Social Congruence and Demographics as Factors in Medical Student Support

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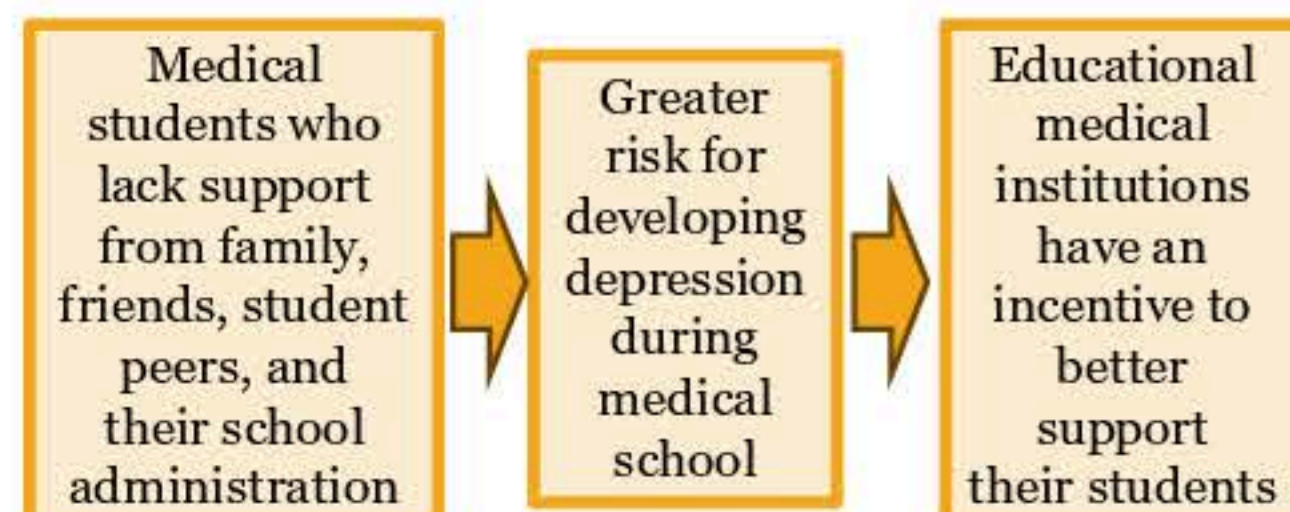AACOM — American Association of Colleges of Osteopathic Medicine

Background

The wellness of medical students during the strenuous transition into their medical education is increasingly a topic of concern and an area of improvement for medical schools in the U.S.

Medical students who lack support from family, friends, student peers, and their school administration → Greater risk for developing depression during medical school → Educational medical institutions have an incentive to better support their students

Thompson et al. (2016)

Students value support from figures who are relatable, have shared experiences, and can meet them on a similar level of knowledge (2, 3). This is referred to as **social** and **cognitive congruence**.

Social Congruence:
sharing similar social roles and experiences that brings comfort to interactions
v.
Cognitive Congruence:
sharing a similar knowledge base that aids in learning and understanding material

Current literature mainly focuses on cognitive congruence and its role in the act of learning in medical education settings through:

- *Effectiveness of peer assisted learning*
- *Improving coursework outcomes*
- *Impact on board scores, etc.*

But can we utilize and assess social congruence in medical education?

How should medical schools best support their students?

Need to know:
1. From whom do they seek support?
2. For what purposes do students seek support?
3. Do demographics play a role?

If social congruence plays a role in these questions, medical schools can place more emphasis and resources towards peer support programs.

Methods

A survey was sent to all 1st and 2nd year students at NYIT COM (637 students invited, 92 completed), to establish the presence of social congruence between students and figures of support (see right). This was done through a series of Likert scale questions asking students to rate the approachability of, relatability of, and the feeling of being understood by the different figures of support. Students were also queried about which of the figures they reached out to for support during their first year of medical school and for what reasons (academic assistance, general medical school advice, general personal advice, general mentorship, or general mentorship in a specific field). For each type of figure selected, the student was asked if age, gender, race, or cultural background played a role in choosing to reach out to that individual. Data was analyzed using Kruskal Wallis tests with post hoc Dunn's tests, and Fisher's exact tests.

