Department of Earth and Planetary Sciences

Climate Survey 2020
Graph Overview

Organizational Climate

Defining climate

"Organizational climate," as it pertains to any organized unit—whether it be a very large company, a small non-profit organization or an academic department at a college or university—refers to, "The atmosphere or ambiance of an organization as perceived by its members. An organization's climate is reflected in its structures, policies and practices; the demographics of its membership; the attitudes and values of its members and leaders; and the quality of personal interactions."[i] In broad terms, academic departments with positive climates are characterized by transparent communication about all departmental matters, uniformity regarding the equitable treatment of department members (faculty, students, administrators, staff), assistance with reference to the needs of members, and respect."

Why climate is important for the workplace

The nature and quality of an organization's climate has been shown to have a direct impact on members' positive or negative assessments of their workplaces. The more positively employees perceive their organization's climate, the more likely they are to view the organization in positive terms, have a desire to continue working for that organization, be motivated to put in the extra effort on behalf of the organization (not just for one's own professional advancement), and be more productive[iii]. In the case of academic departments, this applies to everyone who works for them: faculty (especially regarding intentions to stay in the department)[iv,v,vi], administrators, and staff[vii,viii,ix,x]. In some cases, climate has been linked to intrinsic task motivation, reduced isolation, and satisfaction with promotion processes.[xi]

For students—both at the undergraduate and graduate levels—a positive academic climate is associated with student retention and persistence, academic self-confidence, improved academic performance, and an increased sense of belonging. Negative climates are associated with the opposite outcomes—including low academic self-confidence, poor academic performance, lack of persistence and retention, increased rates of dropping out, and a low sense of belonging—especially among students who are from historically underrepresented populations[xii,xiii,xiv,xv,xvi].

Survey

The purpose of this survey was to evaluate climate among faculty, staff, undergraduate students, graduate students and post-docs/research scientists in the Department of Earth and Planetary Sciences. Climate is a multidimensional construct and therefore there are a number of climate dimensions identified as targets of assessment in the literature. Due to the needs of the Science Division we have chosen to focus on the facets of: inclusion and belonging, interpersonal justice, communication, workplace incivility, accountability for wrongdoing, supervisor/advisor support, job satisfaction (for faculty, staff, and post-docs) and satisfaction with the academic experience (for undergraduate and graduate students).

Methodology

Items in this survey were adapted from other validated instruments in the organizational behavior literature. Department members were given the option to include up to five of their own survey items. The survey consisted of up to approximately 20 forced-choice/Likert-type items. Two open-ended items allowed participants to elaborate on their survey responses and/or to further describe their experiences as well as to provide suggestions about ways the climate could be improved. Parallel items were administered across groups to faculty, staff, post-doc/research scientist, undergraduate, graduate, and post-docs with the point-of-reference (i.e., department, concentration, program) adapted for the respective group. The survey was administered in Qualtrics in early Fall 2020 during the COVID-19 Pandemic. This was acknowledged in the survey as participants were instructed to think broadly about their experiences with climate in the department/concentration/program and about how EPS normally functions pre-pandemic. A total of four-hundred and thirteen (N=413) surveys were sent to faculty, staff, post-docs/research scientists, undergraduates and graduate students, a total of three-hundred and eighteen responded (n=318), resulting in a 77% response rate. A break-down by group is provide in Table 1 below.

Table 1

	Undergraduate Student	Graduate Student	Faculty including ladder and non ladder faculty instructors and fellows	Staff	Post Doctoral Scholar Research scientist	
Response N	6	44	17	21	18	106
Total N	29	81	32	30	66	238
Response rate	20.7%	54.3%	53.1%	70%	27.3%	44.5%

Because of the low response rate for undergraduate students and post-doctoral scholars and research scientists, we excluded them from our analysis. In this report we present a high-level analysis of items across groups (faculty, staff, and graduate students). Participants were asked to report their responses on a series of 6-point Likert scales (1=strongly disagree to 6=strongly agree; 1=extremely dissatisfied to 6 = extremely satisfied). For ease of interpretation, scale points were collapsed across positive categories (i.e., somewhat agree + agree +strongly agree). It should also be noted, that in cases where results are not displayed for a particular group, this means that the item was not displayed in the survey for that group.

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Office of the Provost, Columbia University. (2019). *Guide to Best Practices for Departmental Climate*. New York, NY: Columbia University. https://provost.columbia.edu/sites/default/files/content/Faculty%20Advancement/Best%20Practices%20for%20Departmental%20Climate%20-%20CU.pdf

Finney, J., Finkielstein, C., Merola, J., Puri, I., Taylor, D., Van Aken, E., Hyer, P., and Savelyeva, T. (2008). *Creating a Positive Departmental Climate at Virginia Tech: A Compendium of Successful Strategies*, http://www.advance.vt.edu/Climate.html

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Departmental Climate. In Laursen, S., L. & Austin, A. E., StratEGIC Toolkit: Strategies for Effecting Gender

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Veilleux, J.C., January, A.M., Vander Veen, J.W., Reddy, L.F., and Klonoff, E.A. (2012). Perceptions of Climate in Clinical Psychology Doctoral Programs: Development and initial validation of the Graduate Program Climate Scale. *Training and Education in Professional Psychology, 6*(4): 211–219.

