

PRESCRIBING PASSION

MEDICAL EXPERIENCES INFLUENCE ON STUDENTS' RELATIONSHIP
WITH SCIENCE FROM PRE AND POST SEMESTER SURVEYS AT AN
OPEN-ENROLLMENT INSTITUTION

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Inclusive Science Pedagogy & Identity in Research Experiences





INTRODUCTION

OVERVIEW

Connections to STEM:

1. STEM success linked to community ties (Estrada et. al, 2011).
2. Strong science community connection boosts success (Christe et. al, 2013).
3. STEM success influenced by community ties, identity, and engagement (Nadelson et. al, 2017).
4. Vital STEM community connection for underserved students (Chemers et. al, 2011).

Impact of Medical Conditions:

1. Med school challenges for those with health issues (Pagnin et. al, 2013).
2. Health conditions increase stress and social disconnection (Campagne et. al, 2019).

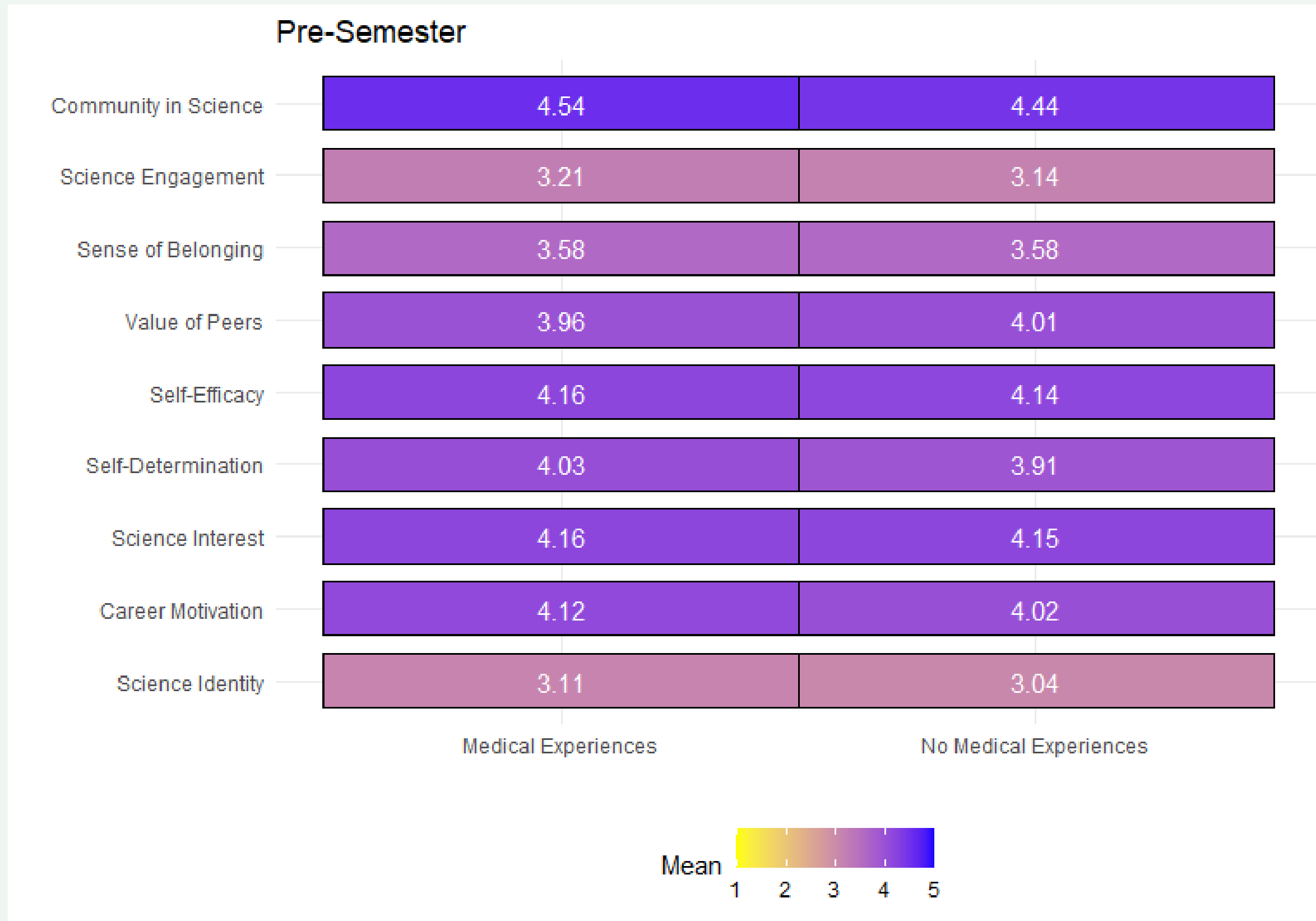
METHODS

Survey Info - 390 Responses

Questions	
Science Identity	Value of Peers
Career Motivation	Sense of Belonging
Science Interest	Science Engagement
Self Determination	Community in Science
Self Efficacy	

