

PhD Students' Views on Faculty Mentoring

A Michigan Doctoral Experience Study Report | February 2026

In Brief

This report examines how PhD students view the academic advising, career development, emotional support, and assistantship training they receive from faculty mentors. We find that, in general, students view the guidance they receive from faculty positively, and these positive views dim only slightly as they progress through their programs. There are only minor differences in students' assessments of mentoring by their discipline and demographic backgrounds. The most substantive difference in students' views of faculty mentoring is related to program climate, suggesting that departmental-level factors are of greater importance for understanding differences in students' mentoring experiences than student-level factors.

Introduction

Faculty are responsible for guiding doctoral students through graduate programs, training them to be effective teachers and researchers, and helping them develop into independent scholars. In recognition of faculty members' important mentoring role, the *Michigan Doctoral Experience Study* asks students to assess the guidance they receive from faculty in four areas that are important to doctoral student success. These four areas are:

- Academic Advising, defined as guiding students through academic and program milestones
- Career Development, defined as facilitating students' professional development and networking
- Emotional Support, defined as providing students with understanding and encouragement
- Assistantship Training, defined as building students' research and teaching skills through modeling, guidance, and feedback

For this report, we use responses from 10,457 continuing PhD students who answered the Michigan Doctoral Experience Study (MDES) at least once during the years 2020-2024. Sample sizes differ across the report's analyses, however, due to data missingness and differences in analytical windows.

Measuring Mentoring

Students can have multiple faculty guiding them through their PhD journey. Asking about each of these potential mentors would lead to a very long survey and exhausted respondents. Therefore, when asking about academic advising, career development, and emotional support, MDES directs respondents to think about the faculty member who was in the role most critical for supporting their degree progress, regardless of how effective the faculty member was in this role. We call this person the Primary Advisor. When asking about assistantship training, MDES directs respondents to think about the person who spent the most time supervising their research or teaching assistantship. This is their Supervisor.

Scales

MDES presents students with a set of statements about their Primary Advisor's and Supervisor's behavior over the past year. Each statement describes an action associated with effective guidance and students are asked to indicate their agreement with the statement on a scale from 1 (strongly disagree) to 5 (strongly agree). For example, Table 1 shows statements that are used to assess whether an advisor provided effective academic advising. We create an **Academic Advising Scale** by averaging students' answers to these three questions.

Table 1. Academic Advising Scale

To what extent do you agree or disagree with the following statements?

Your primary advisor:	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
Made your program's policies and guidelines explicit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helped you navigate your program's formal requirements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provided strategies for getting through your program (preparing for milestones, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