Smolock, E. and Robert, J. (2020). Broadening and strengthening underrepresented group inclusion in immunological research. *Frontiers in Immunology,* doi: 10.3389/fimmu.2020.00465.

Locks, A.M., Hurtado, S., Bowman, N.A. and Oseguera, L. (2008). Extending notions of campus

climate and diversity to students' transition to college. *The Review of Higher Education, 31*(3): 257–285.

Mayhew, M.J., Grunwald, H.E., and Deyt, E.L. (2006). BREAKING THE SILENCE: Achieving a positive campus climate for diversity from the staff perspective. *Research in Higher Education, 47(1):* 63-88.

Laursen, S. L. & Austin, A. E. (2014). Strategic Intervention Brief #11: Strategies for Improving

Departmental Climate. In Laursen, S., L. & Austin, A. E., StratEGIC Toolkit: Strategies for Effecting Gender

Equity and Institutional Change. Boulder, CO, and East Lansing, MI. www.strategictoolkit.org

Hurtado, S. and Carter, D.F. (1997). Effects of college transition and perceptions of the campus racial climate on Latino college students' sense of belonging. *Sociology of Education, 70*(4):324-345.

Cabrera, A.F., Nora, A., Terenzini, P.T, Pascarella, E. & Hagedorn, L.S. (1999). Campus racial climate and the adjustment of students to college. *The Journal of Higher Education, 70*:2, 134-160, DOI: 10.1080/00221546.1999.11780759

Locks, A. M., Hurtado, S., Bowman, N. A., & Oseguera, L. (2008). Extending notions of campus climate and diversity to students' transition to college. *The Review of Higher Education, 31*(3), 257-285.

Garvey, J. C., Rankin, S., Beemyn, G., & Windmeyer, S. (2017). Improving the campus climate for LGBTQ students using the Campus Pride Index. *New Directions for Student Services, 159*:61-70.

Nuñez, A. M. (2009). Latino students' transitions to college: A social and intercultural capital perspective. *Harvard Educational Review, 79*(1), 22-48.

I. Satisfaction Overall

Figure 1: Satisfaction with…

Climate in program/department

Category	Value
Graduate	70%
Faculty	63%
Staff	81%
Total (Mean)	71%
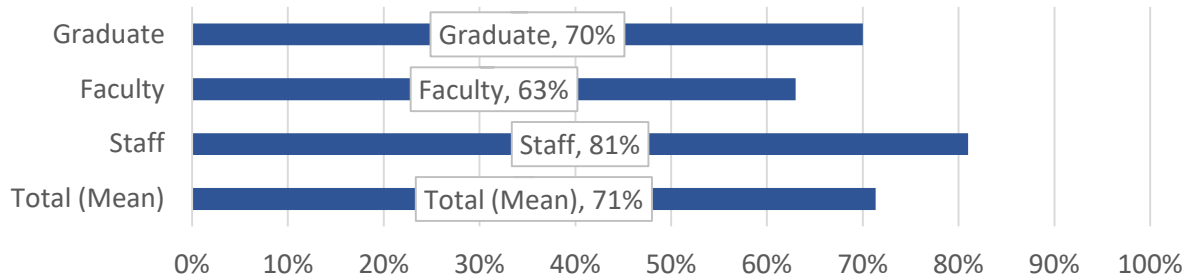
Satisfaction with my program/job

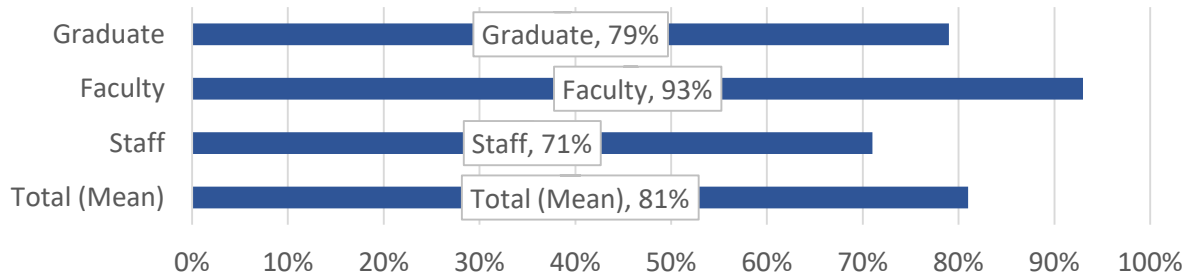| Category	Value
Graduate	79%
Faculty	93%
Staff	71%
Total (Mean)	81%

Figure 2: If I had to do it over again, I would choose where I work/my program

Working/Program

Category	Value
Graduate	82%
Faculty	93%
Staff	81%
Total (Mean)	85%
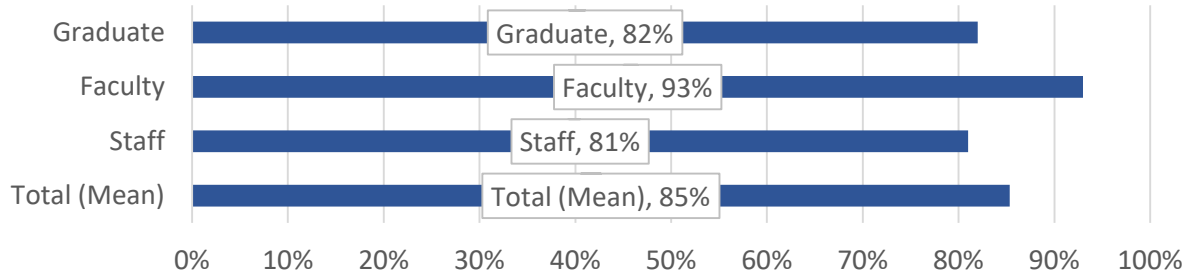
II. Interpersonal Justice

