Dear administers of the Robert M. Teeter Research Fellowship Endowment,

My name is Caroline Manning and I am a senior at Albion college and I study psychology and management.

For my FURSCA project this past summer, I aimed to study personality predictors of overconfidence. Contrary to mere confidence, which can be quite beneficial at times, overconfidence is the discrepancy between our perceived abilities and our actual abilities and can be quite detrimental. For example, overconfidence can result in not taking the necessary precautions to plan backup plans before committing oneself to a desired plan of action or failing to take into account all information before making a decision. Overconfidence can also occur in a variety of capacities, such as overestimating one’s driving abilities or overestimating performance on an exam. Due to the detrimental implications of overconfidence as well as its ubiquitous nature, I wanted to study this topic in greater detail.

I sought to study this topic by examining personality as predictors of overconfidence. Previous research has studied personality through using conscientiousness, extraversion, and narcissism and has found that both extraversion and narcissism are positively related to overconfidence while conscientiousness is not related. I thought these findings were particularly interesting, so I wanted to take these findings a step further by using additional analyses with the data I collect in order to find out which of the three personalities is the strongest predictor of overconfidence. In addition, I wanted to look at the three personality types at a “facet level.” Each of the three personality measures can be divided into more specific sup-types of the personality (*Extraversion*: gregariousness & excitement-seeking; *Conscientiousness*: dutifulness and deliberation; *Narcissism*: superiority and vanity). The previous research done on this topic has not taken into account these facets, and I see it as very important for understanding how the different personality traits actually relate to the judgment bias of overconfidence, so that is why exploring these facets was my goal for the study.

I collected data using mTurk which is an online recruiting tool. My participants completed a general knowledge test with basic trivia questions that asked them to report their confidence levels for their answers and also completed personality inventories measuring my three personalities of interest. Similar to what prior studies did, we ran correlation analyses, which revealed a positive relationship between both narcissism and extraversion and overconfidence and no relationship between conscientiousness and overconfidence. The two positive relationships supported my hypotheses and the no relationship for conscientiousness is of no surprise, but I had hypothesized that it would be negatively related to overconfidence. More interesting to the current study, I believe, is when we ran analyses using the multiple regression model. Previous studies only used correlations which compares just two variables (i.e., extraversion and overconfidence). With a multiple regression model, however, you can put more than one variable in the model as inputs (all the personality traits) and then see how they collectively relate to the one output (overconfidence). When we did this, we found that only narcissism remained a positive predictor of overconfidence. This means that when narcissism and extraversion are in the same model together, extraversion is no longer a predictor. Therefore, whatever relationship extraversion originally had with overconfidence can be explained by “narcissistic aspects” of extraversion. This new perspective of the relationships between personality and overconfidence that is now being brought to light with the current study is important because it helps us to understand the strength and nature of the predictive value of the different personalities when looking at them all together.

As for the facet analysis part of the study, through using another regression model, we overall found that the only significant facet predictor when testing the 19 facets was the superiority facet of narcissism. Although we did not form any hypotheses regarding facets since there has not been much research already done on the topic, reaching this ultimate facet predictor did achieve a goal of ours. We wanted to really narrow down the main predictor of overconfidence and we were able to achieve that through a series of multiple regressions examining facets. This finding of superiority being a predictor of overconfidence is also supported by peripheral prior research such as the findings that people high in superiority tend to think they are better than their groupmates while working in a group project.

This research project was an extremely beneficial experience this summer because it provided me with more research experience which is in and of itself valuable. It gave me an opportunity to work with mTurk for the first time as well as practice running multiple regression models. I also was able to present this research three times this summer: at an alumni event in Petoskey, at an undergraduate research symposium at MSU, and at the FURSCA summer meetings, all of which helped me sharpen my presentation skills.

In addition to the general experience that it provided me, this research also set the foundation for my senior thesis. I am currently working on my senior thesis which examines how gender and personality are related to over and under-confidence in the context of undergraduate students overestimating their course and exam grades, so this summer project was very helpful in laying the foundation for this project. I will also be presenting my thesis work and how it connects to my summer project at Elkin Isaac 2020 to further show the connection between the two projects.

Overall this has been an incredibly valuable experience, so I thank you, Robert M. Teeter Research Fellowship Endowment, for making this possible. I am an aspiring professor, so research opportunities like this are very appreciated experiences as I apply to graduate school. I am interested in applying to graduate programs in Industrial-Organizational psychology, psychology in the workplace, so experience with this topic that I did over the summer is particularly beneficial for my future in the field.

Undergraduate research has been a huge part of my undergraduate experience, which has ultimately shaped my desired career path of being a professor at undergraduate liberal arts college where I can mentor students in their research, so I am very grateful for your generous donations that make this possible.

Thank you,

Caroline Manning