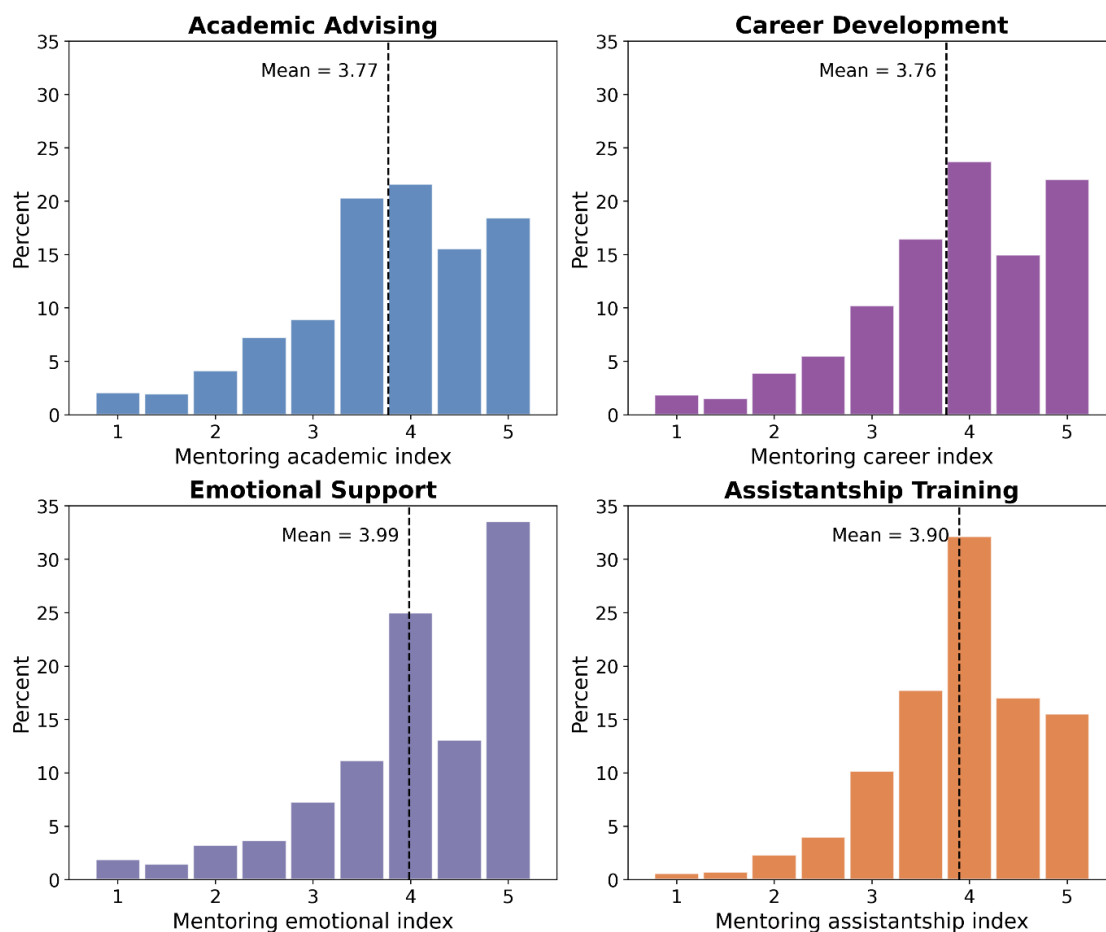
We follow the same process to create a **Career Development Scale**, **Emotional Support Scale**, and **Assistantship Training Scale**. The Assistantship Training Scale was only calculated for students who held research and/or teaching assistantships. The statements that make up each of these scales are available in the appendix.

Mentoring Scale Distributions

As a first step, we examine the mentoring scale distributions to determine whether students perceive faculty to be better at certain types of mentoring than others. **Figure 1** shows the histograms of the four mentoring scales. The scales' values are continuous and can range from a low of 1.0 (if a student strongly

disagrees with all statements that make up the scale) to a high of 5.0 (if a student strongly agrees with all statements that make up the scale). Dotted lines indicate the mean values for the sample.

Figure 1. Mentoring Scale Distributions, by Type of Mentoring



Note: Academic Advising n=10,087; Career Development n=10,152; Emotional Support n=10,091; Assistantship Training n=8,775.

