Longitudinal outcomes among internationally adopted children and their families

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Internationally adopted children are known to be at risk for difficulties in a variety of cognitive domains compared to their non-adopted peers. Over the last few decades, many researchers have studied these cognitive outcomes and their predictors, identifying various adverse effects of early deprivation. However, most of these studies are cross-sectional, offering only a snapshot of the developmental process. Only a few studies have tracked the development of adopted children through a longitudinal study, and the oft-cited research has looked only at the outcomes of early severe deprivation. Dr. Helder’s study is a valuable addition to the existing literature in that it provides a longitudinal examination of adoptees from varying backgrounds. Through the combination of administration of a full neuropsychological battery and assessment of non-cognitive aspects of the adoption (such as parenting style, attachment etc) through parent and child interview, we are able to provide a comprehensive picture of the developmental process following an adoption. This year’s research marks the fourth and final wave of the study.

During this summer, the majority of my time was devoted to data collection. Each week, I administered a complete neuropsychological battery to two or three adoptees. The battery consists of a series of tests that measure IQ (WISC-IV), verbal and visual memory (WRAML-II), language (CELF-IV), motor skills (Grooved Pegboard), executive functioning (C-CPT & D-KEFS), and academic achievement (WRAT-IV). The full battery in combination with additional questionnaires that measured the child’s self-assessment of the adoption and behavioral outcomes took approximately three to three and a half hours to complete. After the scheduled appointment, I was further responsible for scoring the tests, putting together a score report, and entering these results as well as the interview responses into a database. Towards the latter half of the summer, Dr. Helder and I examined some of the trends and formulated a few research questions for my own project, which are as following:

1) Does early deprivation arising from institutional care have an adverse effect on a child’s performance on tests of verbal and visual memory, as well as tasks that require executive functioning and working memory? How do performances on these tasks change over time?
2) Do post-adoption factors (parenting style including disciplinary measures, degree of display of affection etc.) predict performance on aforementioned cognitive tests?
3) Are parent-rated attention/EF problems associated with task performance?
   (Also, are there any predictors of parent-rated attention problems, such as older age at adoption?)

These particular topics were chosen because we discovered a gap in the literature regarding these cognitive domains of memory, executive functioning, as well as their predictors. I am currently in the process of reviewing the literature for these topics and starting my data analyses; I will continue to build on this project through further analyses and writing in the fall in an experimental psychology class. These efforts will culminate in a poster to be presented in the International Neuropsychological Conference in Boston on February, 2016, as well as a peer-reviewed paper in an academic journal.

Because our time so far has been devoted to extensive data collection, we do not have a substantial amount of results to present. However, based on the data analyses we have run so far, several trends have emerged. They are as following.

The visual and verbal memory scores for the first two years of the study were worse compared to age-based norms; however, in the latter phase of the research, they showed improvement, which indicates good recovery over time. However, the domains of working memory, attention, and
hyperactivity displayed deficits across all the years. Initial analyses of post-adoption factors showed how variables pertaining to discipline can predict working memory performance. Also, the balance between the mother and father’s involvement in the child’s life as well as the parent’s perceived knowledge of their child’s day-to-day life predicted some of the verbal, visual, as well as working memory performances throughout the years. Finally, the parent-rated measures of attention and working memory did not correlate with their child’s actual task performance for the first two years. However, in the latter phase, the analyses showed a significant match between the two, which may indicate that the parents’ accuracy in their perceptions of their child’s abilities are improving with passing time.

The opportunity to participate in this research has been a very rewarding experience. I have been able to delve in both the clinical and academic aspects of clinical neuropsychology, which is the field I am planning to pursue through further graduate studies. The close familiarity I gained with administering the battery of tests as well as active participation in the research process culminating in publication opportunities will prove very valuable for my future goals. In addition to these skills, I have learned much about the effects of severe deprivation through an extensive study of adoptees’ developmental outcomes and will contribute to the existing literature on this topic. Also, through working closely with Dr. Helder and a fellow student researcher, Bethany, I have gained valuable exposure and experience with the collaboration process of working on a project with a team of people – this will prepare me for future similar opportunities in graduate school and workplace settings.