



Can somebody help me out? : Factors influencing help seeking and help avoidant behaviors among physics and life science majors

Mark Flores (he/him)¹, Rebecca Verchimak (she/her)², Dina Zohrabi Alae PhD (she/her)³, and Benjamin Zwickl PhD (he/him)³

¹McDaniel College, Department of Chemistry

²Coe College, Department of Physics

³Rochester Institute of Technology, Department of Physics



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Background

- Physics and STEM degree programs often have lower completion rates compared to other majors
- Ability to effectively seek and receive help is shown to be a key contributor to academic success
- Help seeking is different from information seeking

Study Population

Total of 7 interviews

Undergraduate Major:

4 Physics
2 Biology

1 Environmental Science

Gender:

5 Female
2 Male

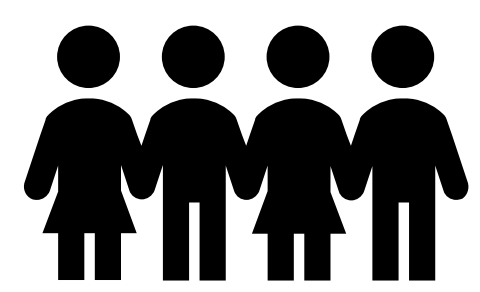
Race:

6 White/Caucasian
1 Asian

Research Questions

- RQ1. Who do undergraduate STEM majors seek help from and what characteristics of those individuals led to seeking or avoiding help?
RQ2. What student attitudes were linked to specific help-seeking behaviors?

Who do undergraduate STEM majors seek help from and what characteristics led to seeking or avoiding help?



Peers

- 6 out of the 7 participants stated that peers were the individuals they chose to seek help from first

Peer Ability and Work Ethic

Encouraged if peer is perceived to have high ability or work ethic

“typically I go to people that I would say, like sort of give off the sense that they are hardworking and like care about what they’re doing.”



“if I know someone has A’s all the time, then I’m more likely to ask them”

Discouraged if perceived low work ethic



“I don’t really [seek help if they] give off the sense that they don’t like care about the work or that maybe they haven’t done it yet.”

Encouraged if peer had similar ability or work ethic to oneself

“I would feel more comfortable asking someone who’s like at my level in the class like doing the same assignment as me.”



“I trust their explanations more than a professor, because I feel like they’re more on my level...especially if it’s like a homework assignment that they’ve already done...they’re using skills that we’ve like both learned.”

Closeness to Peer

Encouraged by interaction outside of the classroom

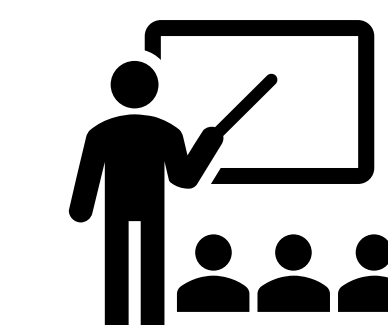
“I think I’m more comfortable with the peers just in general, because we’re friends, we hang out, we have meals together, that type of stuff.”



Discouraged by lack of closeness



“I kind of find it hard to ask like just classmates for help since we aren’t close, like we’re not just naturally helping each other already, so it’s kind of like me asking them for help that’s like our only relationship.”



Instructors

- Only 1 participant stated an instructor was the first individual they sought help from
- Common responses was that instructors were sought out when “all else failed” or avoided seeking help all together

Instructor Availability

Encouraged by behaviors and characteristics that made seeking help more convenient



“professors not rushing away after the class ends, who invite students to stay after and ask questions if they need...that’s usually pretty helpful.”

“encourage you to come into their office hours and whenever you do they don’t treat you like you’re taking up their time, or wasting their time, or acting like you’re a burden.”



Discouraged by lack of availability



“one thing that definitely keeps me from seeking help from professors is like just their availability...their office hours usually don’t match up with whenever I’m available.”

Whether an Instructor Seemed Judgmental

Discouraged due to witnessing past situations where a professor appeared judgmental deterred help seeking This included response statements from professors such as:

“that doesn’t have anything to do with anything”



“how don’t you understand this”

Whether an Instructor Appeared Research or Teaching Focused

Encouraged by professors with a focus on student learning and teaching practices



“one thing I do wish is that...the professors focused more on teaching, rather than just research”

“I think if professors showed more, like, interest in teaching and students’ learning, then I would probably be more inclined to ask for help”



Discussion & Future Research

- Results highlighted the importance of instructor availability and particular behaviors
- Results suggest that instructors need to be self-aware of the content and tone of how they respond to students in classroom and one-on one interactions
- Due to the power imbalance between students and instructors, students may be more likely to infer faculty remarks as condescending or demeaning.

- Considering that help seeking is more frequently sought from peers with a close relationship there may be value in fostering community in a department
- While the interviews and analysis revealed factors that encourage or discourage seeking help, our interview protocol did not provide sufficient information to tell whether the help seeking was appropriate
- Future work could include a larger population with more diverse demographics and a wider range