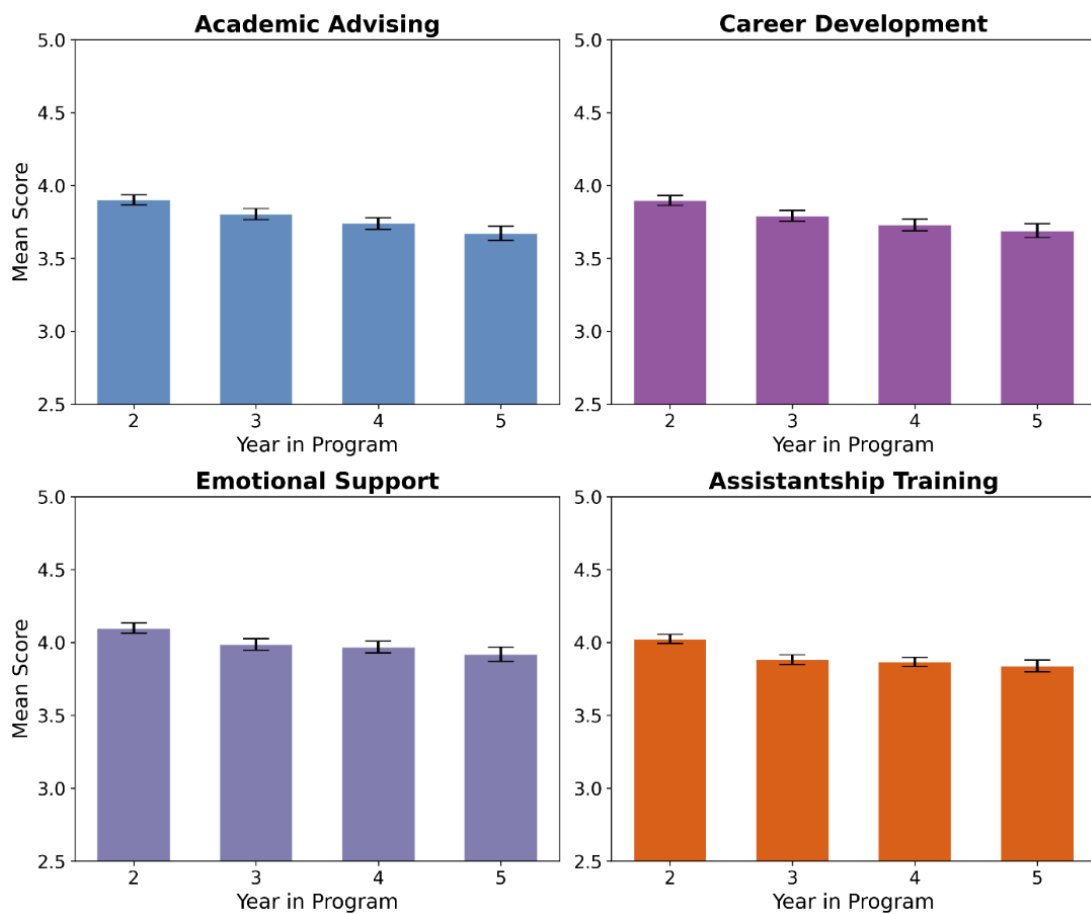
The four distributions have a similar shape: the bars on the right side of the graph are taller than the bars on the left side. This means that more students agree with positive statements about the mentoring they receive than disagree. However, there are some slight differences across the scales. The mean value of the Emotional Support scale is about 0.23 points higher than for the Academic Advising and Career Development scales, suggesting that students perceive faculty to be more effective at providing psychosocial mentoring than providing more instrumental types of guidance.

The mean values of the Emotional Support and Assistantship Training scales are similar (3.99 and 3.90, respectively), but students are much more likely to have strongly positive views of the emotional support

they receive than assistantship training, as evidenced by the height of the bars centered around 5 (strongly agree) on the two scales. In sum, students view their mentoring experiences quite positively, although there is variation in the scales. Students are more likely to strongly agree with positive statements about their mentor’s emotional support than about other types of guidance.

Next, we examine whether students’ views of mentoring vary across different stages of doctoral study. In **Figure 2**, bar charts show the mean of each mentoring scale disaggregated by students’ year in program. Across all four scales, the means are highest in year 2 and lowest in year 5. No particular year is associated with a large decline. Rather, the mean values drop by very small increments on a yearly basis.

