEs was associated with 72% lower odds of having depression or poor mental health overall as an adult; that those with higher levels of positive experiences were over 3.5 times more likely to have healthy social and emotional support as an adult; and that

accumulation of the seven PCEs shifted the outcome positively in adulthood.⁶¹

Methodology

While a methodology report has already been made available, we have collected a summary of information here. For more details, please read the full report.⁶²

Data Collection

We created an online survey which was circulated through various online networks of people who self-identify as Third Culture Kids, Military Kids, Missionary Kids, missionaries, expatriates, international school educators, globally mobile, and global nomads. In addition, the survey was promoted by adult TCKs who are experts in relevant fields, had taken the survey, and then promoted it to their own networks. This included multinationals, foreign service kids, and military kids with experience as academics and international educational consultants.

Prior to circulation, the survey went through a three month process of design review. This included oversight from experts in relevant fields such as academic researchers, international educators and educational consultants, therapists with specific expertise in globally mobile populations (both counselors and psychologists), and a child psychologist. We made changes and additions to wording and support structures in accordance with their suggestions.

We strategically modeled many of the questions on existing ACE questionnaires to enable us to compare our data to previous studies.⁶³ More recent research has widened the ACE parameters to include additional potential traumas such as bullying, teen dating violence, community violence, homelessness, economic hardship, and death of a parent.⁶⁴ We chose to stick to the original ten ACE factors so as to make our data comparable with as many other studies as possible.

Some additional questions were interspersed, largely to answer questions that would naturally arise in respondents' minds - "why ask this but not that?" For example, the original ACE questionnaire asks about violence toward one's mother/step-mother, but not toward the father/step-father; we asked about both. As another example, the ACE question about sexual abuse stipulates that the perpetrator be an adult or at least five years older than the respondent. Anticipating the question "what about the person who was abused by a minor of a similar age?" we included additional questions to represent experiences of child-on-child sexual abuse, as well as sexual grooming. While these responses do not count toward respondents' ACE scores, the data was collected and will be explored in a future paper.

Another change was in the instructions regarding the nature of household members. Typical ACE questionnaires make it clear that any adult living in the house is a household member, including extended family or family friends. In our explanation we clarified that household members also included household staff living in the home, which is common in some expatriate communities.

The survey began with a number of demographic questions, both quantitative and qualitative, to assist in sorting and analyzing the resulting

data. Finally, there were also a series of additional questions related to developmental trauma more generally, which will not be explored in this white paper.

Data Analysis

By the end of the six month survey period, 2,377 responses were received. These responses were put through four exclusion criteria to determine suitability for inclusion in the final data set. Thirty-five were rejected as being respondents under the age of 18. An additional 419 were rejected for being incomplete; that is, not completing all the required questions regarding demographics, ACEs, and developmental trauma. This included a number of responses where only a handful of questions had been answered before the respondent navigated away from the survey. Thirty-seven complete responses were flagged for individual review, as they indicated a potential lack of international mobility. After review 19 were rejected, and 18 retained. Those retained showed a clear experience of international mobility, while those rejected had cross-cultural experiences without international mobility. Those who indicated they had lived in only one country were also reviewed individually; all were living outside their passport country. Finally, all accepted responses were scanned for identical answers; no identical responses were identified. This left 1,904 responses which were included in our final data set.

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In addition to the review of exclusion criteria, a review of qualitative demographic questions was conducted. Respondents were asked to categorize the reasons for their mobility and their educational background, in both cases selecting a primary identifier as well as listing all that applied. All responses in which “none of the above” was selected as the primary identifier for either mobility sector or education were individually reviewed. After review, the majority could be clearly assigned to one of the existing categories using either the explicit or implicit description given. That respondents did not see themselves in the categories was a failure on our part to make our definitions clear; this is explained further in the Demographics section.

The survey was created using Momentive, and some analysis was conducted using its in-built tools; this was especially helpful for fast viewing of particular multivariate sets.⁶⁵ All data was exported in excel files, where more data analysis could be done offline.

Limitations

In the context of our research, the complexity of Third Culture Kid identity and experience as discussed in the Background section of this paper posed problems when it came to drafting questions. To fully engage in a person's geographic experience and cultural identity is an incredibly complex undertaking. The focus of our research was to quantify Adverse Childhood Experiences and explore other experiences of developmental trauma among TCKs with experiences of international mobility; for this reason we chose not to front load the survey with complex questions about specific geographical experience and cultural identity. While this would be very interesting information to have, the difficulty in acquiring it would reduce completion rates without adding greatly to the data collected. Instead, we chose to focus on mobility sector and education as our key qualitative demographics. We also did not ask respondents to share their gender, therefore no gender-based T-tests can be done with this data.

We used non-random sampling to collect our data. That is, we did not choose our respondents; they chose us. The limitation of non-random sampling is that we cannot be sure that this sample in fact represents the TCK population as a whole. Our results come from a pool of people who already identify with international mobility in some way, or were sent the survey information by an acquaintance who did. The comments we received were a mix of those who believed all TCKs had lots of trauma, and those who believed no TCKs experienced trauma; while this indicates diversity in our sample, we cannot be sure this is an accurate sampling. We do believe, however, that our results highlight the need for additional future research.

We did not individually identify each respondent, so there is some risk of fraudulent responses. Steps were taken to minimize this risk. The software used to run the survey was set to recognize IP addresses; if a second attempt was made to take the survey from the same IP address, the individual would

not be permitted to re-take the survey but instead be asked to review their previous response. All complete responses were scanned for identical responses; none were detected. This makes it highly unlikely anyone accidentally answered the survey more than once. After completing the survey, respondents were given the option to share comments and/or their email address to receive updates about the research. 38% of respondents chose to leave their email address, and a further 6% left a comment but not an email address, making a total of 44% (837 people) who made this optional extra effort. While this has no objective empirical value, it certainly suggests that a large proportion of respondents were individually invested in the survey and its results.

“We are confident in the quality of the ACE data presented here.”

Finally, human error could be a factor in the assignment of ACE scores to individual respondents. Each respondent answers questions pertaining to the ten ACE factors. These were tabulated individually by a researcher to create an ACE score for each individual. These scores were then re-calculated and checked. Random checks were later conducted, during which no errors were discovered. Given these layers of checks, we are confident in the quality of the ACE data presented here.

Demographics

Survey respondents were asked to share their experiences concerning a series of demographic categories which we then used to compare and contrast ACE scores between groups. The demographics used in data analysis are explained below, along with tables recording results. In this section we will discuss the demographic results regarding sector, education, age, and mobility (countries lived in, location moves, and house moves).

Sector

We asked respondents to describe the reason/s for their childhood

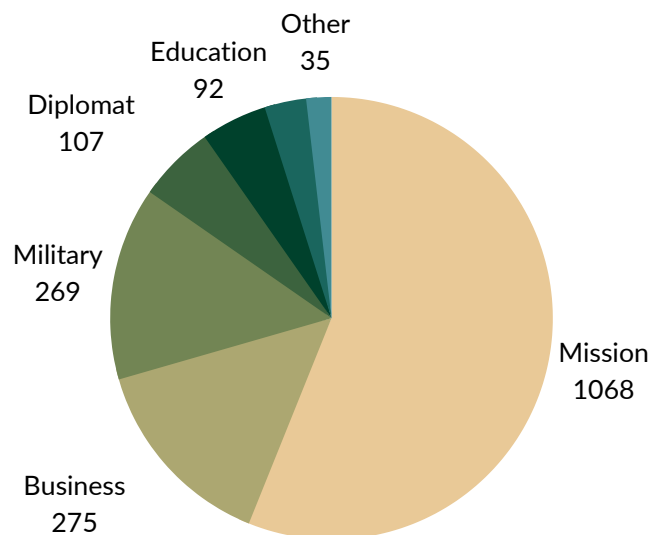
international mobility. An internationally mobile family's sector can have a big impact on what financial, relational, and cross-cultural resources are (or are not) made available to them, so we expected that there would be significant differences in results by sector.⁶⁶

We gave respondents space to record all the reasons for their childhood mobility, as many families have complex motivations behind international moves. This may be due to two parents having different occupations, changes in career over time, or different moves occurring for different reasons. In addition to this we also asked respondents to select one primary reason they identified for their international mobility. This was done so as to be able to use this qualitative demographic factor to sort the rest of the data collected. The seven primary sector categories we created comprise the following range of experiences:

1. **Mission:** a family who moves overseas with the goal of spreading their religion, through a variety of means.
2. **Business:** a family who moves overseas for work (that does not fall into other specific categories). This includes corporate transfers, entrepreneurial ventures, self-initiated expatriates, and those who move looking for work.
3. **Military:** a family who moves overseas due to a parent's military service.
4. **Diplomat:** a family who moves overseas due to a parent's service with their country's foreign service, whether in the diplomatic corps specifically or in other branches of government service.
5. **Education:** a family who moves overseas due to a parent's role as a teacher or student. This includes a parent with a student visa, and a parent on a teaching sabbatical.
6. **NGO/IGO:** a family who moves overseas due to a parent's work in a Non-Government Organization (e.g. Oxfam, Médecins Sans Frontières) or an Intergovernmental Organization (e.g. UN, WTO). This category also included all other charity, humanitarian, and development work.
7. **Other:** Only 35 respondents did not fall into one of the above six categories; 29 of these moved overseas due to a parent's relationship (moving to be near a love interest, to a parent's home country, etc.).

The low number of true “Other” respondents (6) is due to individual review and reallocation. Where a respondent chose “none of the above” for their primary sector, their response was individually reviewed. In many cases, other responses that made it clear they in fact fit into one of the categories as expanded upon above, even though they didn’t feel identity with them. In some cases, we had failed to communicate the nature of the category well enough; in other cases, their description of their situation was exactly what was in the category description. For example, some were unsure that their particular type of humanitarian work fell into the NGO/IGO category. Others were clearly included in the Business category, but did not identify with it, perhaps due to an assumption that this was for high-budget corporate families only. These “none of the above” answers were re-categorised according to the other responses they volunteered, so that their data would be counted in sector comparisons.

Respondents by primary mobility sector		
Sector	# People	% of Total
Mission	1,068	56.1%
Business	275	14.4%
Military	269	14.1%
Diplomat	107	5.6%
Education	92	4.8%
NGO/IGO	58	3.1%
Other	35	1.9%



As you can see above, both the Education and NGO/IGO sectors were under 100 total responses each. This is too small a sub-set for comparison (we used groups of at least 100 for each comparison). For this reason, we combined the Education and NGO/IGO sectors into one group of 150 respondents for the purposes of sector comparison, labeled Edu-NGO.