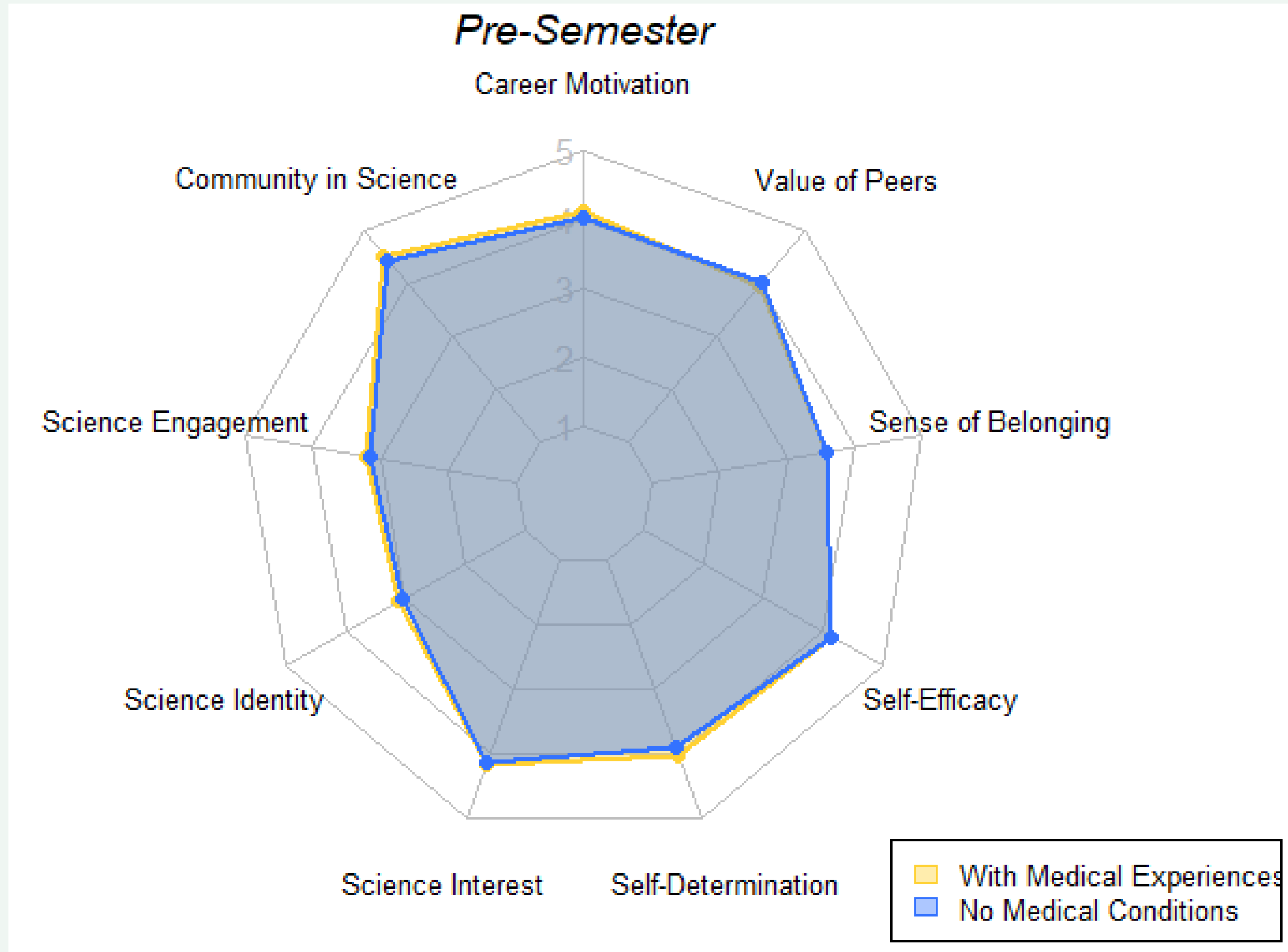


PRE- SEMESTER RESULTS



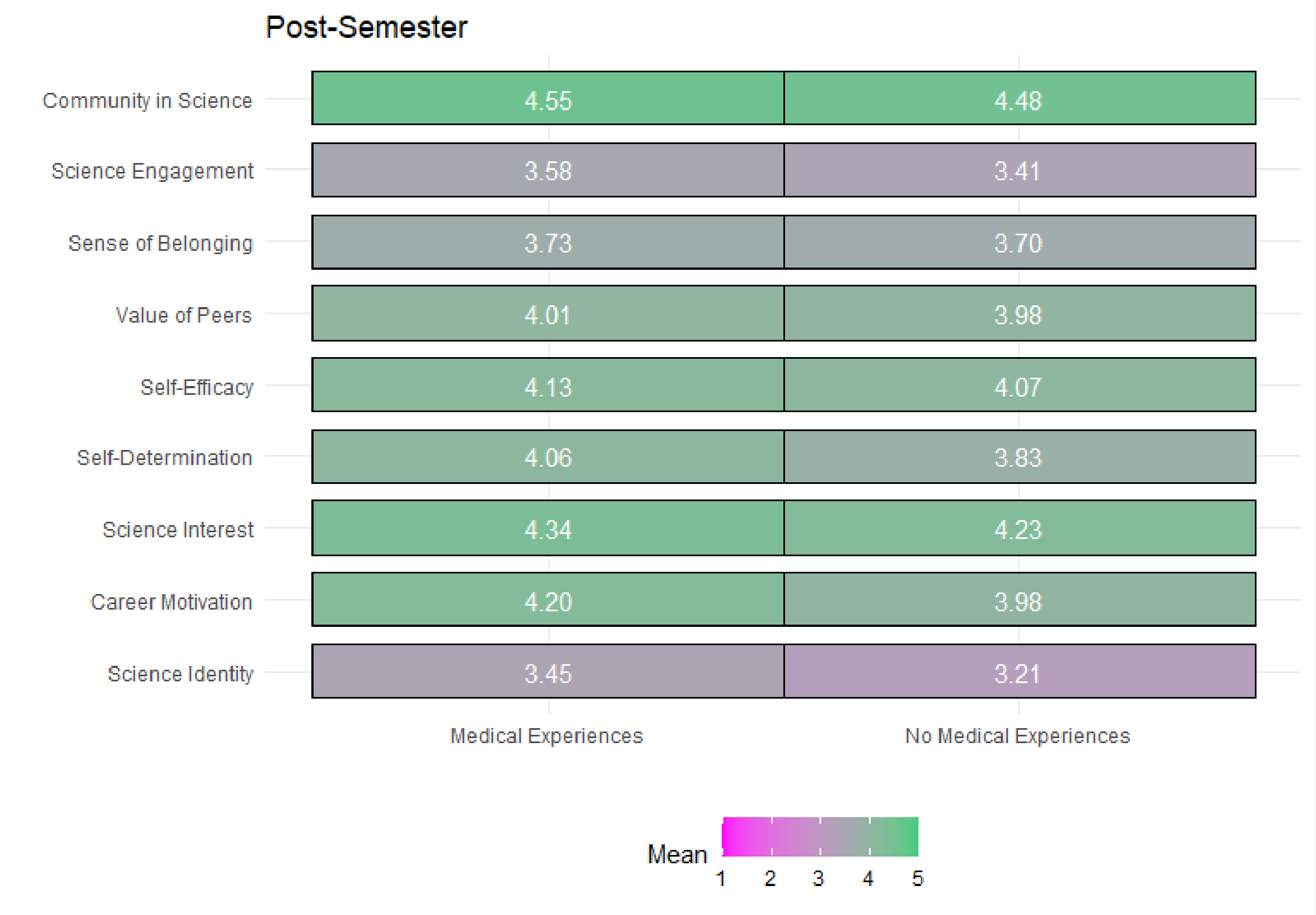