Figure 2. Student Ratings of Mentoring, by Type of Guidance and Year in Program

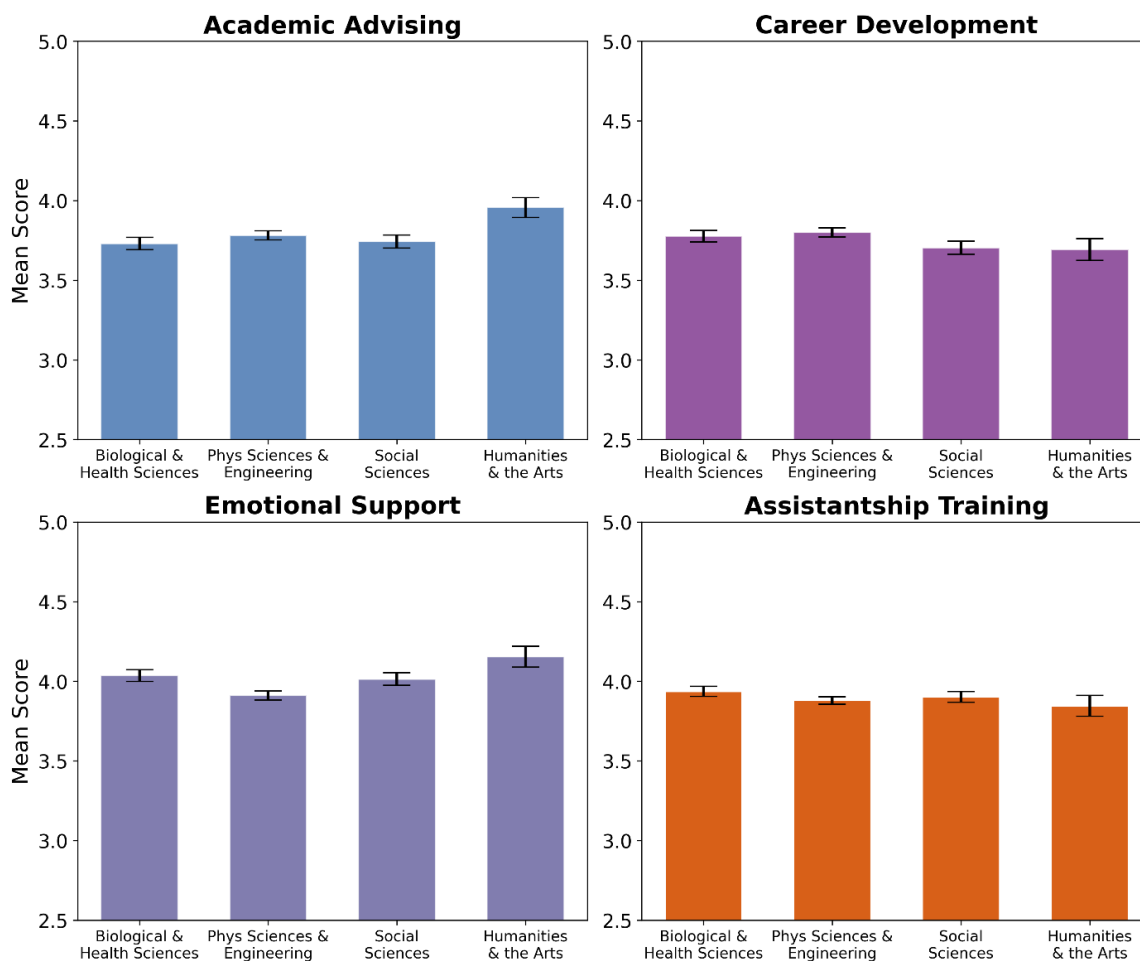


Note: 95% confidence intervals are indicated with horizontal bars. Academic Advising n=8989; Career Development n=9050; Emotional Support n=8992; Assistantship Training n=7,887.

Individual Differences

Next, we examine whether students from different disciplinary and demographic backgrounds vary in their views of mentoring. In **Figure 3**, the bar charts are now disaggregated by students' discipline. Following Rackham convention, the disciplines are grouped into four categories: Biological and Health Sciences, Physical Sciences and Engineering, Social Sciences, and Humanities and the Arts.