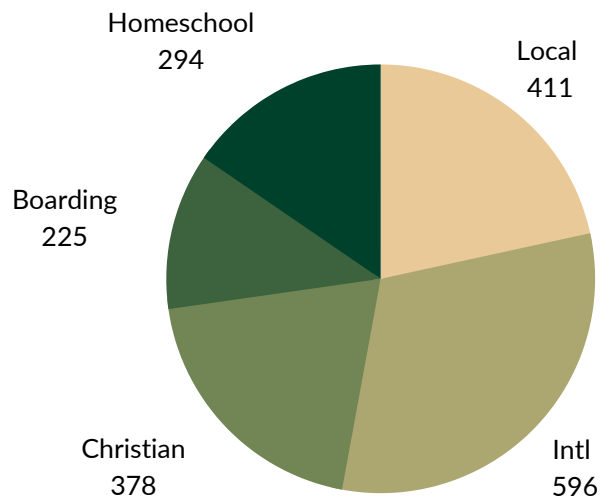
The mission sector comprised over 50% of the total respondents. This is a significant group, large enough to change the overall statistics on its own. For this reason, we ran comparisons for the mission and non-mission groups whenever looking at total group statistics. In some cases, the numbers were similar; in other cases there was a large difference between the two.

Education

We asked respondents to list the different categories of educational environments they experienced during childhood. The type of school an internationally mobile child attends impacts their experience of transitional relationships and access to cross-cultural training.⁶⁷ As with sectors, we asked for both the full list of environments experienced, as well as for their core educational experience. Only one choice was permitted; respondents were asked which category best represented their core educational experience. This allowed us to use this qualitative demographic factor to sort the rest of the data collected. We were interested to see if any patterns might show up here. The five core educational experiences categories we created comprise the following range of educational environments:

1. **Local school:** any national curriculum school in its own country, whether public or private (accredited by the country in which it exists).
2. **International school:** any school using a different curriculum to that of the country in which it is located, whether the student population is predominantly local or foreign (this may or may not include using a different language to the national curriculum). The curriculum might be that of a different country, something different like the International Baccalaureate, or offer a mix of options.⁶⁸ This category includes Department of Defense schools, military base schools, and embassy schools.
3. **Christian international school:** any international school (see definition above) which is run with a specifically Christian worldview. This includes both large international schools and small missionary schools. The student body may include children from non-Christian families, who choose it as the only international option available in their area, or a more cost-effective option than other international schools.
4. **Boarding school:** any school where students live on campus, whether during the week or throughout the school term. Includes students who live in boarding houses off-campus, but away from family.
5. **Homeschool:** any situation in which students are educated outside of a scholastic establishment, with self-determined curriculum; includes family homeschooling, individual tutoring with a hired teacher, and homeschool cooperative groups (with parent teachers or a hired teacher).

Respondents by core educational experience		
Education	# People	% of Total
Local school	411	21.6%
International School	596	31.3%
Christian intl school	378	19.9%
Boarding school	225	11.8%
Homeschool	294	15.4%
Other	0	0.0%



There are zero respondents in the Other category due to individual review and reallocation. In the few cases where a respondent chose “none of the above” as their core educational experience, their response was individually reviewed. In every case, they had left responses that made it clear they in fact fit into one of the categories as expanded upon above. The problem was in our communication of those categories.

For example, many of those who chose “none of the above” attended Department of Defense, Military Base, or Mission schools - all of which fall into one of our broad categories. That they felt they were not included means that we had not communicated the scope of the category rather than that their responses should not be counted. For this reason, all “none of the above” answers were re-categorised according to other responses they volunteered, so that their data would be counted in education comparisons.

Given the high percentage of Mission kids in the sample, it is prudent to immediately compare these two qualitative demographics. The following table plots out the frequency of respondents by both sector and education.

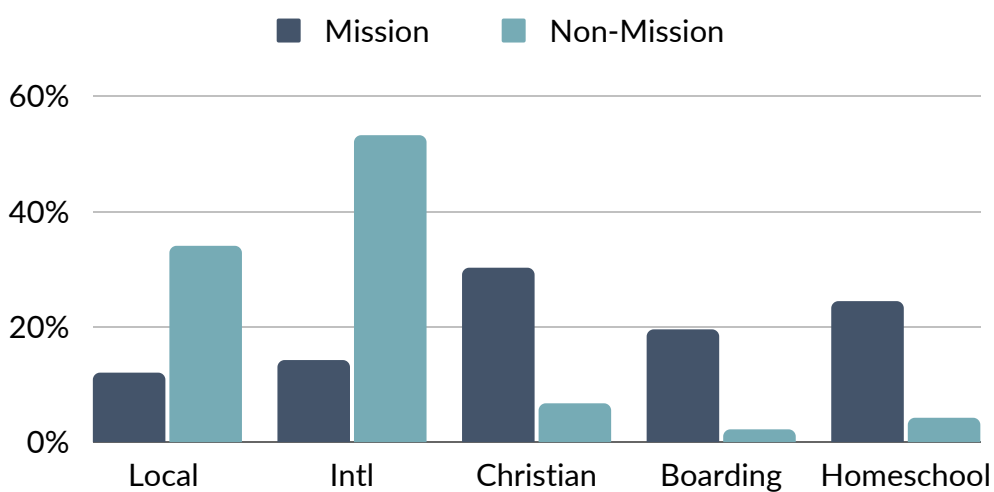
Here it becomes clear that the seemingly even distribution of education types is skewed by the mission population, who make up most of the respondents who attended Christian international schools, boarding schools, and homeschool.

“ The type of school an internationally mobile child attends impacts their experience of transitional relationships and access to cross-cultural training. ”

Comparing sector and education					
	Mission	Business	Military	Diplomat	Edu-NGO
Local	128	86	133	14	35
International	152	157	117	88	73
Christian Intl	322	19	5	3	25
Boarding	207	7	1	0	8
Homeschool	259	6	13	2	9

This next table compares education type by the percentage of mission and non-mission kids who selected it as their primary educational experience. There is a huge difference in the two groups, with the vast majority of non-mission kids attending either local school or international school, while less than a third of mission kids are split between those two educational options.

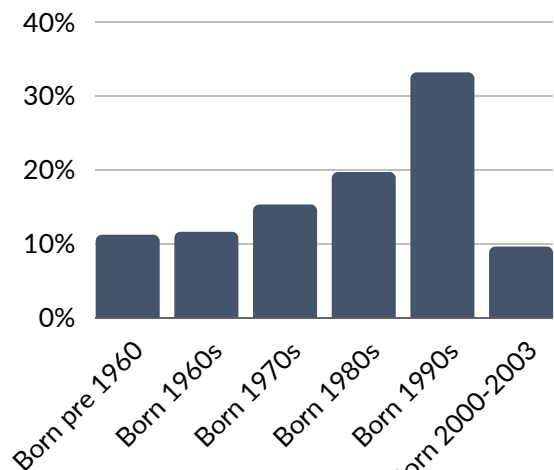
Education % in Mission and Non-Mission		
	Mission	Non-Mission
Local	12.0%	33.9%
International	14.2%	53.1%
Christian Intl	30.1%	6.7%
Boarding	19.4%	2.2%
Homeschool	24.3%	4.2%



Age

We asked respondents for their year of birth, rather than current age. This limits the impact of different cultural age counting methods. It also makes clear the age of the respondents in history for future reference to this research, and allows us to more readily group respondents by decade of birth.

Respondents by decade of birth		
	# of People	% of Total
Born before 1960	212	11.1%
Born 1960-1969	219	11.5%
Born 1970-1979	289	15.2%
Born 1980-1989	373	19.6%
Born 1990-1999	631	33.1%
Born 2000-2003	180	9.5%

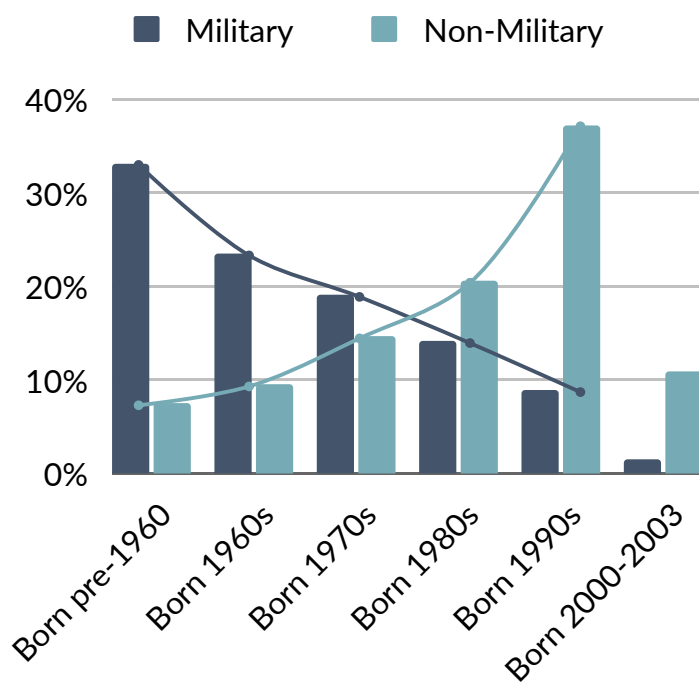


At this point, we wish to point out a bivariate comparison of note. When different sectors are compared by decade of birth, the military sector shows a divergent pattern. Whereas in other sectors we received more responses from younger participants than from older participants, in the military sector we received disproportionately more responses from older participants.

Respondents by decade of birth					
	Mission	Business	Military	Diplomat	Edu-NGO
Born before 1960	101	8	89	11	3
Born 1960-1969	99	29	63	14	12
Born 1970-1979	142	52	51	15	25
Born 1980-1989	213	63	38	19	25
Born 1990-1999	400	100	24	34	64
Born 2000-2003	113	23	4	14	21

When the military sector responses are separated out, a different picture of the age breakdown appears. The line charts placed over the resulting bar chart show how the age trends go in completely opposite directions.

Respondents by decade of birth, military vs non-military						
	All People	% of Total	Military	% Military	Non-Mil	% Non-Mil
Born before 1960	212	11.1%	89	33.0%	123	7.5%
Born 1960-1969	219	11.5%	63	23.4%	156	9.5%
Born 1970-1979	289	15.2%	51	19.0%	238	14.6%
Born 1980-1989	373	19.6%	38	14.1%	335	20.5%
Born 1990-1999	631	33.1%	24	8.9%	607	37.1%
Born 2000-2003	180	9.5%	4	1.5%	176	10.8%



(Line chart excludes the incomplete decade of 2000-2003.)

Mobility

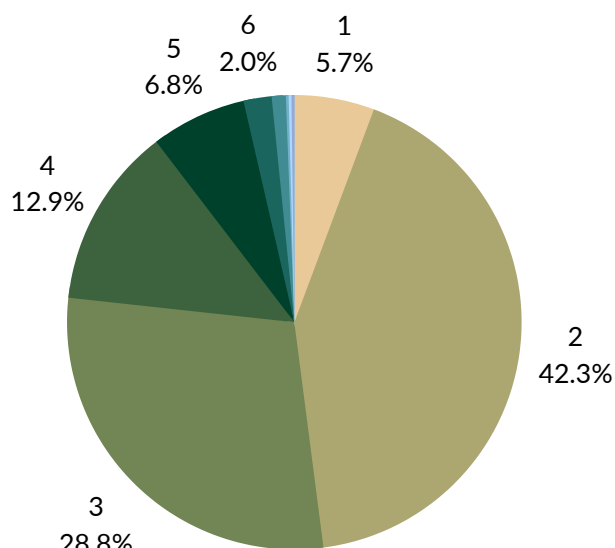
We asked respondents to calculate three numbers representing three different types of mobility: number of countries lived in, number of location moves, and number of house moves. While each question results in a number

that can be treated as quantitative data, these responses are in another way more like qualitative data. There was a level of subjectivity involved in how some individuals came to the numbers they submitted.

