Final Narrative Report for SEF Summer 2018

With the Student Engagement Fund award that I received I was able to travel to a psychological research conference in San Francisco, California. The conference was the Association for Psychological Science (APS) and gave me the opportunity to share a research project that I have been working on for a while. I have been to two research conferences in the past after joining the Emotion Regulation and Temperament lab my freshman year in the fall semester. I was a Research Rookie right off the bat in college and it gave me the opportunity to get involved in the field I love and engaging in research quickly. Through this lab I have run countless participants through two different studies and have attended conferences such as this one. When I was a freshman I attended a conference (ICIS) on an SEF fund and went simply to observe and network through the field. After attending that conference, I knew that the following year I would want to aid on the creation of a project and help present at the conference. Last year I attend SRCD and was a co-author with one of the graduate students within the lab. This year I was lucky enough to be able to submit my own first author poster. This opportunity is mostly given to graduate students. After running all the data with my mentor alongside, I created and submitted my abstract to the conference submission board. I was grateful that they accepted my poster and I was a co-author on two other projects. By attending the conference on the SEF, I was able to reach out to more professionals within the field. During my presentation time I was able to speak with an alumnus of NIU who has his own psychology podcast; in which he invited me to be a part of, in order to speak on my project. I was able to connect with peers and professionals within the field from across the country.

As for my project specifically, I used data from a college study that we run the lab that examines student’s responses to stressful situations. Throughout the four-hour study the students
are asked to fill out questionnaires about their lifestyle, their parents, their behaviors and their child-caring skills. Additionally, the students are asked to complete a battery of cognitive measures. One of these measures is the Delis-Kaplan Executive Functioning Scales (D-KEFS). Through this task there are six sets of verbal cognition. The first has the students say as many words as they can that start with F, then A, then S in 60 seconds. Next, they are asked to say as many animals as they can in 60 seconds, followed by how many boy’s names they can list in one minute. The final set is asking the students to switch between saying a piece of fruit and a piece of furniture in 60 seconds. Another cognitive task that they complete is a set of 4 color-word interference tasks. The first page asks them to simply read the words on the page. Then the next page they are asked to read the color of the ink. The third page they are asked to read the word and not the ink color as the two produce different answers. For example, the word red could be printed in green ink and then should say red. The fourth and final page is similar to the third but if one of the words is inside of a box then they are supposed to read the ink color and not the word. The students also sit through a one-on-one interview with an experimenter, such as myself, where they are asked questions about their parents, such as their marital status and occupations, followed by questions about how many times they have moved and then an array of socioeconomic status questions.

The main goal of my project was to determine if students who had more indicators of low socioeconomic status would have poorer cognitive flexibility. To clarify, cognitive flexibility is a sub-category of executive functioning and it is the ability for someone to shift thought within a set of instructions—such as the color-word task. Additionally, it was expected that more stressful life transitions that continued through a participant’s lifetime would be associated with better cognitive flexibility. To be more specific, participants who experienced parental divorce and
moving homes more frequently would have higher cognitive flexibility. I had 115 participants for my data set and 27.5% of them had divorced parents. Regression analyses were then run in a program called SPSS. I found that parental divorce and total number of moves during both time points, of a child in early age and then in emerging adulthood, had better cognitive flexibility. However, both early-childhood and middle-childhood chronic economic adversity was associated with poorer cognitive flexibility. Overall, I found that experiencing more transitions was significantly associated with better cognitive flexibility. This suggests that these individuals may be better at adapting to short-term life stressors, such as divorcing parents or multiple moves. Individuals during adolescence who had more exposure to chronic stress, such as more indicators of low socioeconomic status, had deleterious effects with their cognitive flexibility. This data is primarily important because it aims to answer the missing aspect of current data in this category, of chronic and time sensitive sensors outcomes. Furthermore, it could create interventions for individuals who are affected by adverse chronic events, to reduce the poor effects that it can have on their cognitive abilities.

I was able to effectively complete this project with the resources of the lab, my mentor, the graduate student who mentored me through the process and the funds received by the SEF award. Additionally, I created many timelines for myself in order to get all of the data collected and run by the time the submissions were due. When it came time to create the poster that was going to be presented and coach my co-authors along about what to say when we were presenting, that time was scheduled out additionally.

By receiving the SEF this summer and being able to attend the APS conference, I was able to enhance my academic experience by networking more throughout the field. I will be applying to clinical Ph. D programs this December and a large part of that process is honing in
on your research interests. Furthermore, having experience within the field to conduct your own research successfully. I believe that by attending this conference and completing the project I will have a step-up in the application process which will only enhance my chances of being selected. Additionally, I think that the peers and colleagues that I connected with will open many resources even after my time in higher education is complete. By attending the conference, I was able to attend other researcher’s presentations and even further expand my knowledge of the field. Overall, it was an incredible experience and I am very grateful for the SEF award that made it possible for me to have a brighter future, even after NIU.