Figure 3. Student Ratings of Mentoring, by Type of Guidance and Type of Discipline



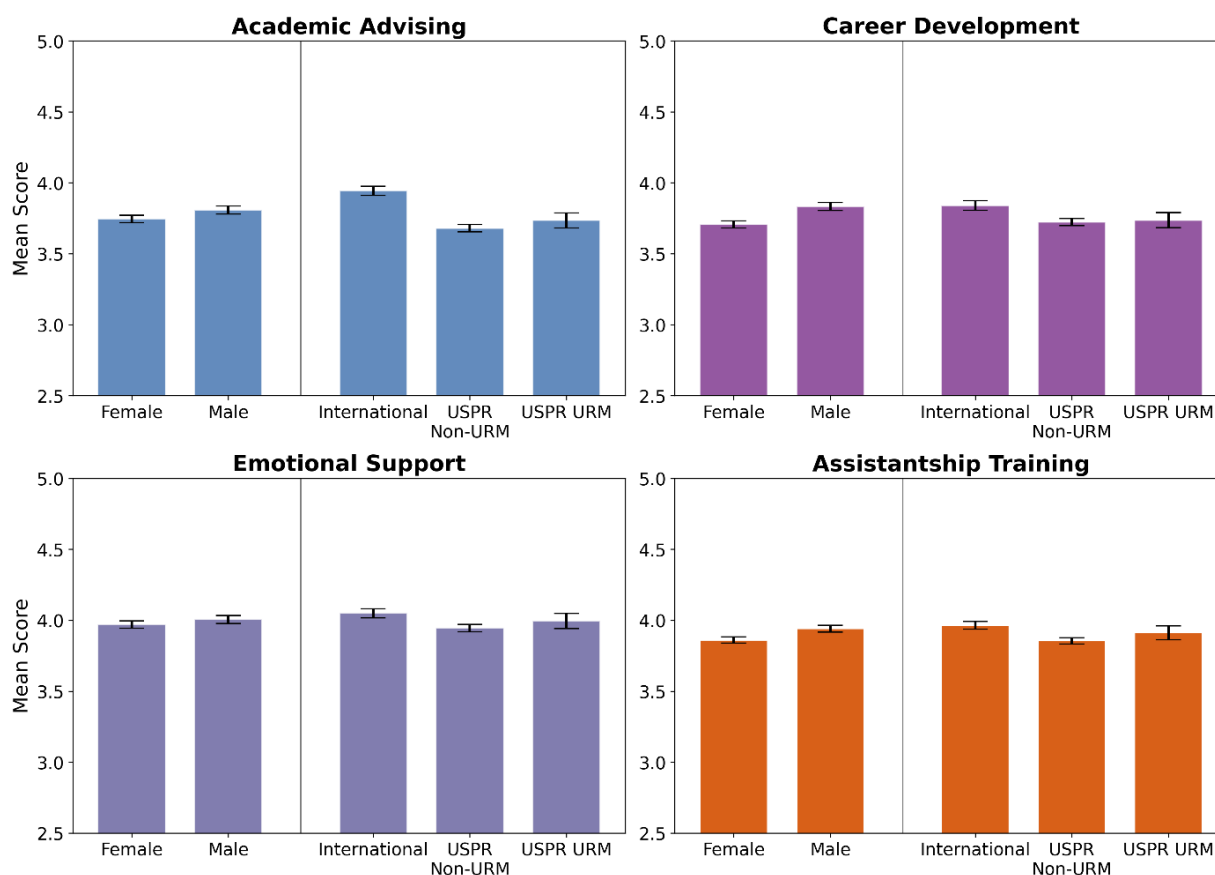
Note: 95% confidence intervals are indicated with horizontal bars. Academic Advising $n=10,087$; Career Development $n=10,152$; Emotional Support $n=10,091$; Assistantship Training $n=8,775$.

The results indicate that students' perceptions of mentoring do not substantively vary across disciplines. The only type of guidance in which there may be meaningful differences are in academic advising and emotional support. The mean values for these scales are larger for students in the Humanities and the Arts than for other disciplines. While there is subtle variation in the means of the Career Development

and Assistantship Training scales by disciplinary type, the fact that their confidence intervals often overlap suggests that these minor differences are both substantively *and* statistically insignificant.