Countries Lived In

The number of countries a person lived in before age 18 sounds straightforward on the surface. The gray area comes when asking how long counts as living in a place. One year? Six months? One month?

Countries lived in		
# Countries	# People	% of Total
1	108	5.7%
2	806	42.3%
3	548	28.8%
4	246	12.9%
5	130	6.8%
6	38	2.0%
7	18	1.0%
8	2	0.1%
9	4	0.2%
10	1	0.1%
>10	3	0.2%

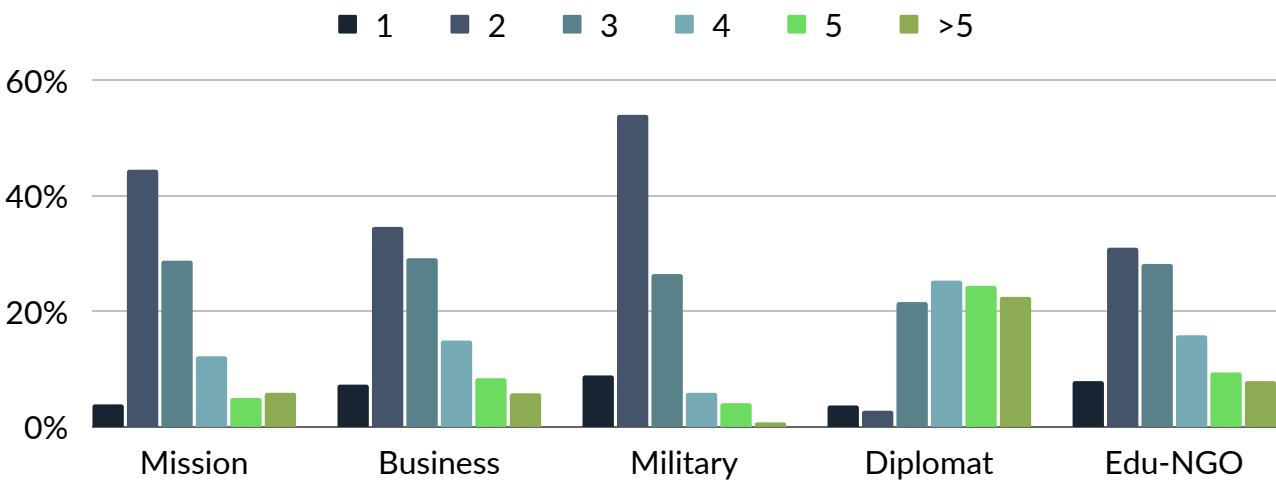


The majority of TCKs in our sample (71%) lived in two or three countries before the age of 18, and an additional 20% lived in four or five countries. Fewer than 4% lived in six or more countries. Those who lived in only one country, it is worth re-stating, were not living in their passport countries (a condition of eligibility).

When we compare the countries lived in by mobility sector, some patterns begin to emerge. (See data table and chart on the next page.)

“The majority of TCKs in our sample (71%) lived in two or three countries before the age of 18, and an additional 20% lived in four or five countries.”

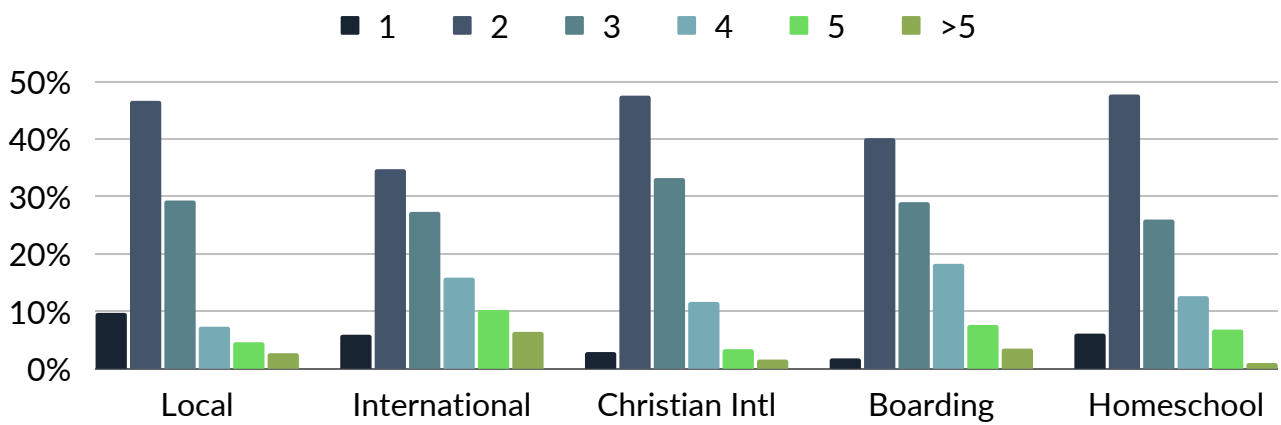
Mobility sectors, by countries lived in					
	Mission	Business	Military	Diplomat	Edu-NGO
1 country	3.9%	7.3%	8.9%	3.7%	7.9%
2 countries	44.4%	34.5%	53.9%	2.8%	30.9%
3 countries	28.7%	29.1%	26.4%	21.5%	28.1%
4 countries	12.2%	14.9%	5.9%	25.2%	15.8%
5 countries	5.0%	8.4%	4.1%	24.3%	9.4%
>5 countries	5.9%	5.8%	0.8%	22.4%	7.9%



Military Kids lived in fewer countries; those from the Edu-NGO sector lived in slightly more than others. The diplomat sector showed far higher international mobility. There was less differentiation by education. There was slightly higher mobility among those who attended international schools, but overall the driver would appear to be sector rather than education. (Also see chart on the next page.)

Education, by countries lived in					
	Local school	International	Christian	Boarding	Homeschool
1 country	9.7%	5.9%	2.9%	1.8%	6.1%
2 countries	46.5%	34.6%	47.4%	40.0%	47.6%
3 countries	29.2%	27.2%	33.1%	28.9%	25.9%
4 countries	7.3%	15.8%	11.6%	18.2%	12.6%
5 countries	4.6%	10.2%	3.4%	7.6%	6.8%
>5 countries*	2.7%	6.4%	1.6%	3.5%	1.0%

*There are fewer than 100 people in the >5 category, so we consider the data in this sub-group unreliable.

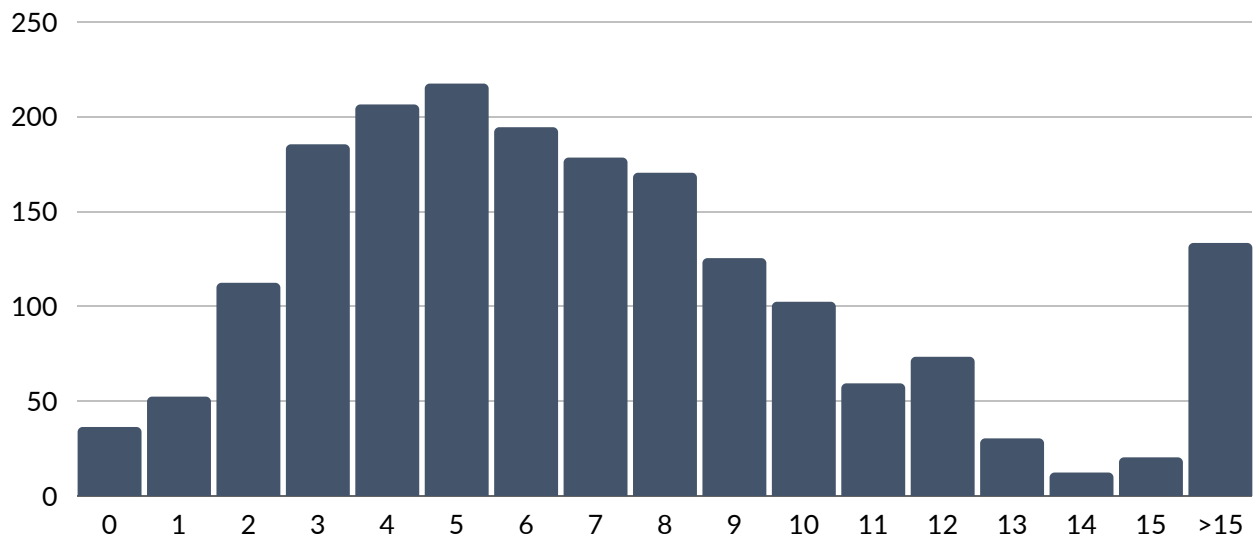


Location Moves

We asked how many times a respondent moved locations (a new country/city) before age 18. This added domestic mobility to international mobility. (See also chart on the next page.)

Location moves		
# of Moves	# People	% of Total
0	36	1.9%
1	52	2.7%
2	112	5.9%
3	185	9.7%
4	206	10.8%
5	217	11.4%
6	194	10.2%
7	178	9.4%
8	170	8.9%
9	125	6.6%
10	102	5.4%
11	59	3.1%
12	73	3.8%
13	30	1.6%
14	12	0.6%
15	20	1.1%
>15	133	7.0%

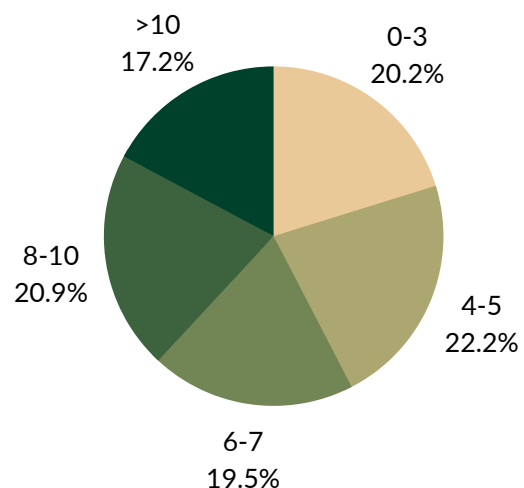
“The average internationally mobile TCK in our sample moved location every three years throughout childhood.”



By assigning the >15 category a value of 16, we calculated a mean number of location moves of 7, and a median of 6. When the >15 category was removed from the calculation, the mean reduced to 6, and the median remained 6. This means the average internationally mobile TCK in our sample moved location every three years throughout childhood.

