

Example Responses for SAP for Restricted Data License

Project Title

Beyond Credentials: Understanding Educational Gradients in Cognitive Function at Midlife

Project Duration

Sixty months

Funding

This study is supported by a seed grant from the University of Wisconsin's Center for Demography of Health and Aging (P30 AG017266)

Timeline

Months 1-3: Acquire, become familiar with, and clean data

Months 4-6: Estimate primary models. Submit for disclosure review.

Month 7: Conference proposal—draft, submit for disclosure review, submit for conference

Months 8-11: Draft full paper; submit for disclosure review.

Months 12-13: Share draft with colleagues; present paper (submitting slides for disclosure review if they include material not previously reviewed)

Months 14-16: Revise, submit full manuscript for disclosure review, submit for publication

Months 16-60: Allow time for revisions, rejection, resubmissions, etc., with additional disclosure reviews as needed based on new/revised tables and/or figures.

Research Question

How do educational opportunities and academic achievements influence cognitive function at midlife beyond what is captured by educational credentials alone?

Demonstrated Need

The HS&B study population is uniquely suited to address this question for several reasons:

1. **Comprehensive Educational Measures:** The HS&B:80 dataset includes detailed records of the participants' high school experiences, such as the quality of their schools, the courses they took, and their academic performance. These measures allow for a nuanced analysis of how specific aspects of education may impact cognitive health. HS&B:80 also includes the identities of any colleges participants' attended, a key piece of information for educational contexts and information not available on the public use data/
2. **Long-Term Follow-Up:** The longitudinal nature of the study enables researchers to track the long-term effects of early educational experiences on cognitive function, controlling for various life course factors related to educational effects. Cognitive function measures for 2021 are only available via the restricted use license.
3. **Diverse Sample:** The diversity of the HS&B:80 sample ensures that the findings apply to different subgroups within the U.S. population, including various racial, ethnic, and socioeconomic groups.
4. **Rich Contextual Data:** In addition to educational data, the HS&B:80 study collects information on participants' socioeconomic backgrounds, family environments, and other life experiences. This allows for a comprehensive analysis that considers the interplay of multiple factors influencing cognitive outcomes.

Study Population

Email: info@edshareproject.org | Website: edshareproject.org

The study population for this research will be drawn from the High School and Beyond (HS&B:80) study, a nationally representative longitudinal survey initiated by the U.S. Department of Education. Sophomores in 1980 and seniors in 1980, followed through postsecondary education into and beyond 1992 with cognitive scores observed in 2021 are the focus of analyses.

Project Abstract

Background

Higher educational attainment has been linked to better cognitive health in midlife and reduced risk of dementia. However, the role of educational opportunities and academic achievements in explaining this relationship remains underexplored.

Objectives

This study aims to investigate the impact of educational opportunities and academic achievements experienced in high school on cognitive function at midlife. It will explicitly model the contributions of early life educational opportunities and academic achievements to variation in later life cognitive function within and between levels of educational attainment.

Methods

Our analysis will include multiple imputation to address item nonresponse and weighted regression analyses of cognitive scores from the 2021 round of the survey on high school educational opportunities (e.g., school quality and course offerings) and academic achievements (e.g., grades and test scores).

Expected Results

We hypothesize that educational opportunities and academic achievements will significantly predict cognitive function at midlife, accounting for much of the

variation traditionally attributed to educational credentials and an appreciable share of variation among those with the SAME level of educational attainment.

Time, Geographic, and Other Units Requested

We are requesting data from 1980, the base year, as well as the 1982, 1984 and 1992 rounds, including the most recent follow-up in 2021. We are also requesting

Work Location

Requester Secure Site

Data Linkages

NA

User-Provided Data

NA


Software Requirements

NA

Methodology

Our analysis will include multiple imputations to address item nonresponse and weighted regression analyses to account for sample representativeness. We will regress detailed measures of cognitive scores from the 2021 round of the survey on high school educational opportunities (e.g., school quality and course offerings) and academic achievements (e.g., grades and test scores). We will condition on family background (parent education, occupation, family income) and demographic attributes (race/ethnicity, gender). In supplementary analyses we will explore the contribution of college quality (as measured by the Barron's college classification) to variation in cognitive skills among college attendees.

List of References

See attached (insert list of references from the  paper)

Project Products

We will publish results from our study in relevant high-impact academic journals such as *Demography* and *Sociology of Education* and present our findings at academic conferences such as the Population Association of America, American Sociological Association, and the Gerontological Society of America.

Requested Output

Description of Tabular Results that may be submitted for disclosure review:

We will present estimates of slope coefficients, associated standard errors, and fit statistics. In accordance with NCES guidelines, we will round all sample sizes to the nearest 10.

Agency Benefits

NA (not required for NCES data)