Figure 3: Treat me with dignity and respect

Faculty treat me with dignity and respect

Group	Percentage
Graduate	Graduate, 86%
Faculty	Faculty, 81%
Staff	Staff, 80%
Total (Mean)	Total (Mean), 82%

(Axis: 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%)

Staff treat me with dignity and respect

Group	Percentage
Graduate	Graduate, 100%
Faculty	Faculty, 100%
Staff	Staff, 86%
Total (Mean)	Total (Mean), 95%

(Axis: 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%)
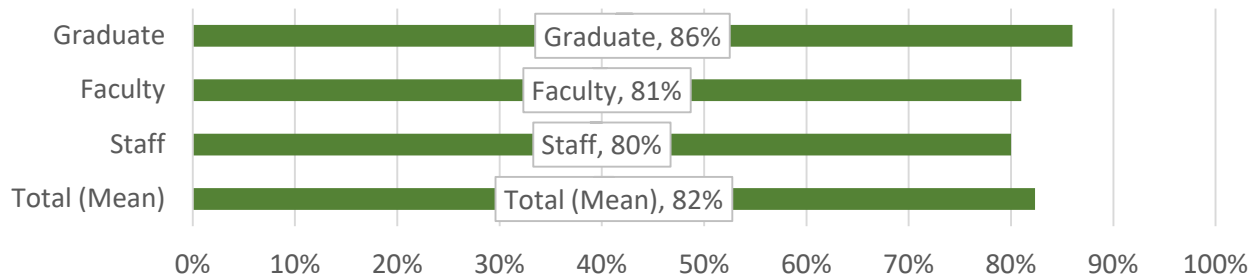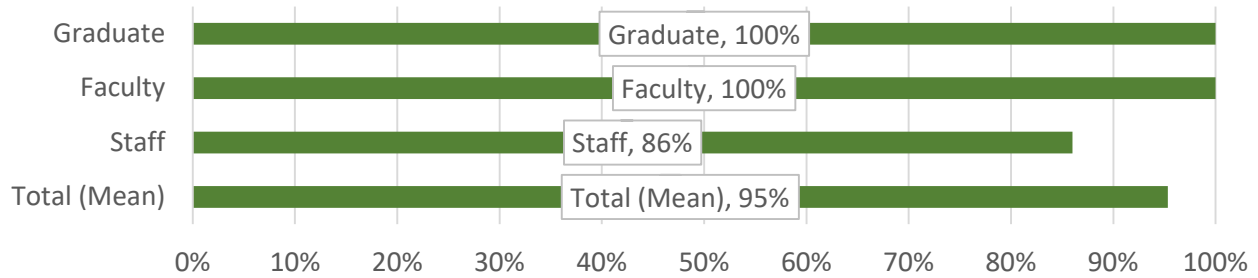
Students treat me with dignity and respect

Group	Percentage
Graduate	Graduate, 84%
Faculty	Faculty, 94%
Staff	Staff, 95%
Total (Mean)	Total (Mean), 91%

(Axis: 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%)
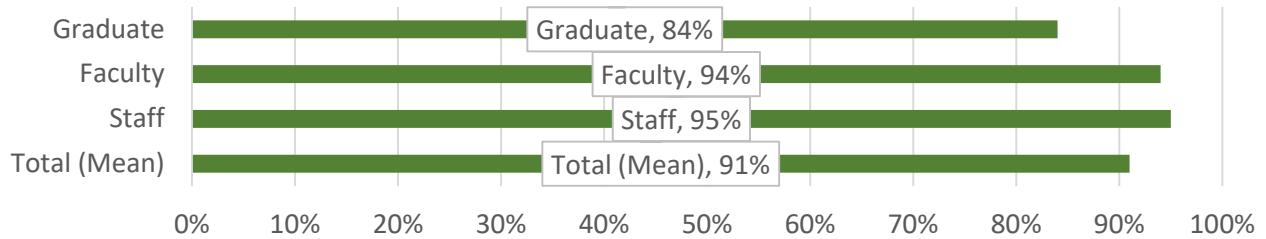
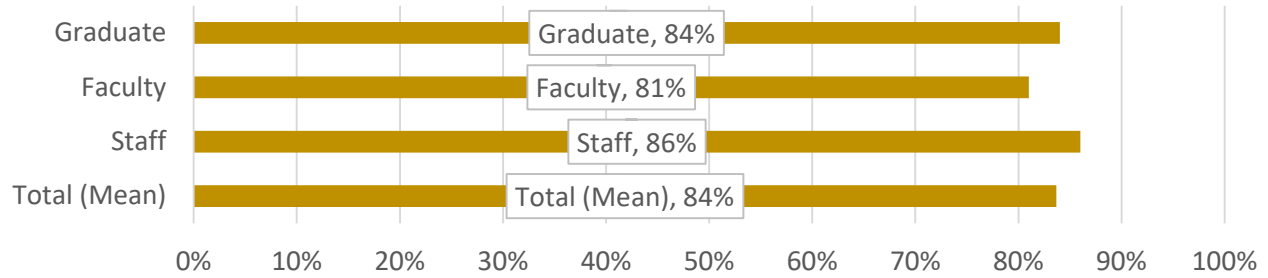# III. Sense of Belonging

