

What Characteristics Predict Student-Faculty Interaction and Important Relationships with Effective Educational Practice

Rong (Lotus) Wang

Indiana University Bloomington | wangrong@indiana.edu

Allison BrckaLorenz

Indiana University Bloomington | abrckalo@indiana.edu

Yi-Chen Chiang

Indiana University Bloomington | chiangy@indiana.edu



Which group of faculty members interact more with students?



Abstract

Student-faculty interaction is significantly beneficial to college students' engagement and success. Past studies of student-faculty interaction (SFI) have focused on the relationship between student characteristics and SFI or faculty members' qualities, skills or approaches and SFI. This study uses a large-scale multi-institution dataset to take a closer examination of the relationships between faculty characteristics, course characteristics, institutional characteristics, faculty course goals, and faculty values for campus support with SFI. Results suggest that several faculty, course, and institution characteristics predict increased SFI. Additionally, faculty who do more to structure their courses for student growth and development and more strongly value a supportive campus environment for students interact with students more frequently.

Background

Studies have examined the relationship between students' demographic characteristics and SFI, such as students' ethnicities, gender, major and class standing (Anaya & Cole, 2001; Kezar & Moriarty, 2000; Kuh & Hu, 2001; Sax, Bryant & Harper, 2005). However, little is known about the relationship between faculty characteristics and SFI. Faculty's belief about their roles and responsibilities closely associate with the time and energy they spend on teaching and the pedagogies they employ (Colbeck, Cabrera & Marine, 2002), which are directly related to the level of interactions with students.

Faculty beliefs about their roles and responsibilities would likely be reflected in how they structure their courses. Liberal education outcomes can be achieved through several channels when working with faculty members or advisors, such as setting learning goals, milestone assessment, and culminating experiences (AAC&U, 2005).

Faculty beliefs about institutional support for students are also likely related to their beliefs about their roles and responsibilities in student development. Strange and Banning (2001) claimed that "campus environments set conditions that affect student learning and, in turn, students influence the shape of campus environments" (p. 200). Nelson Laird, Chen, and Kuh (2008) found a positive association between expected persistence rates and student perceived supportive campus environment. Nevertheless, little is known about the relationship between SFI and faculty members' value of a supportive campus environment.

Research Questions

1. How does student-faculty interaction vary for different kinds of faculty in different contexts? In other words, how does student-faculty interaction differ by various faculty demographics, faculty employment status, course characteristics and institutional characteristics?
2. How is student-faculty interaction related to how faculty members structure their courses for student gains in a variety of areas?
3. How is student-faculty interaction related to faculty values for institutional emphasis on student support?

Data, Sample, and Measures

This study used the 2013 Faculty Survey of Student Engagement (FSSE), a nationwide survey that measures faculty members' expectations for student engagement and their contributions to student learning and development. In 2013, 18,133 faculty members from 146 baccalaureate-granting institutions (61% privately controlled) responded to FSSE. Male (49%) and female (51%) faculty proportionally responded nearly equally. Most respondents were White (73%) and employed full-time (73%). Among full-time faculty, academic ranks were almost equally represented (around 27%) except for "instructor or lecturer" and "other" ranks (14% and 5% respectively). Nearly half were in Arts and Humanities (25%), Social Sciences (13%) and Health Professions (12%).

The dependent variable is the factorial-derived scale Student-Faculty Interaction (SFI) (Cronbach's $\alpha = .77$), a measure of the extent to which undergraduate students interact with faculty members. Three tiers of independent variables were examined. 1) Faculty demographics, faculty's rank and employment status, course characteristics, and institutional characteristics. 2) Course Goals (CG) (Cronbach's $\alpha = .80$), a measure of the extent to which faculty structure their selected courses to promote student development. 3) Supportive Environment (SE) (Cronbach's $\alpha = .86$), a measure of the value that faculty members place on increasing institutional emphasis on student support.

In addition to descriptive analysis, an ordinary least squares (OLS) regression was conducted to estimate the magnitude of the relationship between faculty, course and institutional characteristics and SFI. Then, two OLS models were used to examine the respective effects of CG and SE on SFI, controlling for the previously examined characteristics.



Females had higher SFI than males ($\beta = .08, p < .001$).



Faculty members who were 55 years or older had lower SFI than those who were younger than 55 ($\beta = -.09, p < .001$).



Physical Sciences, Mathematics, & Computer Science | Arts & Humanities | Communications, Media & Public Relations | Education | Social Service Profession | Health Professions

Faculty in Health Professions had the highest level of SFI compared to their peers in Arts and Humanities ($\beta = .06, p < .001$), followed by Communications, Media and Public Relations; Education; and Social Service Professions ($\beta = .05, p < .001$). However, faculty in Physical Sciences, Mathematics and Computer Science had the lowest SFI ($\beta = -.04, p < .001$).



Part-time lecturers/Instructors | Full Professors

Part-time lecturers/instructors had lower SFI than full Professors ($\beta = -.18, p < .001$).



Lower Division | Upper Division

Faculty who taught upper-division classes had higher SFI than those who taught lower-division classes ($\beta = .08, p < .001$).

Course Goals and Student Faculty Interaction

After controlling for all faculty, course, and institutional-level characteristics, setting developmental course goals ($\beta = .36, p < .001$) had a positive and significant relationship with SFI.

Supportive Environment and Student Faculty Interaction

After controlling for all faculty, course, and institutional-level characteristics, a supportive environment ($\beta = .20, p < .001$) had a positive and significant relationship with SFI.

Significance

Although past studies examined various aspects of SFI and the roles of faculty characteristics and institutional characteristics in influencing SFI, those studies focused more on faculty's qualities, skills or attitudes. Few studies have explored how faculty's demographic, course, and institutional characteristics relate to SFI. Additionally, fewer studies have examined how faculty members' course structures and their values for institutional support strengthen SFI. This study brings us new thoughts about the nature of variations in SFI among faculty members: the relationship between emphasizing course goals that enrich students' learning and promoting SFI, and the role of valuing a supportive campus environment in enhancing SFI.

Implications

For Institutions:

- By understanding the nature of the variation in SFI among faculty members with different characteristics, institutions will be able to provide more support and resources to faculty members to help them enhance SFI.
- Understanding the relationships between faculty characteristics and faculty values and SFI will provide helpful reference for institutions during hiring, tenure, and promotion—institutions may want to focus on hiring and rewarding faculty members who value student-faculty interactions and setting clear course goals.
- Institutions dedicated to creating a supportive campus environment for students could more efficiently provide resources for faculty and staff to interact with students by better understanding faculty values for student support.

For Faculty Members:

For faculty members, this study can help them think about incorporating course goals that promote interaction in their teaching and course design.

For Student Affairs Professionals:

The results of this study can help student affairs professionals to better collaborate with faculty members in supporting students through curricular and co-curricular activities, and give them some new ideas in encouraging students to establish quality connections with faculty members.

More information about this study and FSSE can be found on the FSSE website fsse.iub.edu.