No significant
differences at $p < .05$

PRE- SEMESTER RESULTS



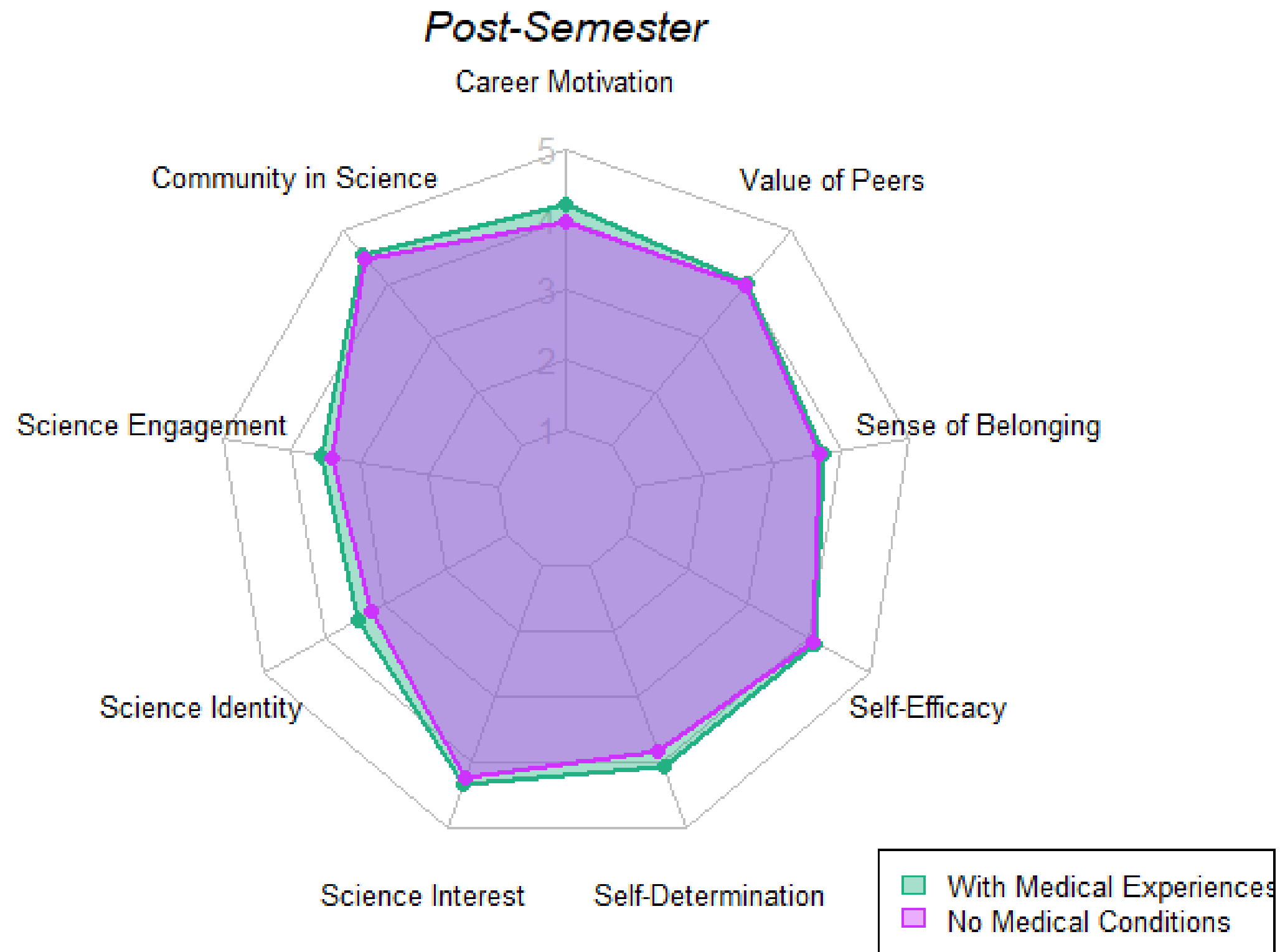