Figure 4: Sense of belonging with others in my (program/department)

I feel accepted by others

|	Percentage
Graduate	Graduate, 86%
Faculty	Faculty, 76%
Staff	Staff, 86%
Total (Mean)	Total (Mean), 83%

Axis: 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

I feel valued by others

	Percentage
Graduate	Graduate, 84%
Faculty	Faculty, 81%
Staff	Staff, 86%
Total (Mean)	Total (Mean), 84%

Axis: 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
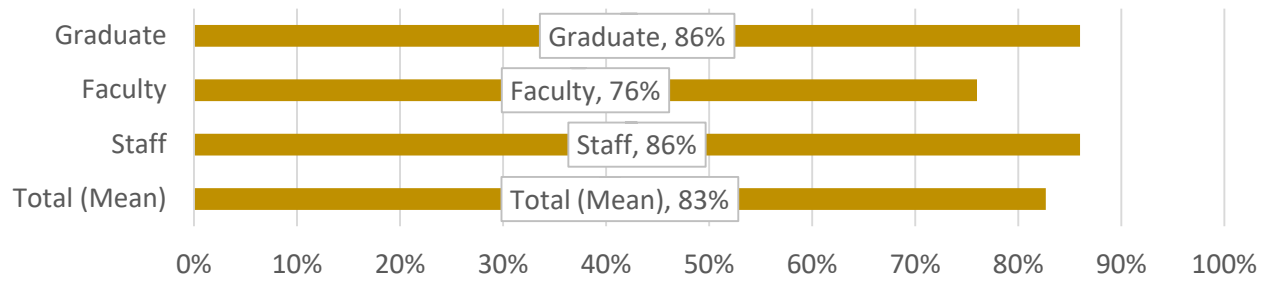
IV. Inclusion

Figure 6: The (department/program) takes care to make all (students/staff) feel included

Graduate, 56%
Staff, 76%
Total (Mean), 66%
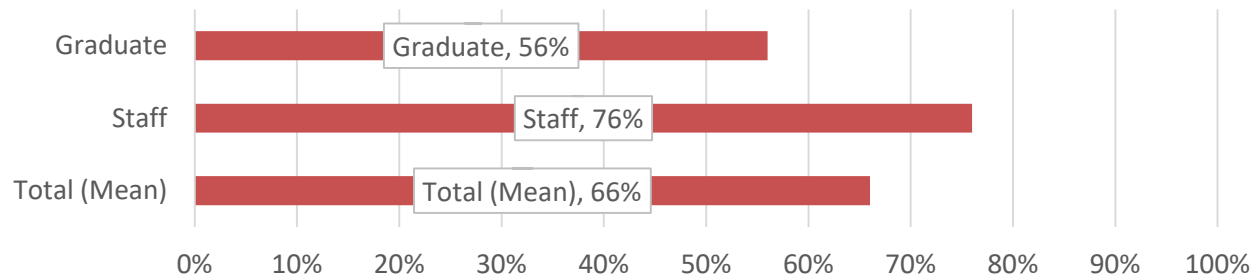
VI. Commitment to Diversity

Figure 8: There is a demonstrated commitment to diversity and inclusion in my (program/department)

Graduate, 58%
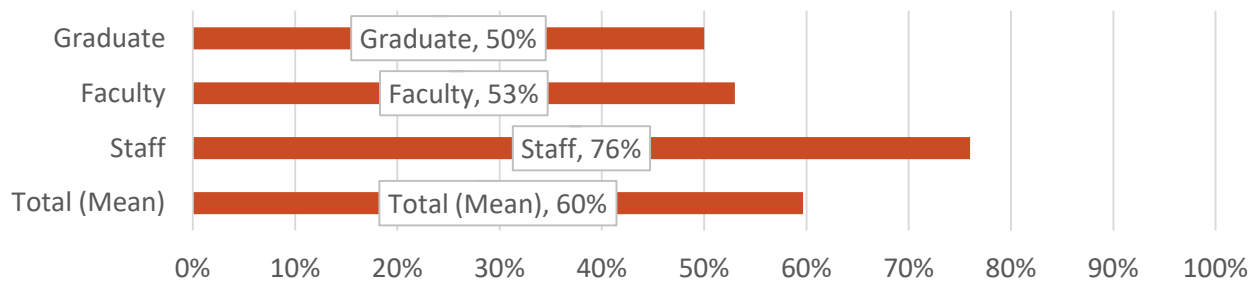Faculty, 69%
Staff, 67%
Total (Mean), 65%
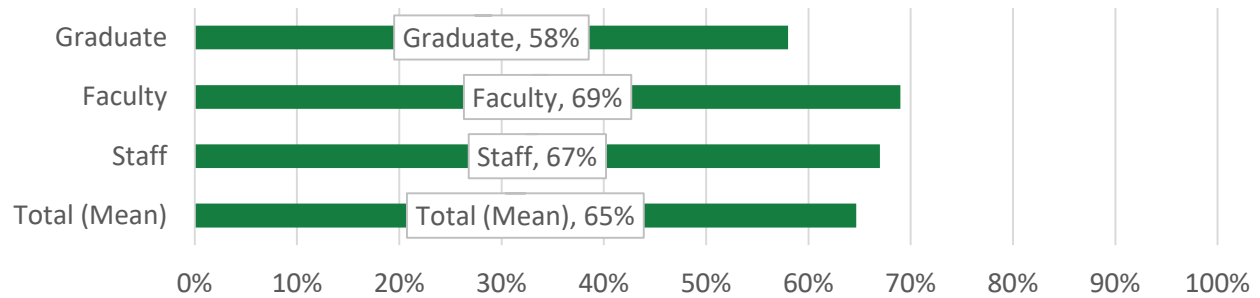
VII. Communication