Types of Support Figures

Faculty
Academic Medicine Scholars (AMS; 3rd year students who teach 1st and 2nd year students while earning a M.S. in Academic Medicine)
Tutors (selected 2nd year students who tutor 1st year students)
'Bigs' (2nd year students assigned to 1st year students during the medical school transition)
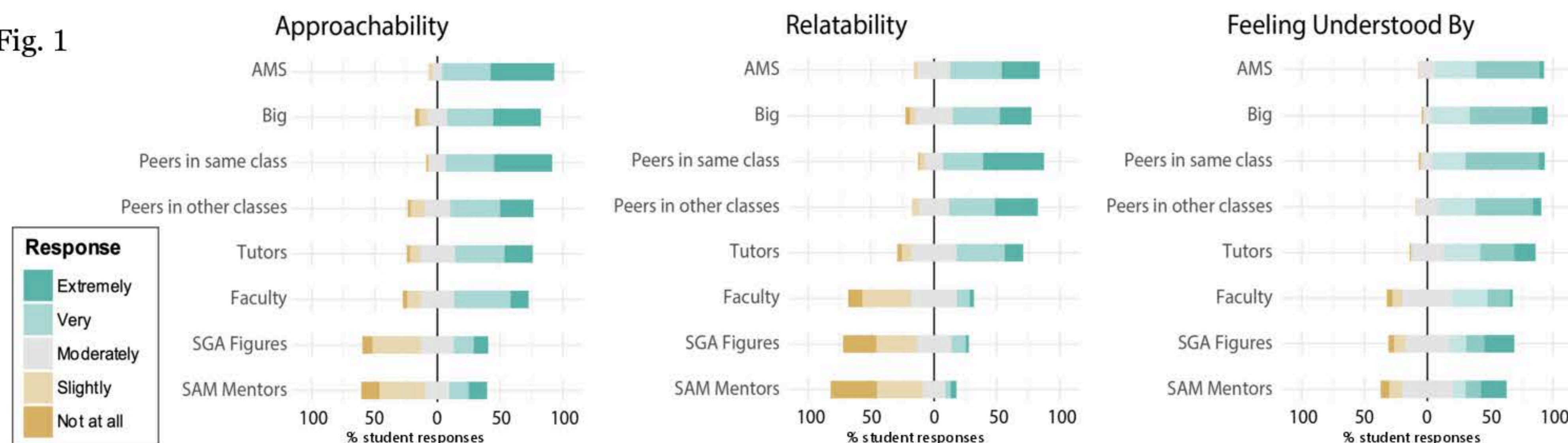**Peers in the same class**
Peers in other classes
Student Government Association (SGA) leaders
Student Advisement and Mentoring (SAM) Mentors (faculty assigned to 1st year students during the transition to medical school)

