

Title: Dataset associated with “Intentional mentoring should increase inclusivity in ecology”

Abstract: High quality mentoring relationships can be pivotal to recruitment, retention, and long-term persistence in ecology majors and careers. The graduate-undergraduate student mentoring relationship can become uniquely important during activities like ecological fieldwork. However, graduate students often have little experience as research mentors, which can lead to negative research experiences for undergraduate mentees. Given the potential for mentoring relationships to impact people’s decisions on pursuing ecological studies and/or careers, we created and piloted a mentoring professional development program designed around intentional mentoring. Intentional mentoring requires that mentors preemptively identify what skills and knowledge their mentee should develop as well as the practices to help mentees develop these competencies. Our rationale for using intentional mentoring was that it has the potential to increase mentors’ and mentees’ awareness of issues around diversity, equity, inclusion, and social justice (DEIJ) in research experiences, in addition to developing professional competencies. To evaluate our program, we conducted focus group interviews with graduate and undergraduate student participants following a multi-week mentoring training workshop, the primary aspect of the program. Participants described an increased valuation of intentional mentoring and a desire to be more intentional in their mentoring relationships. Graduate student mentors described an increased desire to be more intentional mentors, whereas undergraduate mentees described an increased desire to seek mentors with whom they could develop intentional relationships. Undergraduates also better recognized the importance of academic mentors. Based on our evaluation, we posit that intentional mentoring can increase the retention and persistence of students with diverse identities in ecology by fostering a sense of belonging. We advocate the implementation of mentoring training workshops as a part of academic ecological programs to increase inclusion in our discipline.

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Recommended data citation: Stuchiner, E., Lin Hunter, D., Neuwald, J., Webb, C., Balgopal, M. 2021. Dataset associated with “Intentional mentoring should increase inclusivity in ecology.” Colorado State University. Libraries.
<http://dx.doi.org/10.25675/10217/233662>

Associated publications: Stuchiner, E., Lin Hunter, D., Neuwald, J., Webb, C., & Balgopal, M. 2022. “Intentional Mentoring Should Increase Inclusivity in Ecology.” *Ecosphere* 13(1): e3902. <https://doi.org/10.1002/ecs2.3902>

Format of data files: Excel file (.xlsx), .csv, .pdf

Time period during which data were collected: 2019-08-2019-08

Location where data were collected: Colorado State University, Fort Collins, Colorado

File Information: All the data presented in the study is included in the Excel file, “Data for Mountain Scholar_RMAIS study.xlsx”. All data is focus group interview transcripts and associated memos that co-authors wrote while coding the focus group interviews. For preservation purposes, data are also included as a .pdf with transcript excerpts and a .csv file with coding data.

There are 4 total data files:

Data for Mountain Scholar_RMAIS study.xlsx – the focus group interview transcripts and memos

RMAIS_study_transcripts.pdf – the transcript excerpts

RMAIS_study_coding_data.csv – coding data for the transcript excerpts

README_dataset_mentoring_study.pdf – the associated README file

Categories in the spreadsheet – all self-explanatory except for the “pre” and “post,” which corresponds to BEFORE the mentoring program (RMAIS), and AFTER the mentoring program

For details about what each category specifically means, please see the Codebook in Appendix 1 of the associated manuscript.

Mentoring knowledge pre

Mentoring knowledge post

Knowledge of who a mentor is pre

Knowledge of who a mentor is post

Ability to evaluate mentoring relationships pre

Ability to evaluate mentoring relationships post

Intentionality as a mentor pre

Intentionality as a mentee pre

Intentionality as a mentor post

Intentionality as a mentee post

Unclear intentionality pre

Unclear intentionality post

Self efficacy as a mentor pre

Self efficacy as a mentee pre

Unclear self-efficacy pre

Self efficacy as a mentor post

Self efficacy as a mentee post

Unclear self-efficacy post

Desire as a mentor pre

Desire as a mentee pre

Desire as a mentor post

Desire as a mentee post

Appreciation of mentor pre

Appreciation of mentee pre

Appreciation of mentoring relationships pre

Appreciation of mentoring relationships post
 Appreciation of mentor post
 Appreciation of mentee post
 Mutually beneficial pre
 Mentor benefits pre
 Mentee benefits pre
 No one benefits pre
 Mutually beneficial post
 Mentor benefits post
 Mentee benefits post
 No one benefits post
 Mentor has more power pre
 Mentee has more power pre
 Relationship became more equal pre
 Relationship was or became equal pre
 Mentor has more power post
 Mentee has more power post
 Relationship became more equal post
 Relationship was or became equal post
 Supportive lab environment
 Collaborative lab environment
 Other lab environment
 Inclusive workshop environment
 Learning workshop environment
 Other workshop environment
 Inclusive natural science environment pre
 Inclusive natural science environment post
 Cares about students natural science environment pre
 Cares about students natural science environment post
 Other natural science environment pre
 Other natural science environment post
 Inclusive academic environment pre
 Inclusive academic environment post
 Cares about students academic environment pre
 Cares about students academic environment post
 Other academic environment pre
 Other academic environment post

Definitions of acronyms, site abbreviations, or other project-specific designations used in the data file names or documentation files:

Workshop abbreviation:

- RMAIS – Research Mentoring to Advance Inclusivity in STEM

Variable information: Measurement units are included in variable names. Please see the associated manuscript or email the dataset contact for clarification.

Method(s): Included in associated manuscript.

Software: Interview transcripts were coded using MS Excel.

Date dataset was last modified: June 2020