Figure 9: Open-respectful communication with peers/colleagues in my program/department

Respectfully consider each other's point-of-views and opinions

- Graduate, 73%
- Faculty, 53%
- Staff, 95%
- Total (Mean), 74%
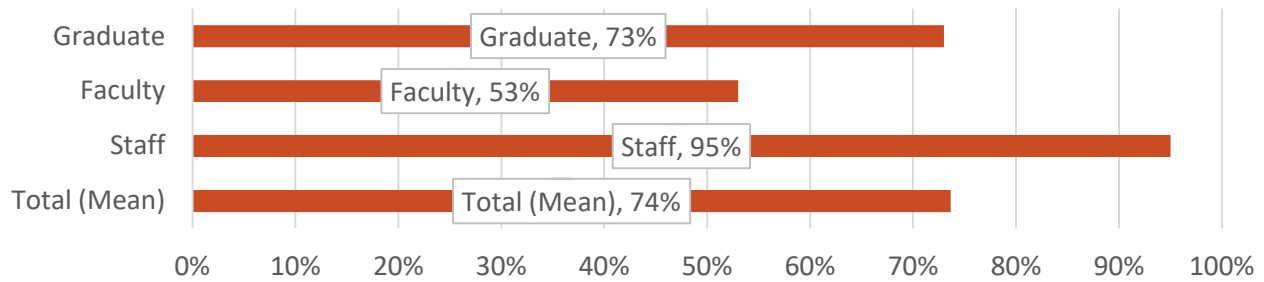
I feel comfortable dissenting when I disagree with the majority opinion

- Graduate, 50%
- Faculty, 53%
- Staff, 76%
- Total (Mean), 60%

I feel like my opinions are being heard and considered

- Graduate, 66%
- Faculty, 50%
- Staff, 76%
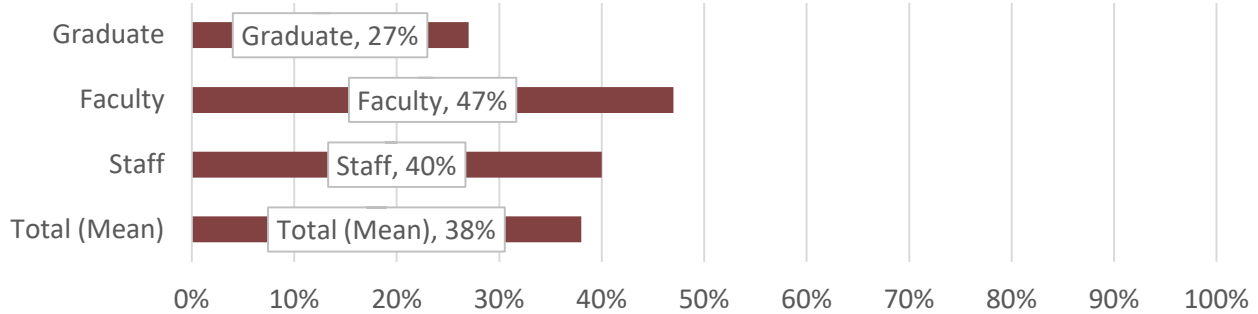- Total (Mean), 64%
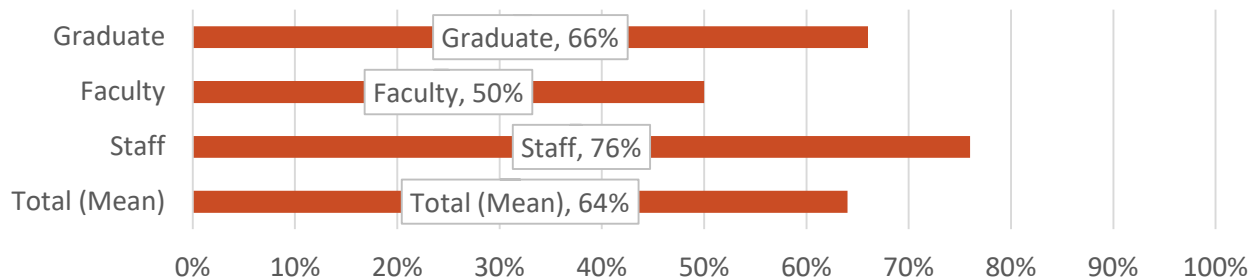
VIII. Workplace Incivility