Results

Fig. 1 — Approachability, Relatability, Feeling Understood By. Response: Extremely, Very, Moderately, Slightly, Not at all. % student responses.
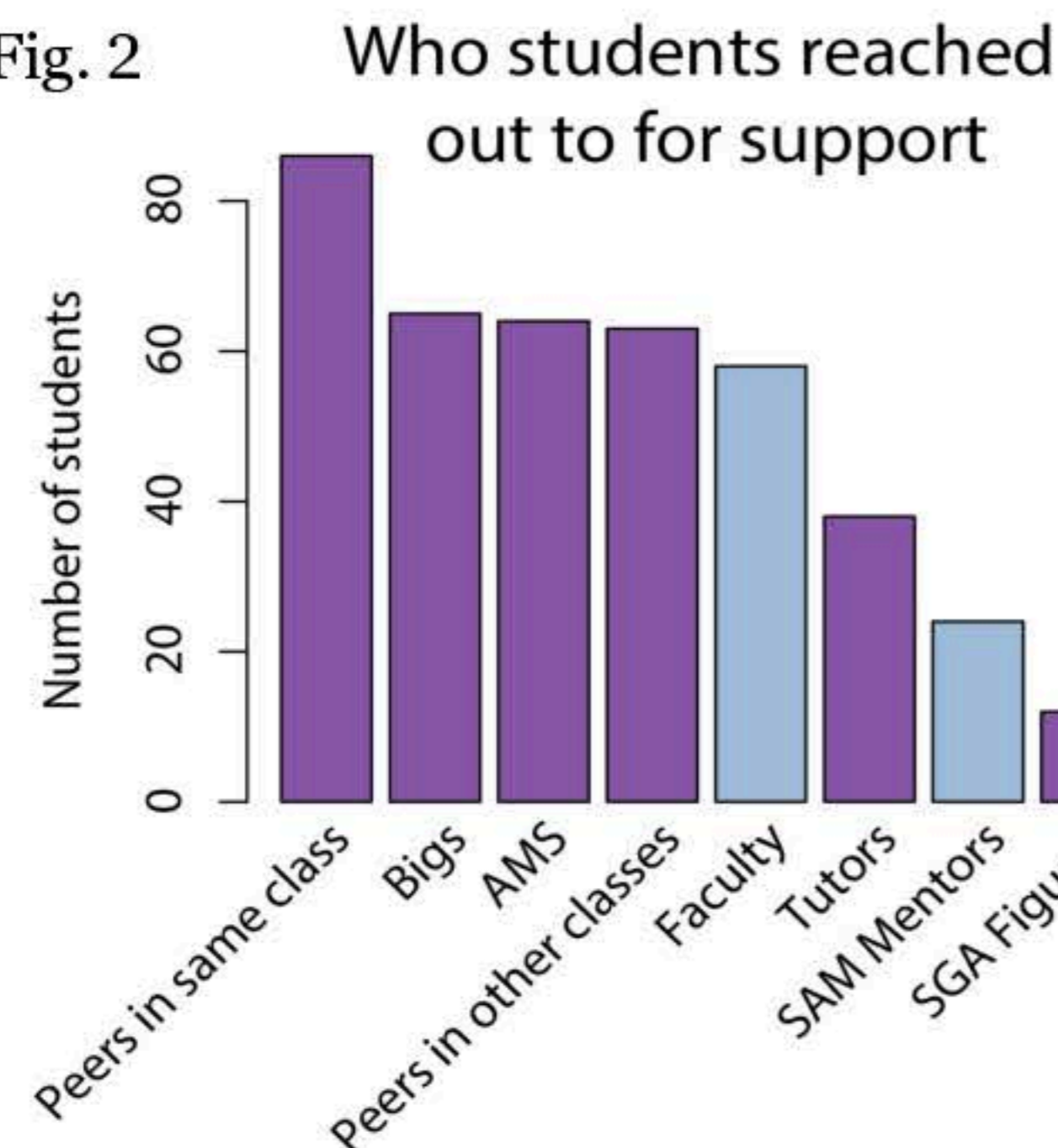
There were significant differences in the approachability, relatability, and feeling understood between figures of support ($p<0.01$). Among all characteristics, AMS, Bigs, and peers in the same or other classes were rated significantly different from faculty and SAM mentors ($p<0.05$; Fig. 1).

Fig. 2 — Who students reached out to for support. Number of students.

When seeking support, most students contacted peers in the same class year (86), followed by "Bigs" (65), AMS (64), peers in another class year (63), faculty (58), tutors (38), SAM faculty mentors (24), and SGA figures (12; Fig. 2).

Fig. 3 — * Indicates the most common reason that support figure was contacted. Figure Type: Peer, Faculty. Academic Assistance, General Medical School Advice, Mentorship in a Specific Field, General Personal Advice, General Mentorship. % of students.

Students' reasons for seeking support were significantly related to who they contacted, but only for faculty, AMS, tutors, "Bigs", peers in the same class year, and peers in another class year ($p<0.01$). Academic assistance and general medical school advice were the most common reasons students sought support (Fig. 3).

Table 1. For all students who contacted a specific figure of support, they were asked if age, gender, race, or cultural background played a role in reaching out to that figure. The responses were used to calculate a ratio of Yes:No. Fisher's exact tests showed that the ratio of Yes:No responses by figure were significantly different from expected for age, gender, and cultural background. Pairwise tests are shown below each factor comparing Yes:No ratios for each significant result.

Age (p<0.01)	Gender (p<0.01)
Listed from greatest to least Yes:No ratio	Listed from greatest to least Yes:No ratio
Peers in the same class $p<0.05$	Bigs $p<0.05$
Scholars	Scholars
Peers in other classes	Peers in the same class
Bigs	Peers in other classes
Tutors $p<0.05$	SGA $p<0.05$
SGA	Faculty
SAM	Tutors
Faculty	SAM
Race	**Cultural Background (p<0.05)**
No differences	No differences