For the purposes of multivariate comparison, we also combined this data into groups of approximately equal distribution across the total population.

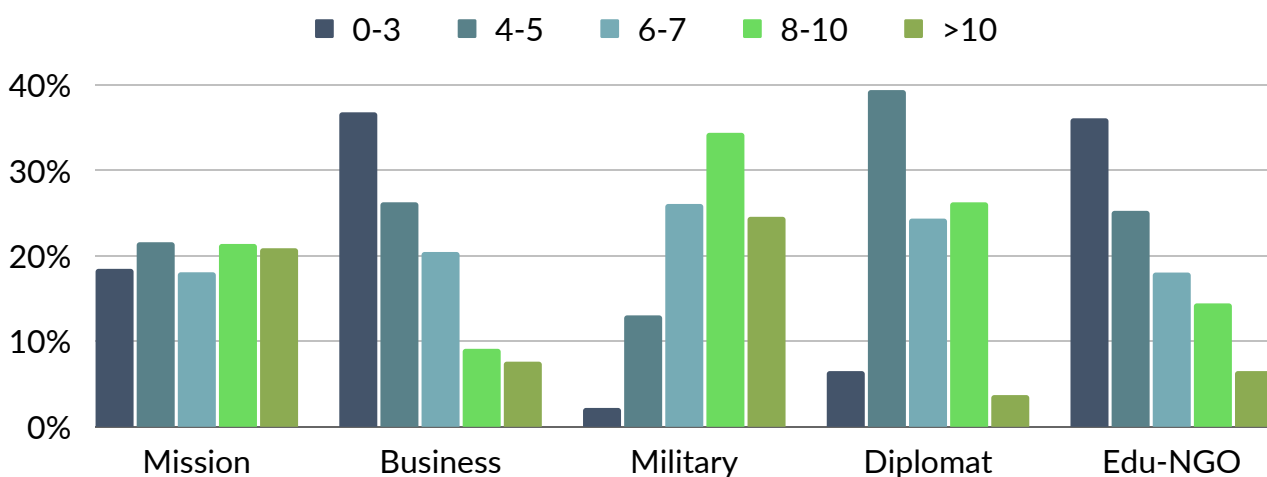
Location moves, condensed		
# of Moves	# People	% of Total
0-3	385	20.2%
4-5	423	22.2%
6-7	372	19.5%
8-10	397	20.9%
>10	327	17.2%



It is difficult to precisely define what does and does not constitute a “move” without writing a hundred different example scenarios, and some would still be left out. By keeping to a simple question we allowed respondents to individually define what made sense in their own circumstances.

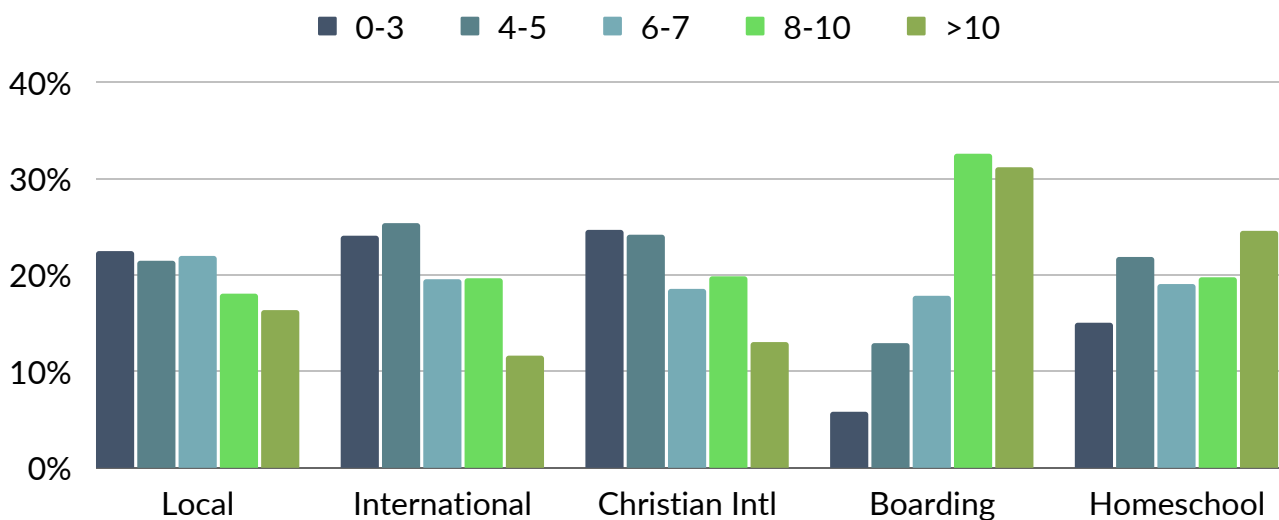
When the combined location move groups are divided up by sector, mobility patterns become apparent. The mission group numbers are reasonably flat, as to be expected given that they make up a large proportion of the overall sample. Every other sector, however, has a vastly different makeup. There is some similarity between the business and Edu-NGO sectors, both of which have lower mobility than other sectors. The military sector shows much higher mobility, which is not surprising. The diplomat sector has a different distribution again, with about 90% of respondents falling in the three middle categories (4-10 location moves).

Mobility sectors, by location moves					
	Mission	Business	Military	Diplomat	Edu-NGO
0-3 moves	18.4%	36.7%	2.2%	6.5%	36.0%
4-5 moves	21.5%	26.2%	13.0%	39.3%	25.2%
6-7 moves	18.0%	20.4%	16.0%	24.3%	18.0%
8-10 moves	21.3%	9.1%	34.3%	26.2%	14.4%
>10 moves	20.8%	7.6%	24.5%	3.7%	6.5%



The distributions by education are less stark, but some notes can still be made. There was slightly less mobility in international school students, with the distribution very similar for Christian schools. Local schools had slightly higher mobility, with a not dissimilar distribution. The distribution was different in the homeschool and boarding school groups, trending toward higher mobility, with extremely high mobility in the boarding students. This likely reflects the multiple moves of living in two places at once which many boarding students experience. (See data table and chart on the next page.)

Education, by location moves					
	Local school	International	Christian	Boarding	Homeschool
0-3 moves	22.4%	24.0%	24.6%	5.8%	15.0%
4-5 moves	21.4%	25.3%	24.1%	12.9%	21.8%
6-7 moves	21.9%	19.5%	18.5%	17.8%	19.0%
8-10 moves	18.0%	19.6%	19.8%	32.5%	19.7%
>10 moves	16.3%	11.6%	13.0%	31.1%	24.5%



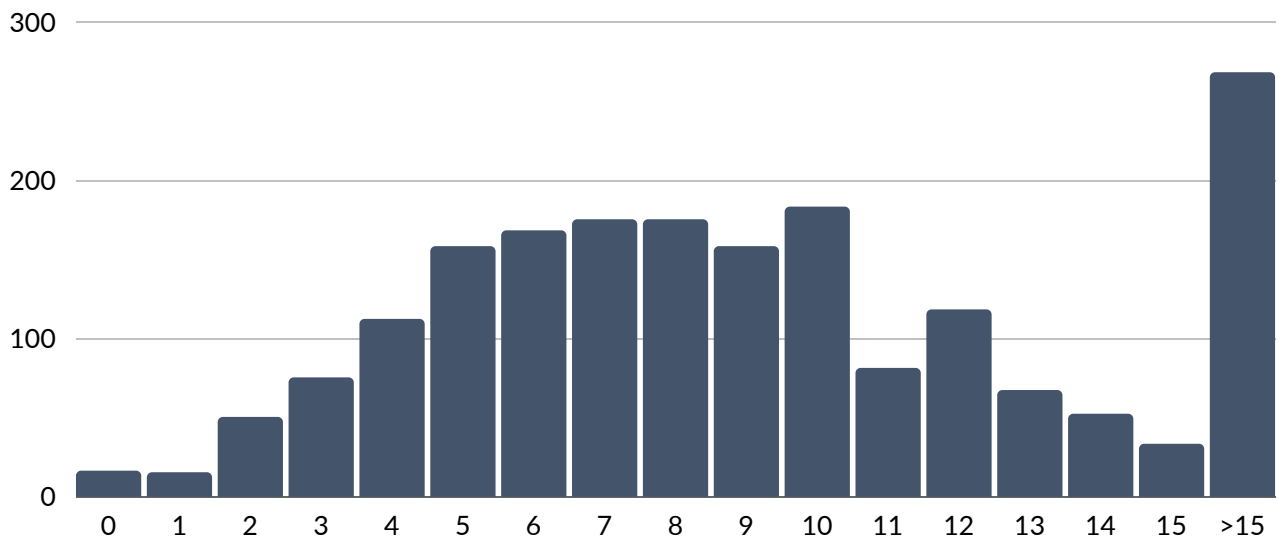
House Moves

With house moves we again left space for self-definition. We asked for the number of times a respondent moved house (including in the same location) before age 18. This added another layer of mobility to the experiences of TCKs in our sample.

When calculating the >15 group as 16, the mean and median were both 9. The mode was >15, however, suggesting that the true mean and median would be higher. Even with a mean of 9, however, we can surmise that the average TCK sampled moved house every two years during childhood. (See data table and chart on the next page.)

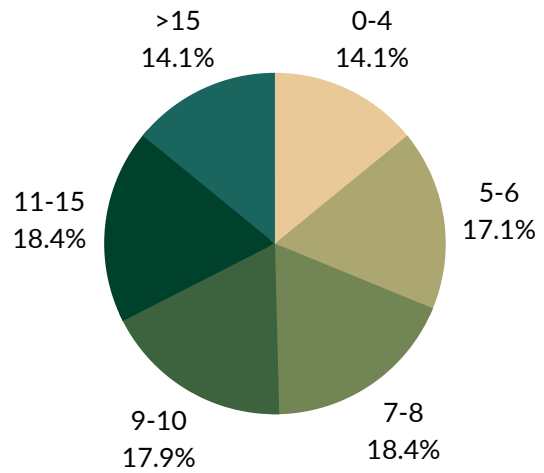
“ The average TCK sampled moved house every two years during childhood. ”

House moves		
# of Moves	# People	% of Total
0	16	0.8%
1	15	0.8%
2	50	2.6%
3	75	3.9%
4	112	5.9%
5	158	8.3%
6	168	8.8%
7	175	9.2%
8	175	9.2%
9	158	8.3%
10	183	9.6%
11	81	4.3%
12	118	6.2%
13	67	3.5%
14	52	2.7%
15	33	1.7%
>15	268	14.1%



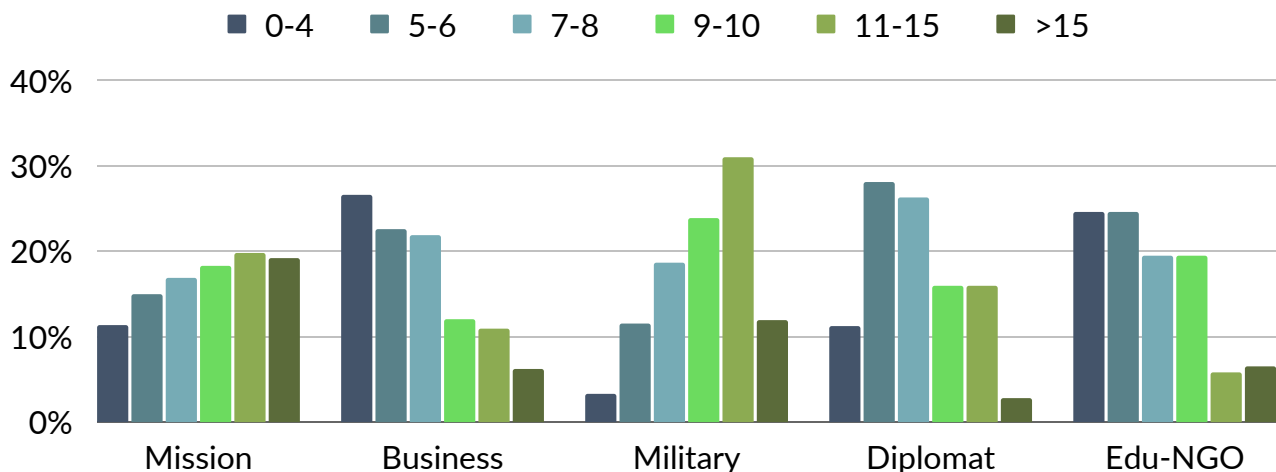
For the purposes of multivariate comparison, we also combined this data into groups of approximately equal distribution across the total population. (See data table and chart on the next page.)