Figure 4 presents bar charts disaggregated by students' sex, citizenship, and underrepresented racial minority (URM) status. There are only minor differences in the means across these demographics, with males and international students tending to have slightly higher values than females and students who are US Citizens or permanent residents (USPR).

Figure 4. Student Ratings of Mentoring, by Type of Guidance and Demographics



Note: 95% confidence intervals are indicated with horizontal bars. Academic Advising n=10,087; Career Development n=10,152; Emotional Support n=10,091; Assistantship Training n=8,775.

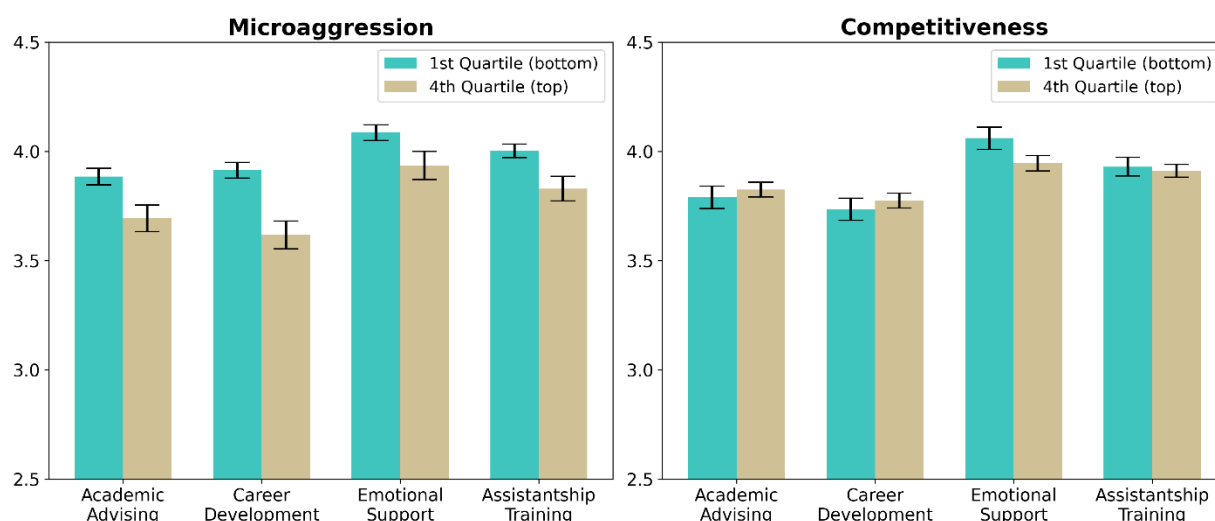
Department Context

Finally, we consider whether department and program level contextual factors are related to the mentoring scale scores. MDES asks respondents to assess how often they experience **microaggressions** in their academic environment. Specifically, the survey asks how frequently they are devalued, ignored, and isolated within their academic spaces. MDES also asks students to assess the level of **competitiveness** between students in their department on a four-point scale, from *not at all competitive (1)* to *very*

competitive (4). See the appendix for the items in the microaggression scale and the wording of the competitiveness question. We then calculate the mean values of the microaggression scale and the peer competitiveness question for students in the same department or program to **create departmental-level measures** of climate and competition. We then categorize departments by whether they fall in the 1st, 2nd, 3rd or 4th quartiles of the microaggression scale and competitiveness question.

Figure 5 contains two sets of bar charts. The set on the left shows the mentoring scale means for students in departments that score in the bottom and top quartiles on the microaggression scale. The set on the right shows the means for students in departments that score in the bottom and top quartiles on peer competitiveness.

Figure 5. Student Ratings of Mentoring, by Departmental Microaggression and Competitiveness Quartile



Note: 95% confidence intervals are indicated with horizontal bars. Academic Advising n=10,087; Career Development n=10,152; Emotional Support n=10,091; Assistantship Training n=8,775.

