

## Intellectual Merit Criterion

### Overall Assessment of Intellectual Merit

Excellent

### Explanation to Applicant

The current work clearly defines a novel contribution, outlines specific and important research questions and demonstrates on the basis of prior work and discussion of the research environment that the application is likely to lead to breakthrough findings.

## Broader Impacts Criterion

### Overall Assessment of Broader Impacts

Excellent

### Explanation to Applicant

The measures this application is addressing are almost household names and are consulted in popular press discussions of poverty, wealth, health etc. As such, the proposed, more nuanced examination of contributors is likely to lead to broad impact.

### Summary Comments

Research statement, broad plan, and match with the candidate's background are very solid, as is the institutional and support environment outlined for this application.

## Intellectual Merit Criterion

### Overall Assessment of Intellectual Merit

Good

### Explanation to Applicant

The applicant is confident and capable according to the application materials presented. She gives a strong and convincing rationale for the study to be presented, including thoughtful planning of the method, analysis, and design of his study. She has considered contingencies in the event of potential complications should they arise, and has made a case for theoretical, statistical, and applied outcomes in her findings. I am less than confident that these questions can be reliably answered in a large dataset inquiry; however the proposal as it is written assures me that the student has thought through the design with careful consideration.

## Broader Impacts Criterion

### Overall Assessment of Broader Impacts

Good

### Explanation to Applicant

This work has the potential to make a broad impact, but I would like to see a better rationale for how it will do so. Creating syntax and making them available online for other scholars is kind, but WHY is it important? What difference does it make? Why should we care?

### Summary Comments

I believe the evidence is there to suggest this student will become a very strong scholar with a promising future as a psychologist. Regardless of the outcome of this competition, I encourage this student to continue to pursue her line of inquiry as it is rigorous

and relevant.

## **Intellectual Merit Criterion**

### **Overall Assessment of Intellectual Merit**

Excellent

### **Explanation to Applicant**

The applicant completed her undergraduate degree in psychology at Washington University. She is currently pursuing doctoral study in the area of quantitative methods at Vanderbilt University. The applicant has exhibited a high degree of initiative by tracking down the KCLS data and using it to answer questions concerning personality and longevity. This work has resulted in a third author publication in Psychological Science. The applicant is interested in social versus individual causation questions as they pertain to the SES-health gradient. She has the foundation (e.g., experience in working with large archival longitudinal data sets) and mentorship to conduct the described plan of research. References note that the applicant is a talented quantitative methodologist who also possesses keen theoretical insights.

## **Broader Impacts Criterion**

### **Overall Assessment of Broader Impacts**

Excellent

### **Explanation to Applicant**

The novel quantitative approach to be used as part of the proposed research to questions of causality has broad impacts. The applicant will make available to other researchers statistical syntax for R, SAS, and SPSS applications along with detailed tutorials. Additional current outreach activities include the development of a quantitative skills toolbox and engagement with the blog community. She is also a member of Vanderbilt's Women in Science Group.

## **Summary Comments**

The applicant intends to test the impacts of SES, personality, and intelligence on health, estimating how much of the SES-health gradient is caused by each. She has a compelling existing record of achievement. Reference letters enthusiastically describe a highly motivated and skilled applicant. The intellectual merits and broader impacts of the research are outstanding.