

Data Management and Sharing Plan

Submitted to: NSF Directorate for STEM Education (EDU)

1. Quantitative survey and academic outcomes data

Data or Research Product Category General Information

Data or Research Product Category: Quantitative survey and academic outcomes data

Description: De-identified survey responses from approximately 600 undergraduate students participating in the study. Surveys will measure STEM self-efficacy, sense of belonging, mentoring experiences, and intention to persist in a STEM major. The dataset will also include limited academic variables such as class year, major, course enrollment, and semester GPA.

Access Policies and Limitations: *Not applicable*

Data Standards and Metadata

Data/Metadata Standard: ICPSR Metadata Schema

Additional Details: Variable names, labels, allowable values, missing-value codes, survey questions, units, and derivation procedures will be documented in a data dictionary. Repository metadata will accompany the deposited dataset.

Data or Research Product Provenance

Data Source: New Data Collection

Additional Details: Survey data will be exported from Qualtrics and cleaned and analyzed in R. Cleaning and transformation procedures will be documented in R scripts and version-controlled during the project.

Public Archiving

Data Sharing Location: ICPSR

Additional Details: De-identified dataset and documentation deposited in the Inter-university Consortium for Political and Social Research (ICPSR).

Timeline for Public Accessibility

Data Sharing Timeline: At time of publication

Additional Details: Data supporting publication will be deposited no later than the time of publication. Remaining shareable data will be deposited by the end of the award period.

Data Availability

Data Availability Period: Indefinitely

Will you adhere to the standard retention policy of the chosen repository: Yes

Accountability

Responsible Personnel: Dr. Dana Sharewell

Role: Principal Investigator

Organization Associated within the Proposal: National Science Foundation

Email Address: sharewell@mailbox.sc.edu

2. Semi-structured interview data

Data or Research Product Category General Information

Data or Research Product Category: Semi-structured interview data

Description: Audio recordings and transcripts from approximately 60 semi-structured interviews with undergraduate participants about their experiences with peer mentoring and persistence in STEM.

Access Policies and Limitations

Access Limitation(s)/Exception(s):

1. Human Data Protection

Explanation(s) and Justification(s) of Concern(s): De-identified transcripts will be shared. Audio recordings will not be publicly released because voices are identifiable. Transcript access may be restricted if necessary to reduce re-identification risk.

Data Standards and Metadata

Data/Metadata Standard: ICPSR Metadata Schema

Additional Details: Each transcript will include a nonidentifying participant ID.

Documentation will describe

interview procedures, transcription, de-identification, and qualitative coding methods.

Data or Research Product Provenance

Data Source: New Data Collection

Additional Details: Interviews will be digitally recorded, professionally transcribed, checked against

recordings by research staff, de-identified, and coded using qualitative analysis software.

Public Archiving

Data Sharing Location: ICPSR

Additional Details: De-identified transcripts and documentation deposited in ICPSR.

Original recordings retained securely according to IRB/institutional requirements and not publicly archived.

Timeline for Public Accessibility

Data Sharing Timeline: At time of publication

Additional Details: Same, subject to IRB and confidentiality restrictions.

Data Availability

Data Availability Period: Indefinitely

Justification or Additional Details: Repository-assigned persistent identifier will be cited in publications where the interview data support reported findings.

Will you adhere to the standard retention policy of the chosen repository: Yes

Accountability

Responsible Personnel: Dr. Dana Sharewell

Role: Principal Investigator

Organization Associated within the Proposal: National Science Foundation

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