House moves		
# of Moves	# People	% of Total
0-4	268	14.1%
5-6	326	17.1%
7-8	350	18.4%
9-10	341	17.9%
11-15	351	18.4%
>15	268	14.1%



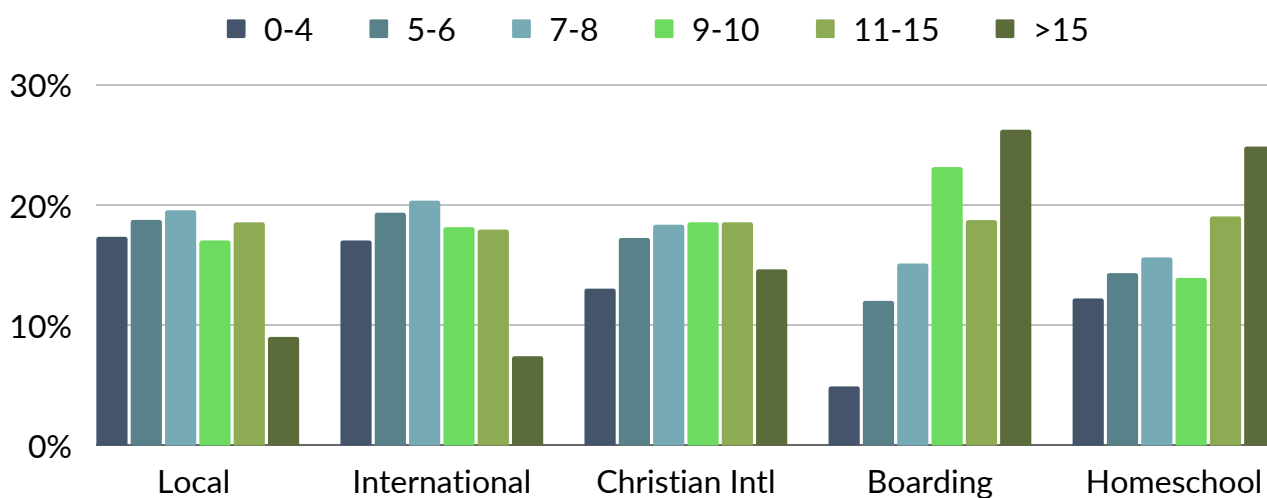
The mission numbers are reasonably flat, as is to be expected given they form such a large percentage of the total sample, but show greater mobility than other sectors. The other sector with very high mobility is, predictably, the military sector. As with the location move numbers, the business and Edu-NGO sectors have a similar distribution, with lower mobility. The diplomat sector has a different distribution, falling somewhere in between the others.

Sector, by houses moves					
	Mission	Business	Military	Diplomat	Edu-NGO
0-4 house moves	11.3%	26.5%	3.3%	11.2%	24.5%
5-6 house moves	14.9%	22.5%	11.5%	28.0%	24.5%
7-8 house moves	16.8%	21.8%	18.6%	26.2%	19.4%
9-10 house moves	18.2%	12.0%	23.8%	15.9%	19.4%
11-15 house moves	19.7%	10.9%	30.9%	15.9%	5.8%
>15 house moves	19.1%	6.2%	11.9%	2.8%	6.5%



Next we looked at the data by education. The high frequency of moves experienced by TCKs attending boarding school and homeschool (both largely missionary kids) point to situations where families not only move, but children split their time between different locations. More comparison, and preferably additional research, is needed before making conclusions. There is a lot to be gleaned from the data we gathered on mobility among globally mobile TCKs; we plan to explore this data more in a future paper.

Education, by house moves					
	Local school	International	Christian	Boarding	Homeschool
0-4 house moves	17.3%	17.0%	13.0%	4.9%	12.2%
5-6 house moves	18.7%	19.3%	17.2%	12.0%	14.3%
7-8 house moves	19.5%	20.3%	18.3%	15.1%	15.6%
9-10 house moves	17.0%	18.1%	18.5%	23.1%	13.9%
11-15 house moves	18.5%	17.9%	18.5%	18.7%	19.0%
>15 house moves	9.0%	7.4%	14.6%	26.2%	24.8%



ACE Scores

A person's ACE score is calculated through 10 yes or no questions regarding their life before age 18. Every 'yes' answer adds one point to their score.

These are our 10 questions, phrased as first-person true/false statements:**

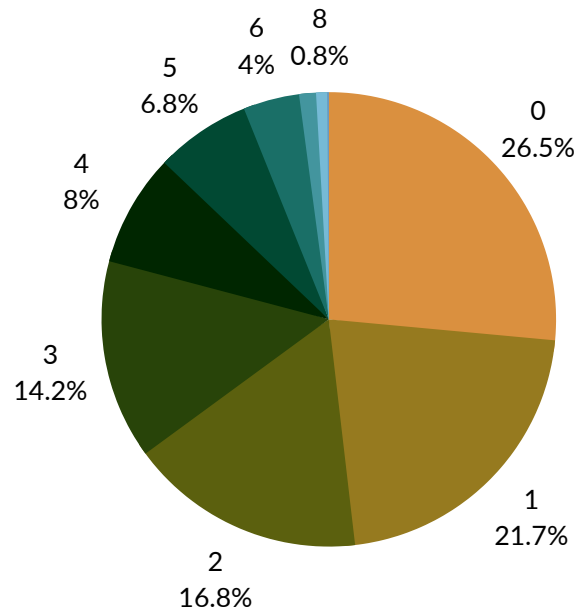
1. My parents separated or divorced
2. A member of my household struggled with alcoholism/was a problem drinker OR used illicit drugs*
3. A member of my household went to prison
4. A household member was mentally ill OR depressed OR attempted suicide*
5. As a child, I felt my parent/s didn't love me or think I was important or special OR I felt my family didn't look out for each other, feel close to each other, or support each other*
6. As a child, I worried I didn't have enough to eat, had to wear dirty clothes, or had no one to protect me OR I worried my parent/s were unable to take care of me physically or take me to the doctor if I needed it.*
7. An adult member of my household did any of the following: swore at me, humiliated me, put me down; used spiritual language to shame or manipulate me; used my emotions to shame, manipulate or harm me; acted in a way that made me afraid I might be physically hurt.
8. An adult member of my household or other caretaker adult did any of the following: often pushed, grabbed, slapped, or threw something at me; hit me so hard that it left a mark or I was injured as a result.
9. My parent/step-parent was treated in any of the following ways: often pushed, grabbed, slapped, or had something thrown at them; sometimes kicked, bitten, hit with a fist or hit with something hard; ever repeatedly hit or threatened with a gun or knife.
10. Any adult (or person at least five years older than me) did any of the following with or without my consent: touched, grabbed, or fondled me; had me touch their body in a sexual way; attempted to have sex/sexual contact with me; actually had any kind of sex/sexual contact with me.

** Different phrasing was used through the survey; the style was standardized here for clarity.

* Where a capitalized OR is used, we divided the question into separate elements; if one or more elements were answered with a 'yes,' a single ACE was added to the individual's tally.

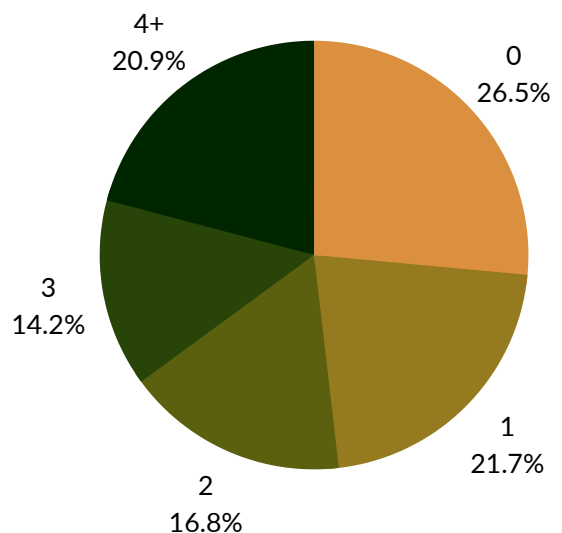
The following chart shows the ACE scores we recorded for all 1,904 survey respondents. The highest score was nine out of ten, attributed to two individuals.