Figure 10: Percentage of those who have experienced an incident of workplace incivility

Put you down or were condescending
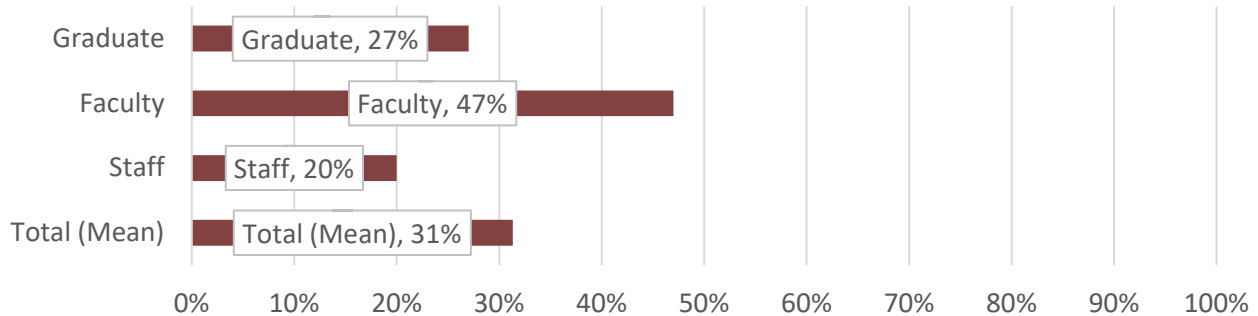

Graduate	Graduate, 73%
Faculty	Faculty, 76%
Staff	Staff, 80%
Total (Mean)	Total (Mean), 76%
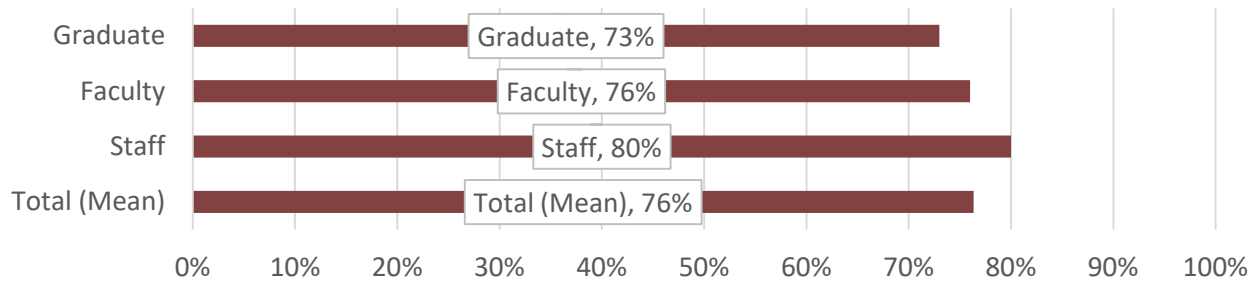
Addressed you in unprofessional terms

Graduate	Graduate, 27%
Faculty	Faculty, 47%
Staff	Staff, 40%
Total (Mean)	Total (Mean), 38%

Bullied or harassed you

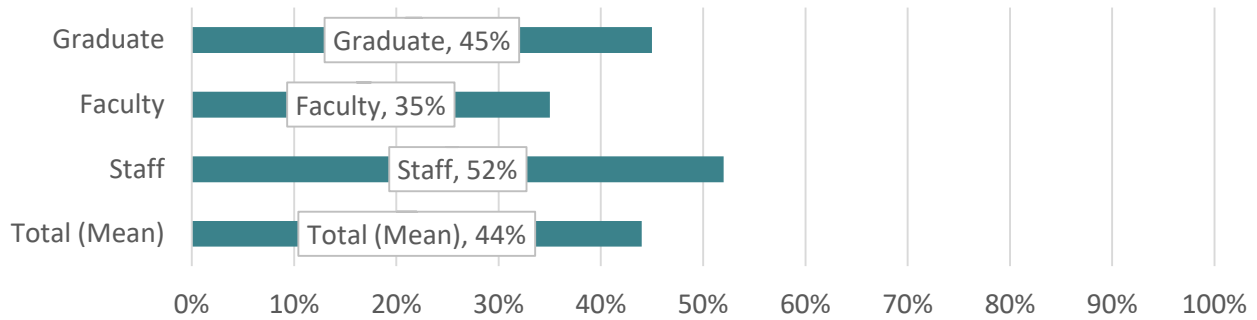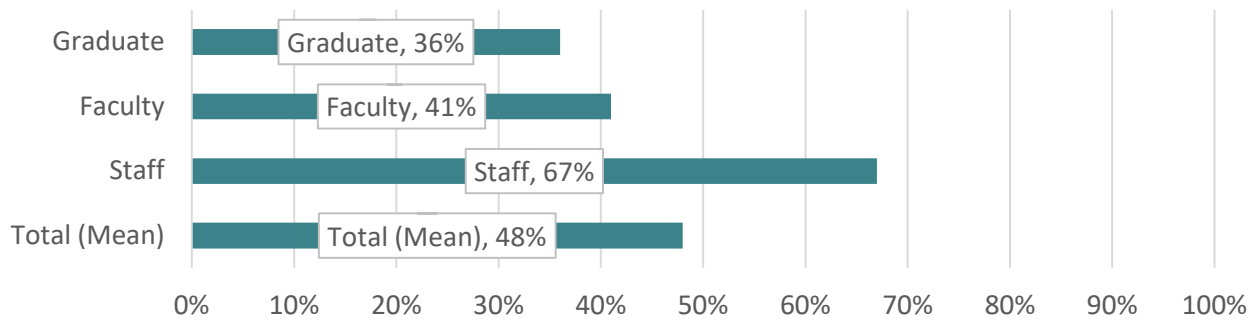|	
Graduate	Graduate, 27%
Faculty	Faculty, 47%
Staff	Staff, 20%
Total (Mean)	Total (Mean), 31%