The results suggest that department-level climate — particularly related to microaggressions — is more closely related to how students rate their mentoring than student characteristics are. Looking at the graph on the left, we see that in comparison to students in top quartile departments (departments with a relatively high frequency of microaggressions), students in bottom quartile departments (departments with a relatively low frequency of microaggressions) have academic advising scale scores that are 0.12 points higher, career development scale scores that are 0.19 points higher, emotional support scale scores that are 0.07 points higher, and assistantship training scale scores that are 0.11 points higher. Also, looking at the graph on the right, we see that students in bottom quartile departments (departments where students frequently characterize their peers as non-competitive) have emotional support scale scores that

are 0.10 points higher than students in top quartile departments (departments where students frequently characterize their peers as very competitive).

Summary

There is substantial variation in how positively PhD students at the University of Michigan rate the guidance they receive from advisors and supervisors, but, overall, many more students view their mentoring experiences positively than negatively (Figure 1). Although students view all four types of guidance quite positively, they are more likely to strongly endorse positive statements about the emotional support they receive from mentors than about other types of guidance. Students' views of mentoring are only minorly related to their year in program (Figure 2), discipline (Figure 3), or sex, citizenship status, and URM status (Figure 4). However, students in programs with low levels of microaggressions rated the mentoring they received much more positively than students in programs with high levels of microaggressions (Figure 5). This suggests that **students' perceptions of mentoring have less to do with who they are and more to do with the context in which mentoring occurs**. This finding supports the need for programs and resources that develop faculty mentoring skills, such as Rackham's MORE (Mentoring Others Results in Excellence) committee, and initiatives that support inclusion and the creation of a healthy departmental culture.



*Photo: Marc-Gregor Campredon,
Office of University Development,
University of Michigan*

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Appendix

Career Development Scale

To what extent do you agree or disagree with the following statements related to the types of CAREER DEVELOPMENT provided by your primary advisor during the past academic year.

Your primary advisor...	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
Helped you develop your career goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Connected you to opportunities that enhance your career	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Encouraged you to take advantage of professional development opportunities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Introduced you to people in your field	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Emotional Support Scale

To what extent do you agree or disagree with the following statements related to the types of EMOTIONAL SUPPORT provided by your primary advisor during the past academic year.

Your primary advisor...	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
Built your confidence	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Actively listened to you	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provided encouragement when you needed it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Empathized with the challenges you experienced	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Research Supervisor

Please tell us the extent to which you agree or disagree that your **research supervisor** did the following during the past academic year (*If you interacted with multiple supervisors during the year, please think about your experience with the supervisor you spent most of your time*).

Your research supervisor...	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
Modeled how to do good work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Taught you skills that will help you be successful in your work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provided constructive feedback about your work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provided the right amount of autonomy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Supported having a work-life balance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Held reasonable expectations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Teaching Assistantship Supervisor

Please tell us the extent to which you agree or disagree that your **GSI supervisor** did the following during the past academic year (*If you interacted with multiple supervisors during the year, please think about your experience with the supervisor you spent most of your time*).

Your teaching supervisor...	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
Modeled how to do good teaching	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Taught you skills that will help you be successful in teaching	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provided the right amount of autonomy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provided the right amount of autonomy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Supported having a work-life balance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Held reasonable expectations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Microaggression Scale

Thinking about your experiences in ACADEMIC SPACES (i.e., classes, research labs, etc.) within the past year, please indicate how often you experienced each event.

	Never (1)	Rarely (2)	Sometimes (3)	Frequently (4)
I felt uncomfortable sharing my ideas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My ideas or opinions were minimized, ignored or devalued	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was treated as if I were less intelligent than my peers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt isolated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Peer Competitiveness

How would you rate the level of competitiveness between students in your department/program, based on your experience during the past academic year?

- (1) Not at all competitive
- (2) Slightly competitive
- (3) Moderately competitive
- (4) Very competitive