ACE Scores (whole TCK sample)		
# of ACEs	# People	% of Total
0	504	26.5%
1	413	21.7%
2	319	16.8%
3	271	14.2%
4	152	8.0%
5	129	6.8%
6	76	4.0%
7	22	1.2%
8	16	0.8%
9	2	0.1%
10	0	0.0%



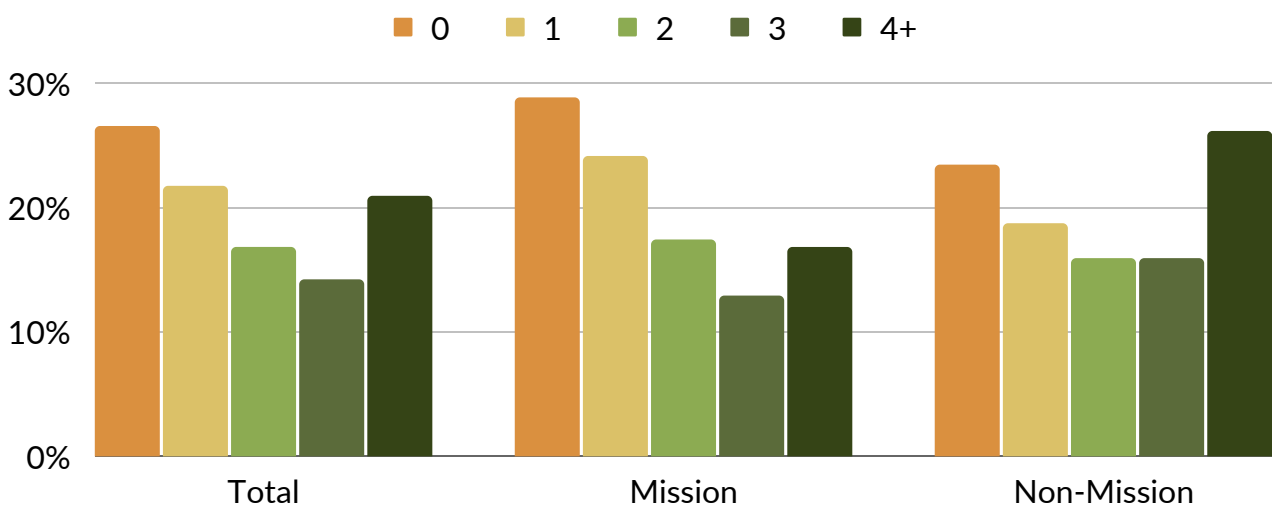
As discussed earlier, a score of four or higher has been determined to put an individual at high-risk of various emotional and physical health challenges. For this reason, we also arranged the same data into the table below, condensing scores of 4-10 into a single category: 4+. We use the same condensed 4+ category for all other tables throughout this paper.

ACE Scores (whole TCK sample)		
# of ACEs	# People	% of Total
0	504	26.5%
1	413	21.7%
2	319	16.8%
3	271	14.2%
4+	397	20.9%



As discussed previously, the mission sector makes up over 50% of the total sample, and therefore we compared the ACE scores of the mission and non-mission groups to the total sample. The ACE scores between these groups differ, as seen in the table below. The mission group in our sample had lower ACE scores than other TCKs: both a higher percentage of respondents with a score of 0 and a lower percentage of respondents with a score of 4+.

ACE Scores, mission and non-mission groups						
	All ACEs	% of Total	Mission	% Mission	Non-Mission	% Non-Mission
0	504	26.5%	308	28.8%	196	23.4%
1	413	21.7%	257	24.1%	156	18.7%
2	319	16.8%	186	17.4%	133	15.9%
3	271	14.2%	138	12.9%	133	15.9%
4+	397	20.9%	179	16.8%	218	26.1%



We also have data on the individual ACE factors that make up the ACE score (the specific adverse childhood experiences each person reported) which we will share and analyze in a separate forthcoming paper.

“The mission group in our sample had lower ACE scores than other TCKs: both a higher percentage of respondents with a score of 0 and a lower percentage of respondents with a score of 4+.”

ACE Score Comparisons

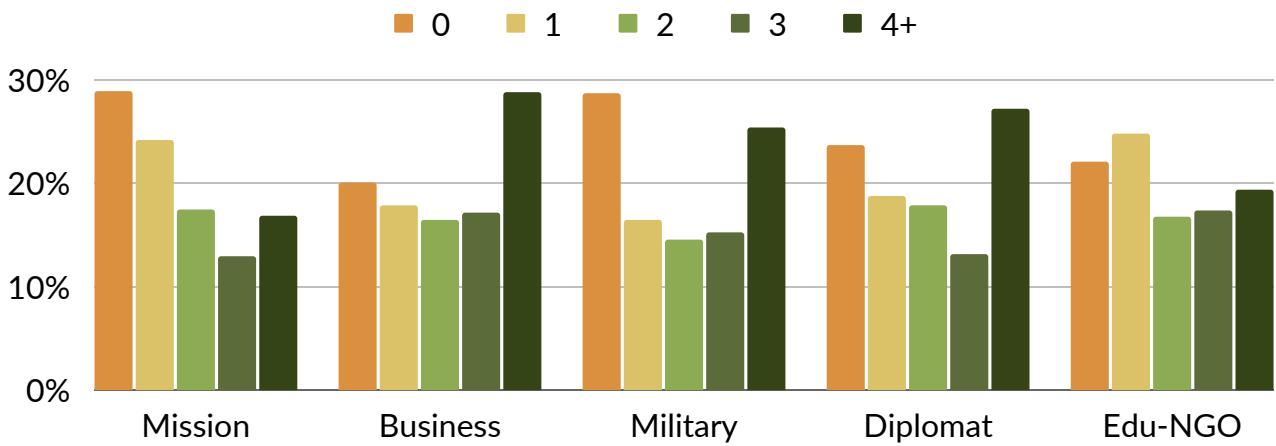
Next we wanted to compare the different demographic groups we isolated to determine what, if any, factors impacted the distribution of ACE scores. The following tables use percentages instead of raw numbers in order to compare the rate at which certain scores appear in each sample group. Each group compared in each chart throughout the following section comprises at least 100 unique individuals (unless otherwise noted). We looked for potential risk factors, particularly groups with higher rates of the high-risk 4+ ACEs.

ACEs by Sector

Continuing the analysis above of ACE scores in the mission and non-mission groups, we started by looking at ACE scores across all sectors. ACE scores in the Edu-NGO sector, while not as low as the mission sector, showed a significantly different distribution to other sectors. The proportion of respondents with the risk factor of 4 or more ACEs in the business, military and diplomat sectors was significantly higher - over 25% in each case, with the business sector close to 30%. (See also chart on the next page.)

“The proportion of respondents with the risk factor of 4 or more ACEs in the business, military and diplomat sectors was significantly higher - over 25% in each case, with the business sector close to 30%.”

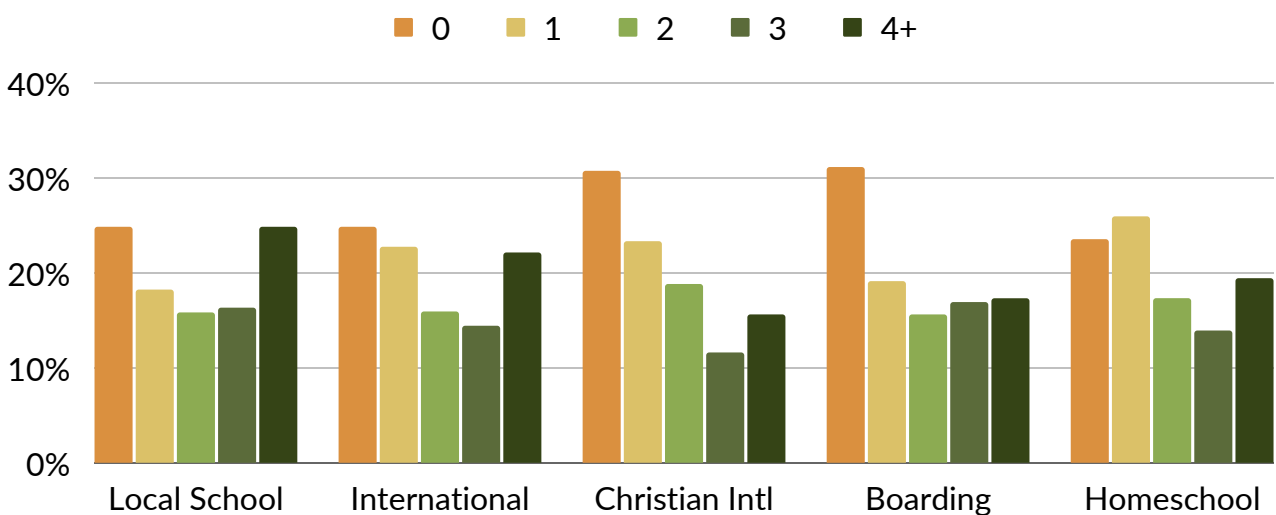
ACE Scores, by mobility sector						
Sector	# of people	0	1	2	3	4+
Mission	1,068	28.8%	24.1%	17.4%	12.9%	16.8%
Business	275	20.0%	17.8%	16.4%	17.1%	28.7%
Military	269	28.6%	16.4%	14.5%	15.2%	25.3%
Diplomat	107	23.6%	18.7%	17.8%	13.1%	27.1%
Education	150	22.0%	24.7%	16.7%	17.3%	19.3%



ACEs by Education

Next we looked at ACE scores by core education type. The distributions in these groups did not have such distinct differences. Scores were lower for those who attended Christian international school as a core educational experience, and a bit higher for those at local schools and international schools, but not much higher than the homeschool experience.

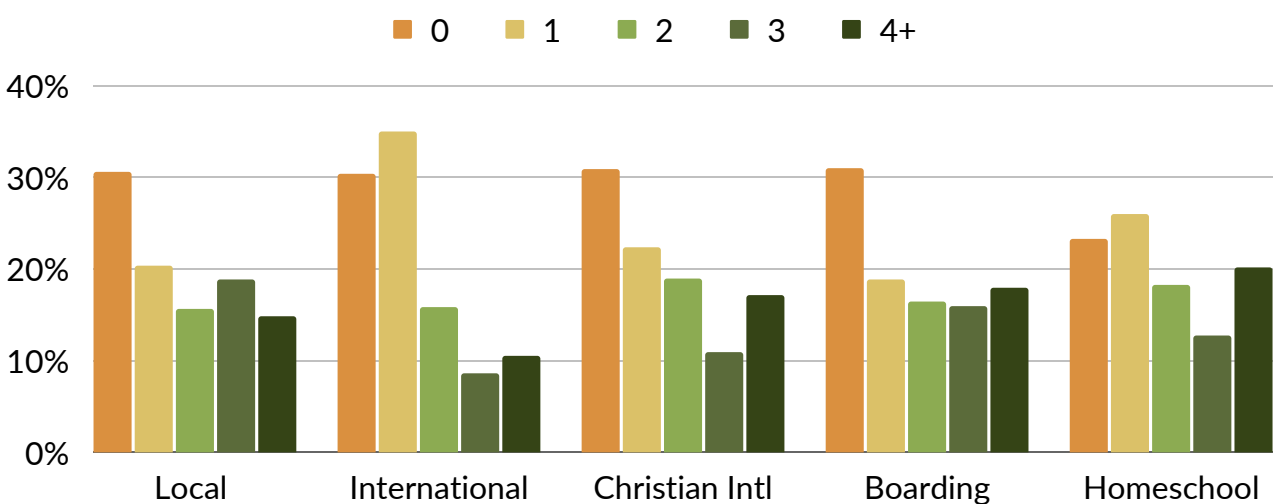
ACE Scores by education						
	# of people	0	1	2	3	4+
Local School	411	24.8%	18.2%	15.8%	16.3%	24.8%
International	596	24.8%	22.7%	15.9%	14.4%	22.1%
Christian Intl	378	30.7%	23.3%	18.8%	11.6%	15.6%
Boarding	225	31.1%	19.1%	15.6%	16.9%	17.3%
Homeschool	294	23.5%	25.9%	17.3%	13.9%	19.4%



As noted earlier, three education experiences are disproportionately represented by mission kids, namely: Christian international school, boarding school, and homeschool. We therefore hypothesized that the lower ACE scores seen in mission kids was the driving force behind the lower ACE scores seen in these schooling types, rather than these educational experiences necessarily being protective factors in themselves.