IX. Accountability Wrongdoing

Figure 11: Process & Procedures to correct wrongdoing

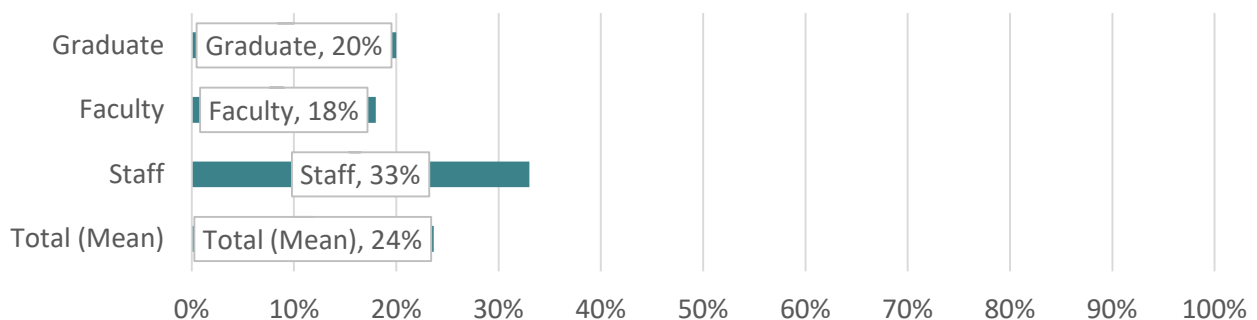There is a willingness to correct discourteous or offensive behavior

Graduate	Graduate, 45%
Faculty	Faculty, 35%
Staff	Staff, 52%
Total (Mean)	Total (Mean), 44%

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Clear process for resolving conflicts

Graduate	Graduate, 36%
Faculty	Faculty, 41%
Staff	Staff, 67%
Total (Mean)	Total (Mean), 48%

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Would feel comfortable coming forward with grievances

Graduate	Graduate, 39%
Faculty	Faculty, 47%
Staff	Staff, 67%
Total (Mean)	Total (Mean), 51%

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
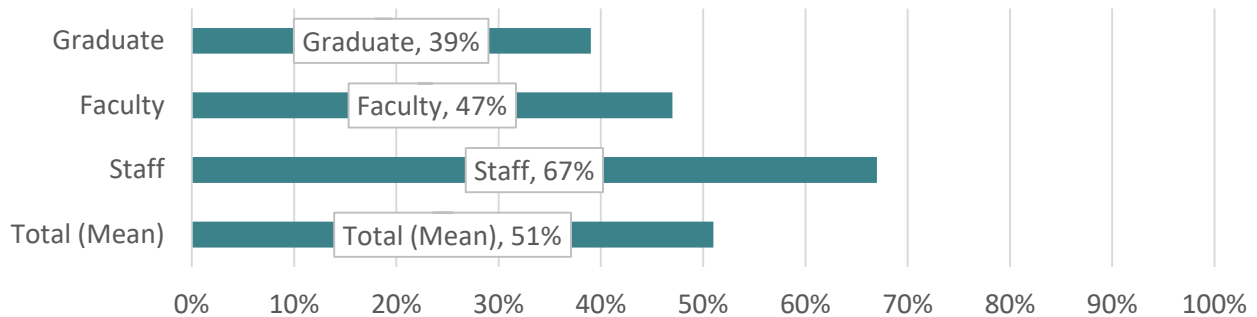
All members of the community are held to the same standards

Graduate	Graduate, 20%
Faculty	Faculty, 18%
Staff	Staff, 33%
Total (Mean)	Total (Mean), 24%