No significant differences at $p < .05$

POST- SEMESTER RESULTS



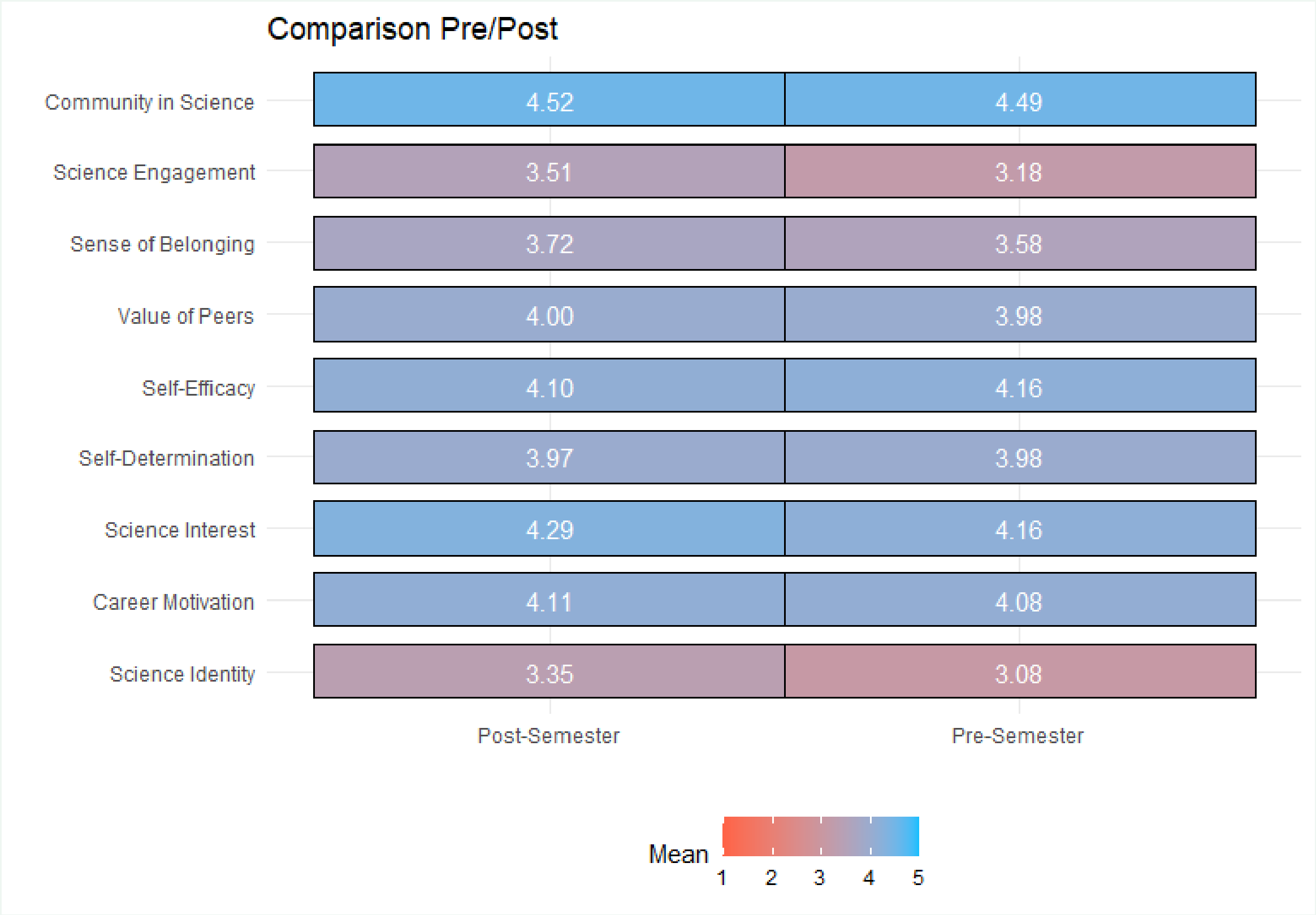
Significant differences at Science Identity, Career Motivation, and Self-Determination at $p<.05$