To check this hypothesis, we compared the education type and ACE scores of mission kids specifically. In doing so, we see that mission kids who selected Christian school, boarding school, or homeschool as their core educational experience had higher ACE scores than those who attended local school and international school. This lends weight to the hypothesis that the protective factor noted above is indeed that of being a mission kid rather than attending one of these school types. Homeschooling was correlated with higher ACE scores in missionary kids, while missionary kids in international schools (rather than Christian international schools specifically) had some of the lowest ACE scores among TCKs in our overall sample.

ACE Scores among Mission Kids, by education						
	# of people	0	1	2	3	4+
Local School	128	30.5%	20.3%	15.6%	18.8%	14.8%
International	152	30.3%	34.9%	15.8%	8.6%	10.5%
Christian Intl	322	30.8%	22.3%	18.9%	10.9%	17.1%
Boarding	207	30.9%	18.8%	16.4%	15.9%	17.9%
Homeschool	259	23.2%	25.9%	18.2%	12.7%	20.1%



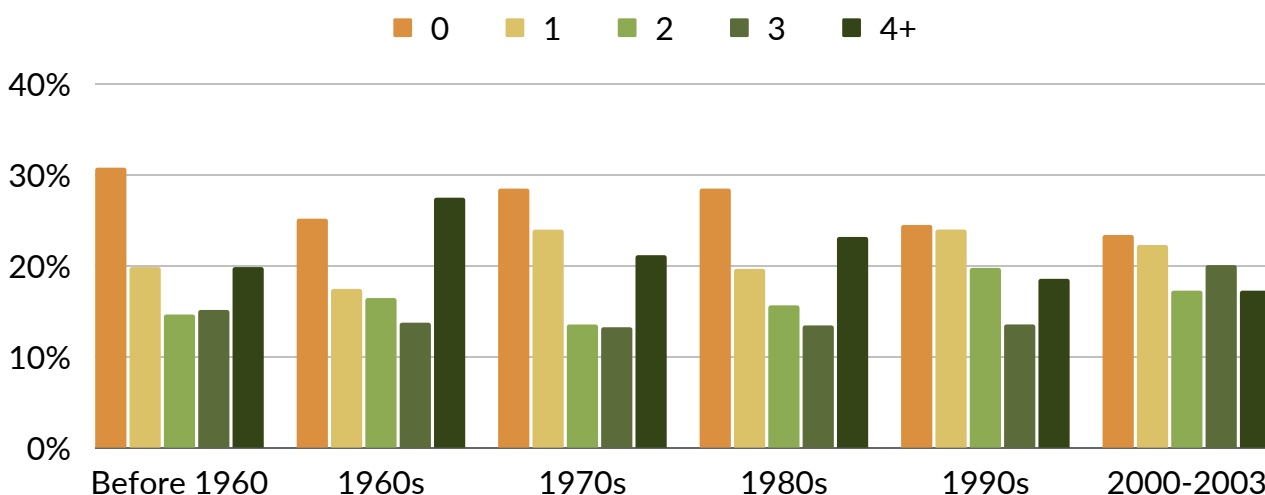
This is not to say that home-schooling is necessarily risky, but the correlation suggests that some of the same reasons mission families choose home-schooling over international schooling (or another option) may lead to additional ACEs. For example, when living in a remote area there may be limited options for education, but perhaps greater risk of additional ACEs due to the environment. Further research is warranted here.

“ Homeschooling was correlated with higher ACE scores in missionary kids, while missionary kids in international schools (rather than Christian international schools) had some of the lowest ACE scores among TCKs. ”

ACEs by Age

Another factor we compared against ACE scores was age. Before considering other variables, age alone seems to show Adverse Childhood Experiences among TCKs trending down over time.

ACE Scores, by decade of birth						
	# of people	0	1	2	3	4+
Born before 1960	212	30.7%	19.8%	14.6%	15.1%	19.8%
Born 1960-1969	219	25.1%	17.4%	16.4%	13.7%	27.4%
Born 1970-1979	289	28.4%	23.9%	13.5%	13.2%	21.1%
Born 1980-1989	373	28.4%	19.6%	15.6%	13.4%	23.1%
Born 1990-1999	631	24.4%	23.9%	19.7%	13.5%	18.5%
Born 2000-2003	180	23.3%	22.2%	17.2%	20.0%	17.2%



Once the mission vs non-mission variable is compared, the picture regarding age-related ACE scores is less clear. Mission kids' ACE scores trend down after 1970, while the non-mission group's scores have no such clear pattern. More analysis is needed here; we plan to go into more depth with this data in future papers.

ACE Scores, by mobility sector						
Age	Sector	0	1	2	3	4+
Born before 1960	Mission	31.7%	23.8%	14.9%	15.8%	13.9%
	Non-Mission	29.7%	16.2%	14.4%	14.4%	25.2%
Born 1960-1969	Mission*	29.3%	18.2%	22.2%	12.1%	18.2%
	Non-Mission	21.7%	16.7%	11.7%	15.0%	35.0%
Born 1970-1979	Mission	28.9%	27.5%	16.9%	7.8%	19.0%
	Non-Mission	27.9%	20.4%	10.2%	18.4%	23.1%
Born 1980-1989	Mission	31.0%	23.5%	15.5%	12.2%	17.8%
	Non-Mission	25.0%	14.4%	15.6%	15.0%	30.0%
Born 1990-1999	Mission	27.8%	25.5%	17.3%	12.0%	17.5%
	Non-Mission	18.6%	21.2%	23.8%	16.0%	20.3%
Born 2000-2003	Mission	25.7%	21.2%	20.4%	22.1%	10.6%
	Non-Mission*	19.4%	23.9%	11.9%	16.4%	28.4%

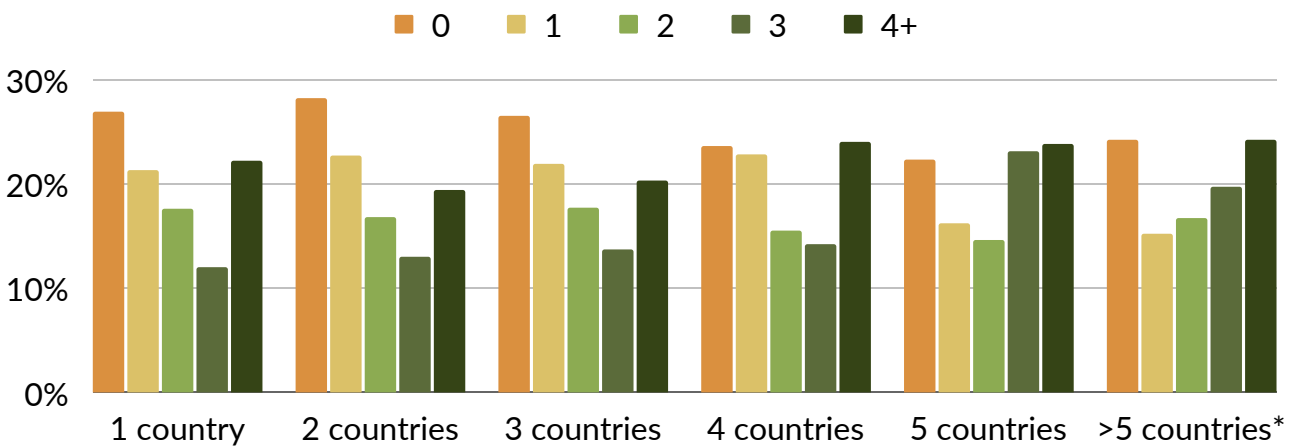
*There were fewer than 100 respondents in these two sub-groups (99 mission kids born between 1960-1969, and 67 non-mission born between 2000-2003). The data for these sub-groups is therefore considered less reliable.

ACEs by Mobility

The distribution rates of ACE scores were very similar for TCKs who lived in 1-3 countries. It is worth noting, however, that TCKs who lived in only one country (meaning they never lived in their passport country before age 18) had higher rates of 4+ ACEs than those who lived in two or three countries. With greater mobility the distribution changed slightly. TCKs who lived in more than three countries were more likely to have at least one Adverse Childhood Experience, and more likely to have a higher risk score of 4 or more. (See data table and chart on next page.)

“ TCKs who lived in more than three countries were more likely to have at least one ACE, and more likely to have a higher risk score of 4 or more. ”

ACE Scores, by countries lived in					
	0	1	2	3	4+
1 country	26.9%	21.3%	17.6%	12.0%	22.2%
2 countries	28.2%	22.7%	16.8%	13.0%	19.4%
3 countries	26.5%	21.9%	17.7%	13.7%	20.3%
4 countries	23.6%	22.8%	15.5%	14.2%	24.0%
5 countries	22.3%	16.2%	14.6%	23.1%	23.8%
>5 countries*	24.2%	15.2%	16.7%	19.7%	24.2%



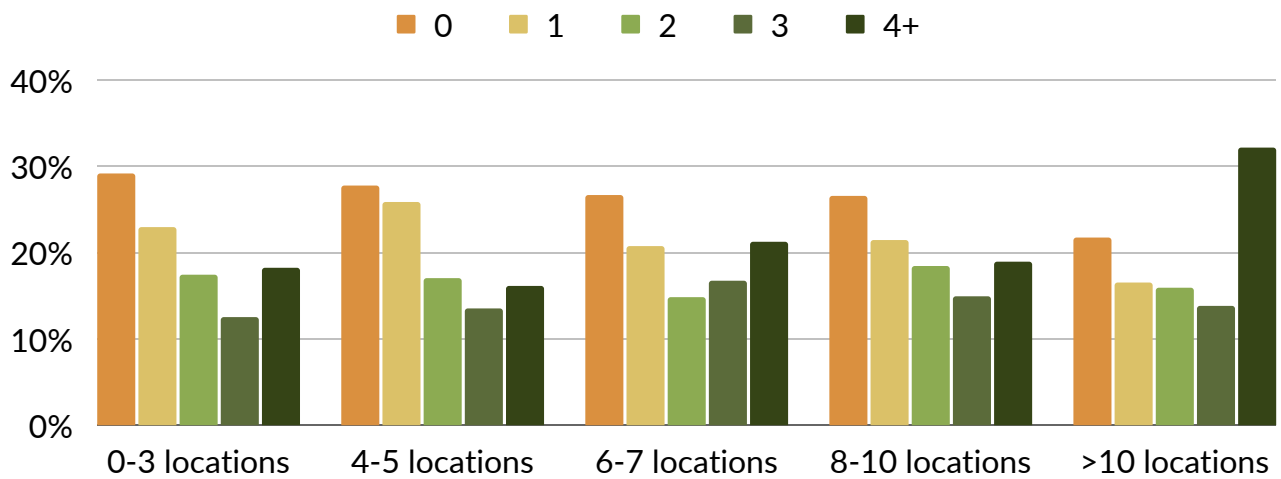
*Data from the “more than 5 countries” sub-group is considered unreliable as it is only 66 people.

