**JASA ACS Reproducibility Initiative - Author Contributions Checklist Form**

The purpose of the Author Contributions Checklist (ACC) Form is to document the code and data supporting a manuscript, and describe how to reproduce its main results.

As of Sept. 1, 2016, the ACC Form must be included with all new submissions to JASA ACS.

This document is the initial version of the template that will be provided to authors. The JASA Associate Editors for Reproducibility will update this document with more detailed instructions and information about best practices for many of the listed requirements over time.

## Data

**Abstract (Mandatory)**

Short high level description

The paper uses publicly available data from the Wisconsin Longitudinal Study.

**Availability (Mandatory)**

Restrictions (if data will not be made publicly available, justify why not)

The data set is publicly available. It can be downloaded from https://www.ssc.wisc.edu/wlsresearch/. Data used in the present paper are also included in the R package ‘blockingChallenge’ that accompany this paper.

**Description (Mandatory if data available)**

Permissions (demonstrate that author has legitimate access to data)

Licensing information

Link to data (e.g., dataverse.org, datadryad.org; this need not be the actual link at time of submission but if not, it should indicate where the data will be deposited if the manuscript is accepted)

Data provenance, including identifier or link to original data if different than above

File format

Metadata (including data dictionary)

Version information

This paper uses public variables from the Wisconsin Longitudinal Study for the analysis of the question of interest. Detailed description of the variables can be found from https://www.ssc.wisc.edu/wlsresearch/documentation/. The PDF manual of the ‘blockingChallenge’ package, submitted with this paper, includes summary description of the variables used in the present study.

**Optional Information (complete as necessary)**

Unique identifier / DOI

## Code

**Abstract (Mandatory)**

Short high level description

There are two sets of codes: (1) for the analysis of the Wisconsin Longitudinal Study data, and (2) for reproducing the simulation results.

**Description (Mandatory)**

How delivered (R package, Shiny app, etc.)

Licensing information (default is MIT License)

Link to code/repository (e.g., github.com, bitbucket.org; this need not be the actual link at time of submission but if not, it should indicate where the code will be deposited if the manuscript is accepted)

Version information (e.g., for a Git repository, the number or branch+commit)

1. We are submitting an R package named ‘blockingChallenge’. The replication code for data analysis is given in the manual of this R package, pages 3–6 of the PDF manual. The code is appropriately documented; it includes details of the additional R packages needed, runtime, and exact seed to replicate the results.
2. For the simulation results we are submitting the required code separately in a zip file, simulationcode.zip. Please see the ‘readme.txt’ file included in the zip for a guide on running these codes.

**Optional Information (complete as necessary)**

Hardware requirements (e.g., operating system with version number, access to cluster, GPUs, etc.)

Supporting software requirements (e.g., libraries and dependencies, including version numbers)

Unique identifier/DOI

*The codes are written in the statistical software R version 3.4.0 x86\_64 (*https://www.r-project.org/*). All codes were run on a Windows 7 system (32bit) with 16GB RAM and Intel Code i7-3770 3.40GHz processor on a 1TB physical drive. The R package has been tested with R 3.5.1 and R devel.*

## Instructions for Use

**Reproducibility (Mandatory)**

What is to be reproduced (e.g., "All tables and figure from paper", "Tables 1-4”, etc.)

How to reproduce analyses (e.g., workflow information, makefile, wrapper scripts)

Example code in the PDF manual of the R package ‘blockingChallenge’ includes code to reproduce Figure 1, Table 1, and Table 4.

Table 2 and 3 are created using the codes in the zip file ‘simulationcode.zip’; simualtiontable\_power.R creates Table 2, simualtiontable\_ds.R creates Table 3. Please see the ‘readme.txt’ file and the documentation included in the respective R codes for workflow detail.

**Replication (Optional)**

How to use software in other settings (or links to such information, e.g., R package vignettes, demos or other examples)

## Notes

Other relevant information, in particular how to access the data and code if not yet made publicly available.