I consider this internship to be the defacto part two of my previous internship from the Summer of 2014, as it quite literally picked up where I finished. The subject of this year’s internship is the same as last year’s: examining the crowdsourcing platform of Amazon Mechanical Turk (commonly abbreviated as “MTurk”) for use with minority ethnic groups in the United States. Last year focused mainly on the prework, the financial, and bureaucratic requirements when setting up social research, as well as creating infrastructure for data collection. This year was spent doing what most people would consider scientific research: forming hypotheses, data collection, analysis of data, and drawing conclusions.

I worked in the same organization as last year: together with Dr. Carl Albert Bardi, chair of the Sewanee Psychology department. Our plan was to first test the viability of minority group research using MTurk and second, if deemed viable, use MTurk as a source to further research in the validity of Aggressiveness Constructs for minority groups. The history of psychology in the United States has been almost exclusively focused on Caucasians. Good, robust data that can hold up under a variety of statistical analyses is both expensive and time consuming to obtain. The more particular the group or the more noise one has to sift through, such as identifying specific minorities and filtering out Caucasian participants, the more costly this data is. Thus, researchers simply assumed that the constructs (theoretical models) they used with a Caucasian basis were factor invariant (did not change across ethnic groups). The recent release of MTurk has lowered the barrier of entry for this kind of research. For a concrete example, a decent sample size starts around 250, with more specific experiments requiring upwards of 1,000. Our surveys sampled two groups, Latin Americans and African Americans, with each group
containing roughly 250 participants after cleaning the data of incomplete surveys. The expected cost of one African American was approximately $3.75. It is only through the power of crowdsourcing that we could have such an affordable price for participants.

In both internships, I worked as an assistant. However, my responsibilities became more important as time wore on. In the beginning I was simply writing reports and letters, as well as helping design survey items and manage survey logic in the survey platform Qualtrics. During this summer, I started with cleaning the data and then graduated to looking through research, forming hypotheses, and forming data based constructs in a software package called AMOS. While the previous year was relatively slow, this year has helped me gain extremely important information about my planned career as a data analyst. While scientists are intelligent, statistical practices are viewed and treated almost as an arcane craft. Expert scientists very frequently bungle even some of the most basic of statistical ideas, and even the elders of the statistical realm mess up some of the more subtle concepts. Therefore, there will always be a job for the proverbial stats guy, and I am extremely grateful that Dr. Bardi is not just a psychologist but also the psychological statistics professor at Sewanee. As such, he was very capable of helping and teaching me about statistics as much as any of my math professors. Despite reality not exactly meeting my expectations of my dream career, my internships have not deterred me from it in the slightest, and I am attending the University of Tennessee at Chattanooga’s graduate school for Applied Statistics in the fall. If anything, these internships have merely shown me the importance of working in teams when researching.

As a brief overview of my actual activities these eight weeks, I started with re-educated myself about Qualtrics and our data and variable analysis program SPSS. That lasted a few days
until we were ready to “press the button” and begin obtaining data. Unfortunately, gathering data takes time, and we were unable to doing anything in the meantime. Thus, we spent a few weeks simply waiting for the data to finish coming in. Once we finished gathering data, I cleaned away the noise and incomplete responses in a mixture of SPSS and Microsoft Excel. We started doing preliminary testing at this stage, but we ultimately needed to install AMOS, which was not available yet. So waited again, doing what’s called “playing with the data” to find anything interesting. It was during this time that we decided that our initial plans to develop a brand new assertiveness scale for minorities was too ambitious. We eventually settled on simply testing how the standard assertiveness inventory, the Rathus Assertiveness Schedule, held up with minorities. This, too, proved to be time consuming, and we unfortunately could not finish this project adequately by July 7th, my last work day. I will take the following lesson to heart with me to grad school: always work with someone who is better than me with scheduling estimations and if that is not possible, just triple the estimation; something I expected to take about a week ended up taking roughly three and a half.