Next we looked at location mobility. The clear takeaway from this data is an overwhelming correlation between high risk ACE scores (4 or more) with those who indicated a large number of location moves (more than 10 before age 18). While most other groups had fewer than 20% with an ACE score of 4+ (with the exception of 6-7 moves at 21%), the group who moved more than 10 times had a rate of over 30% with ACE scores of 4 or more. In other

words, nearly a third of TCKs in our sample who moved more than 10 times during childhood had a high risk ACE score of 4 or more, compared to less than a fifth of those who moved less frequently. (See data table and chart on the next page.)

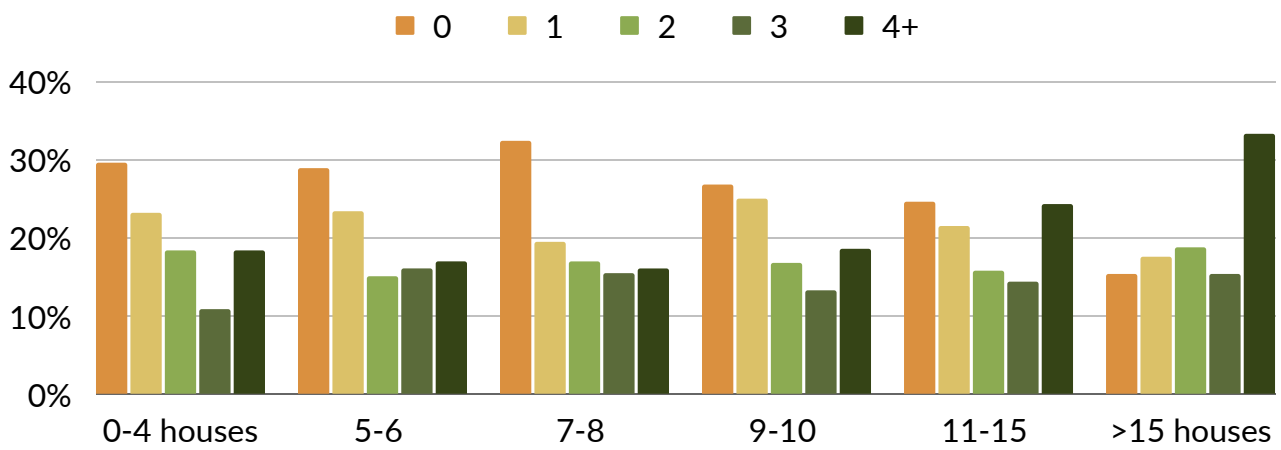
“ Nearly a third of TCKs who moved more than 10 times during childhood had a high risk ACE score of 4 or more, compared to less than a fifth of those who moved less frequently. ”

ACE Scores, by location moves					
	0	1	2	3	4+
0-3 moves	29.1%	22.9%	17.4%	12.5%	18.2%
4-5 moves	27.7%	25.8%	17.0%	13.5%	16.1%
6-7 moves	26.6%	20.7%	14.8%	16.7%	21.2%
8-10 moves	26.5%	21.4%	18.4%	14.9%	18.9%
>10 moves	21.7%	16.5%	15.9%	13.8%	32.1%



Finally, we compared rates of ACE scores with the number of house moves. Again we see a strong correlation between high mobility and high ACE scores, with a dramatic uptick in high risk scores (4+) in those who lived in more than 15 houses during childhood. One third of this group had an ACE score of 4 or higher. (See data table below and chart on the next page.)

ACE Scores, by house moves					
	0	1	2	3	4+
0-4 houses	29.5%	23.1%	18.3%	10.8%	18.3%
5-6 houses	28.8%	23.3%	15.0%	16.0%	16.9%
7-8 houses	32.3%	19.4%	16.9%	15.4%	16.0%
9-10 houses	26.7%	24.9%	16.7%	13.2%	18.5%
11-15 houses	24.5%	21.4%	15.7%	14.3%	24.2%
>15 houses	15.3%	17.5%	18.7%	15.3%	33.2%



These two data sets (location moves and house moves) indicate that mobility is driving higher ACE scores in this sample. High mobility is very clearly correlated with higher ACE scores among TCKs in this sample. We intend to do additional data analysis for future papers, and hope to see more research done in this area.

“ High mobility is very clearly correlated with higher ACE scores among TCKs in this sample. ”

Practical Applications

We intend for our research to have immediate practical applications, both in raising awareness of the levels of childhood adversity present in the internationally mobile TCK population, and in creating better resources for this population and those who care for them.

Childhood adversity and the presence of ACE scores does not inherently determine health and wellbeing in adulthood. In fact, the prevalence of certain protective factors can mitigate the risks associated with a high ACE score.⁶⁹ Efforts that focus on building healthy families early in the life of a child are an effective means of preventing ACEs and reducing their damaging effects.⁷⁰ The Center on the Developing Child at Harvard University offers three principles for helping families with young children thrive: enhancing

responsive relationships, strengthening core life skills, and reducing sources of stress.⁷¹ While this advice was given to governmental policymakers, we suggest that it is also applicable to all agencies responsible for sending families abroad, and overseeing their care while they live outside their passport countries. This includes, though is not limited to, governments (especially their foreign service and military branches), international schools, missionary organizations, and corporate HR.

The protective factors known as Positive Childhood Experiences (PCEs) include categories of feeling heard and supported by parents, having supportive peers and a sense of belonging in a multigenerational group, feeling safe in the home, having two non-parent supportive adult relationships, and participating in community traditions.⁷² When the majority of the seven PCEs are present regularly throughout a child's developmental years, the adversity they experience is more likely to develop into resiliency.⁶¹

“When children perceive at least one stable, supportive adult in their life, they are less likely to experience toxic stress and develop unhealthy coping strategies. Safe, stable and nurturing relationships help to build resilience, prevent violence, improve mental health and support health across one's lifespan.”⁴⁵

In the TCK population, PCEs are less likely to be obtained organically. Their highly mobile life makes it difficult for four of the seven PCEs involving community relationships to be maintained and fostered. Specific ACE factors (not addressed in detail in this paper) show that many of these TCKs did not feel emotionally supported by their parents, which contributes to a lack of two of the PCE scores. The final PCE, feeling safe and protected in the home, can be lacking if the family is living in an unsafe environment, such as for the purpose of humanitarian or government work. For these reasons, adults supporting TCKs need to be conscientious about implementing the protective PCEs with intentionality.

“In the TCK population, PCEs are less likely to be obtained organically, so adults supporting TCKs need to be conscientious about implementing the protective PCEs with intentionality.”

Learning the specific ACE scores of individual TCKs also helps parents, caregivers, and adult TCKs themselves develop effective preventive care strategies:

“...most often, professional counseling is necessary to work through these traumas, particularly as TCKs transition into adulthood. When the TCK is older, learning about ACE scores and the projected health ramifications can help them to avoid negative outcomes. For example, if an adult TCK knows that their ACE score indicates that they are 7x more likely to become an alcoholic, they may choose to forgo drinking alcohol recreationally as an intentional preventive measure...Likewise, parents need to be aware of the trajectory potential indicated by their TCK’s ACE scores and apply a preventive approach beginning as early as possible.”²

By looking at current ACE and PCE research and comparing it with our research on the TCK population we can not only see what the rate and type of ACE scores are that TCKs most often experience, but we can also apply research on protective measures (HOPE and PCEs) to consider how we might encourage those working with the TCK population to combat ACE scores intentionally in their care for TCKs.

Conclusion

The data we have collected and presented here does not say that international mobility is necessarily unfavorable for young people, nor is this our belief. On the contrary, the lead contributors to this research both had experiences of international mobility during childhood (one in the mission sector, one in the business sector) which, while not entirely smooth, they are very thankful for as adults. At the same time, research-based care for young people means knowing what risks they face so that appropriate resources can be provided to families and individuals.

The ACE scores seen in this sampling of the TCK population are higher than those seen in studies of monocultural populations both in the developed and the developing world. From 2011 to 2014, 62% of adults from 23 states in the USA reported having at least one ACE; 25% reported three or more, and 12.5% had four or more.⁷³ By comparison, 35% of TCKs in our sample reported three or more ACEs, and 21% had four or more. In the 2010 study in the Philippines 75% of 1,068 respondents had at least one exposure to an adverse childhood experience (similar to our TCK sample) but only 9% had an ACE score of 4 or more, compared to 20% in our sample.⁵⁸ The 2002-2003 survey of 2,143 respondents in Nigeria on Adverse Childhood Experiences did not use the exact ACE questionnaire formula and is therefore not completely comparable, and yet the rates of parental mental health issues, neglect and abuse were significantly lower than seen in our TCK sample.⁵⁷

“The ACE scores we see in this sampling of the TCK population are higher than those seen in both in the developed and the developing world.”

In the USA, 14-20% of children experience a diagnosable mental, emotional and behavioral disorder, such as depression, anxiety or OCD.⁷⁴ The adult TCKs we sampled had higher ACE scores than adults in the USA. It is therefore likely that a significant segment of young TCKs are experiencing mental health disorders and require support, in addition to the need to provide PCEs to prevent future risks. That said, “the ACE score is neither a diagnostic tool nor is it predictive at the individual level.”⁴⁴

Knowing that the TCK population as a whole is likely to have higher ACE scores and is therefore in need of higher levels of service is valuable. Knowing that there are potential risk factors is beneficial. But an ACE questionnaire alone cannot tell the future for individual children. This is especially true given what the research shows about the protective power of PCEs.

This research adds concrete data to what is already seen and known anecdotally by those doing hands-on work to support the TCK community. We hope to see this data being used to strengthen the case for increased

support, in funding, personnel, purchased resources, and additional research. Internationally mobile families and children are often viewed as privileged, and therefore not at risk of ACEs, PTSD, or other mental health struggles. This data suggests the opposite: that the globally mobile are instead more prone to these kinds of problems when they are left unaddressed through the intentional application of PCEs. Additional research is required to learn more about the prevalence and impact of ACEs and PCEs in children experiencing mobility, whether domestic or international, planned or unplanned.

We infer from this data that the unique conditions of international mobility, even when this mobility is desired by families and has positive outcomes for young people, may contribute to higher rates of Adverse Childhood Experiences in the globally mobile Third Culture Kid

population. High mobility in particular carries with it strong risk for young people. This knowledge does not mean that international mobility should be avoided, but that research on HOPE and PCEs should be leveraged to provide additional support and care to globally mobile families. All sectors who prompt families to move abroad and all groups providing oversight to families living abroad have a responsibility to understand the long-term impact of this mobility, and provide appropriate services to ensure these young people thrive both in the short and long term.

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