There are differences in the ratios of students reporting that age and gender play a role when reaching out to different figures of support NYIT COM. These differences are primarily between peer figures and faculty figures, with greater ratios of students reporting that age and gender play a role when they reach out to peer groups than when they do to other groups (Table 1).
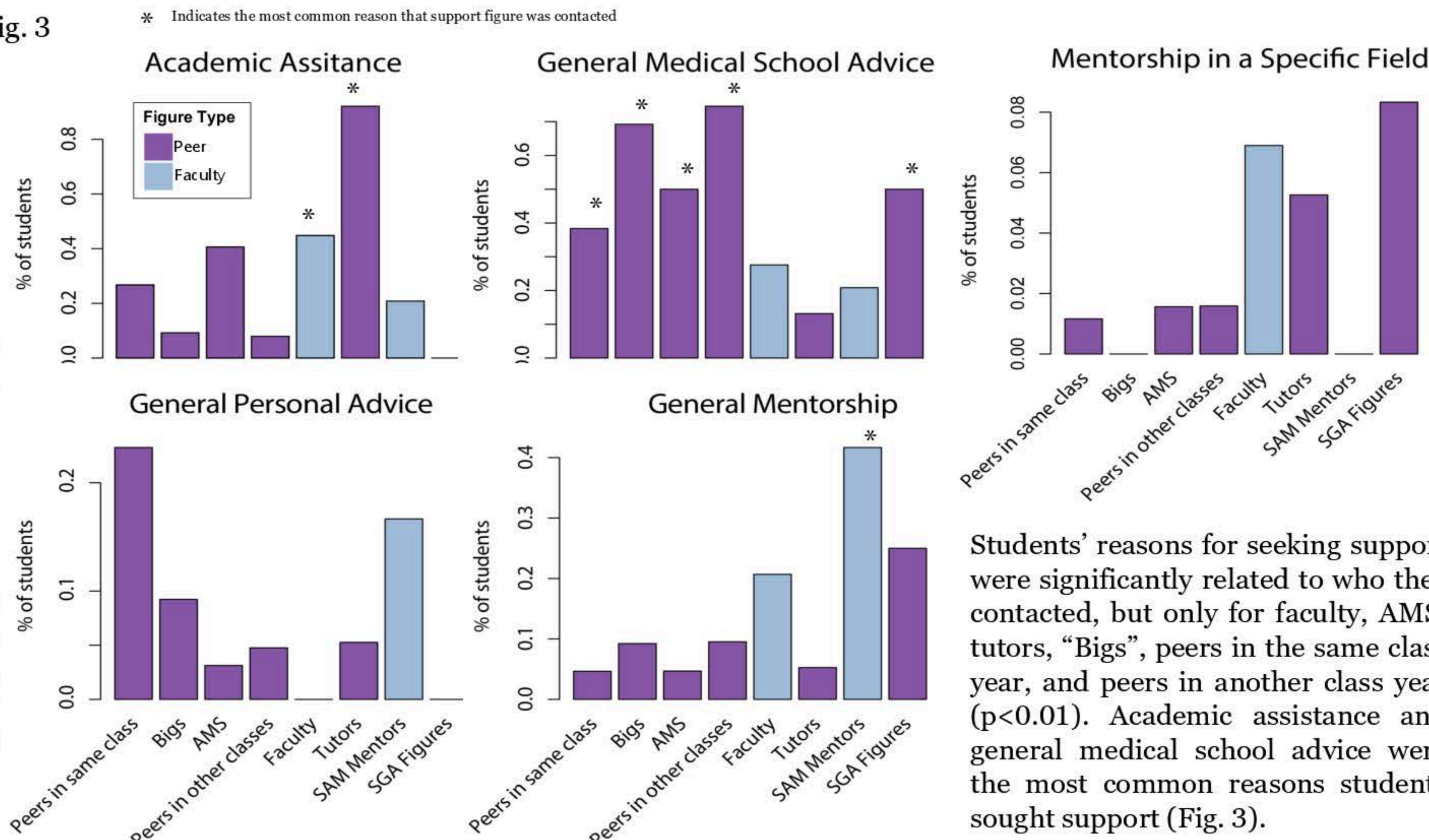
Conclusions

- Social congruence is most present with peer groups (Bigs, Peers in the same class, Peers in other classes, AMS).
- Students use these peer groups more so than other figures for support.

- Tutors and Faculty were used the most for academic assistance. Tutors more so, possibly due to social congruence.
- Faculty figures were approached the most for general mentorship.
- Peer groups were approached the most for personal and general medical school advice.

- Age, gender, and cultural background may play minor roles for students when reaching out to peer groups

This study identifies a useful distinction that medical schools can utilize when implementing student support programs—that students most often seek support from figures with whom they experience social congruence. This can help focus efforts when providing students with resources and support during the transition into medical school.

Future Considerations:
- *Using different parameters to assess varying figures of support and the medical student experience.*
- *Perform student interviews to guide future research initiatives.*
- *Design a study that could be used at a larger scale or other institutions.*

References

1. Thompson et al. 2016. Teaching and Learning in Med. 28, 174-182.
2. Lockspeiser et al. 2008. Adv Health Sci Educ Theory Pract. 13, 361-372.
3. Tayler et al. 2015. Med Ed Online. 20, 27921.