POST- SEMESTER RESULTS



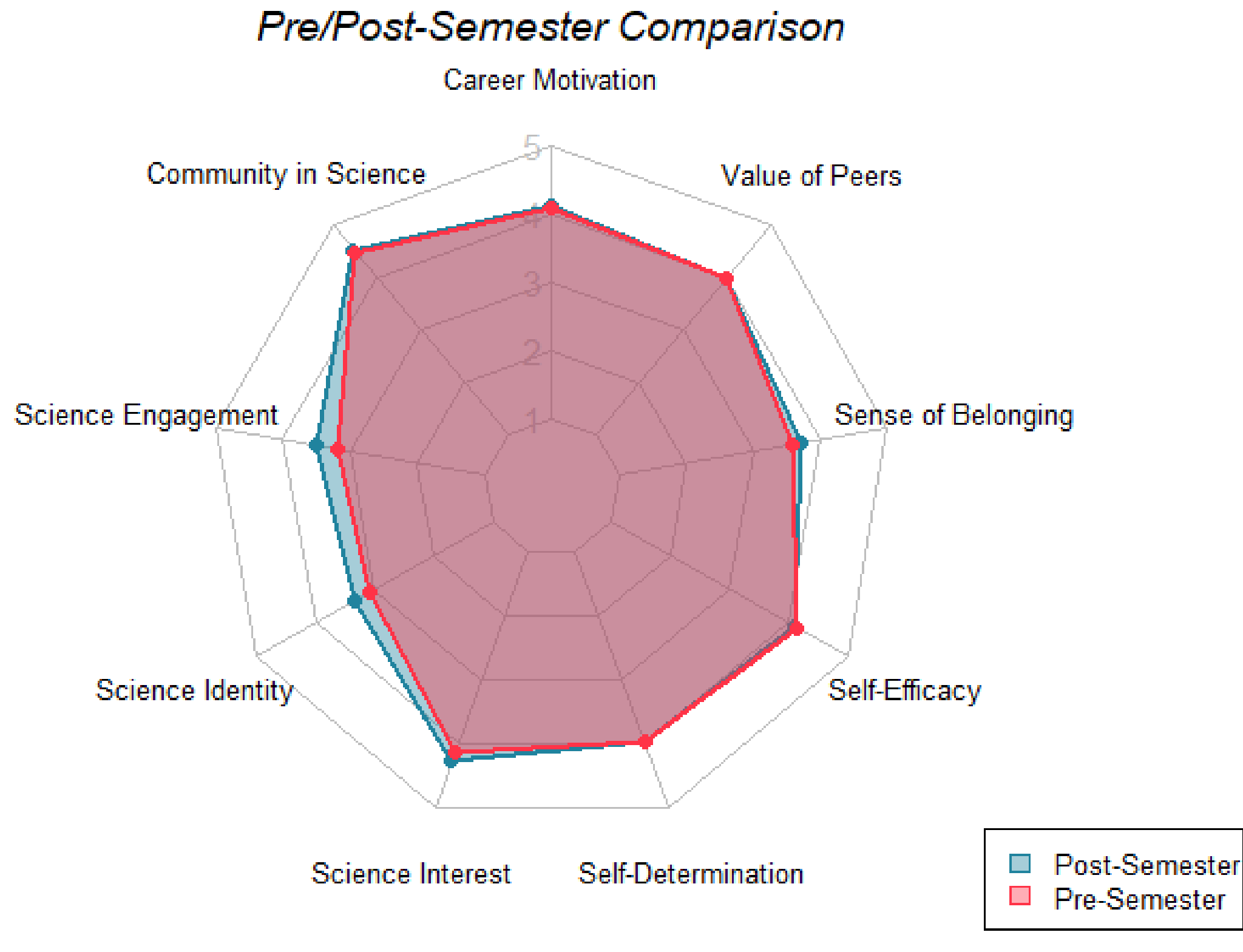
Significant differences at Science Identity, Career Motivation, and Self-Determination at $p < .05$

PRE/POST- SEMESTER RESULTS



Significant differences
at Science Identity,
Science Interest,
Science Engagement,
and Sense of
Belonging at $p < .05$

PRE/POST- SEMESTER RESULTS



Significant differences at Science Identity, Science Interest, Science Engagement, and Sense of Belonging at $p < .05$

CONCLUSIONS

- STEM motivation is significantly influenced by medical experiences.
- Experiences in classrooms through the semester can influence student's STEM motivation
- In this selection of students, STEM motivation increases through the semester

INTERVENTION / SERVICE PROJECT



QUESTIONS?

THANK YOU

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