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

X. Supervisor/PI/Advisor support

Figure 12: Staff ratings of supervisor support

Category	Percentage
Makes me feel appreciated	71%
Provides opportunities to expand and grow my skill set	71%
Values my work and contributions	81%
Total (Mean)	74%
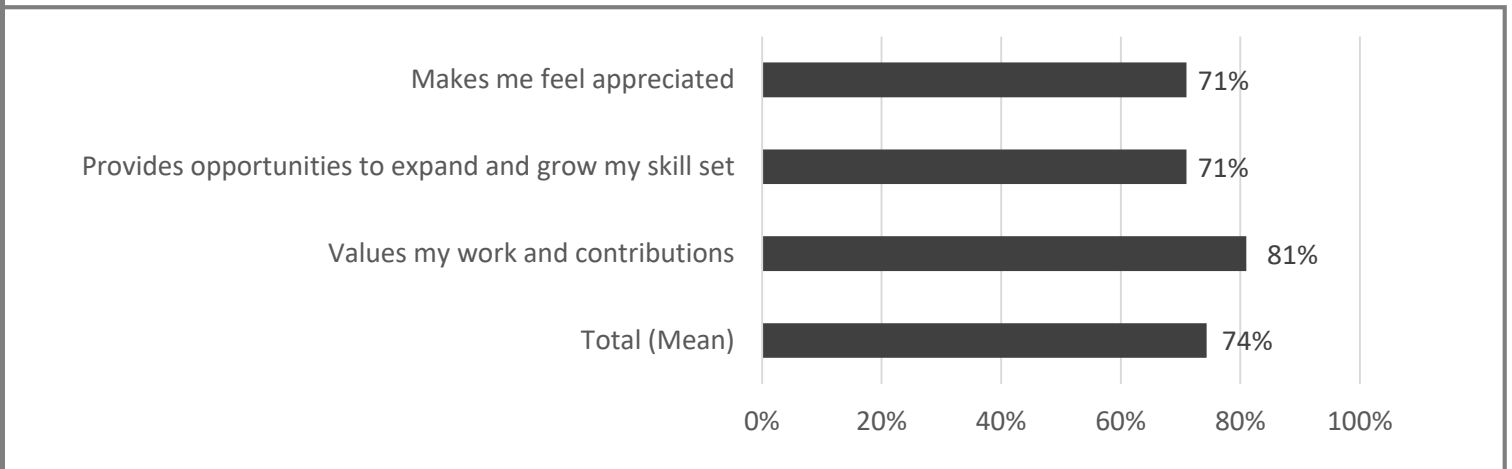
Figure 14: Graduate student ratings of advisor support

Category	Percentage
Values my ideas and contributions	91%
Considers my career goals and aspirations	86%
Is generally available	84%
Cares about my academic success	93%
Total (Mean)	93%
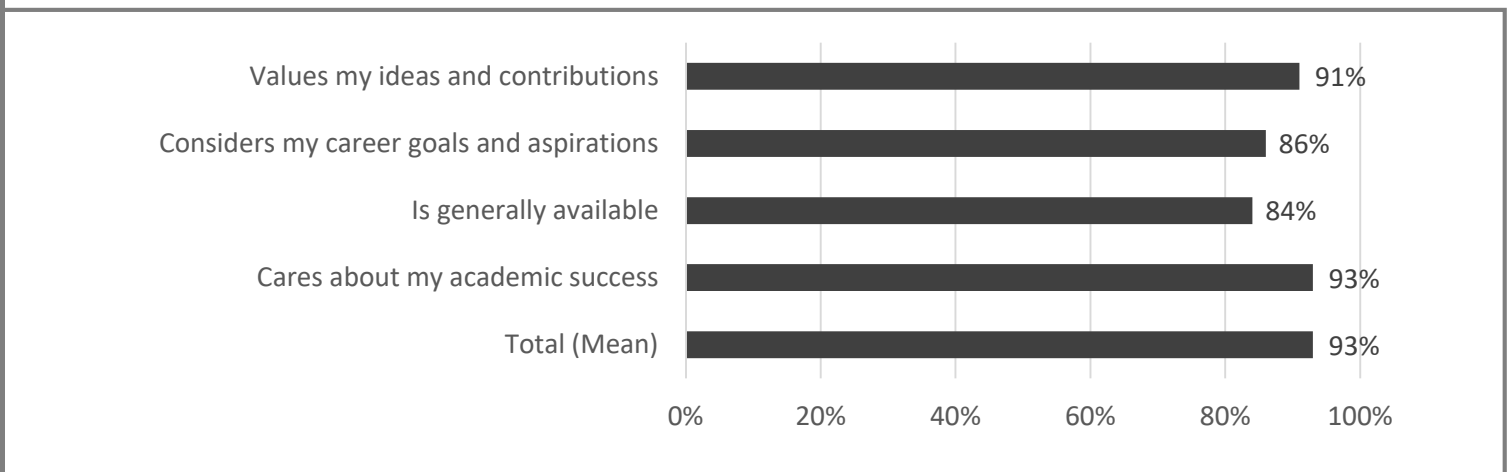
Open-Ended Comments

Survey participants were asked to respond to 2 open-ended items:

- This survey has asked you to reflect upon a large number of issues related to the climate and your experiences in this climate, using a multiple-choice format. If you would like to elaborate upon any of your survey responses and/or further describe your experiences, we encourage you to do so in the space provided below.

- Please provide suggestions about ways the climate could be improved in your department.

Data Analysis

Analyses were conducted only for faculty, graduate students and staff members; the number of responses for undergraduates and postdocs was too low to analyze independently. All responses were downloaded from Qualtrics into a Word document, which in turn was downloaded to NVivo 12, a coding and qualitative data management program. The analysis entailed a line-by-line analytic reading of the open-ended comments to classify the ways in which participants addressed the survey questions. A key limitation is that responses were obtained from only a small portion of the survey participants and therefore open-ended comments may not be generalizable. The comments should be interpreted as representative only of the views of the 9 faculty, 17 graduate students, and 10 staff members who provided them. However, attempts were made to interpret results in light of the Likert-type items which had larger response rates. We use the comments to provide context for interpretation of Likert responses. Key takeaways from the open-ended comments are presented in the bullet points below.

- There are pockets of incivility (as reported by faculty, graduate students and staff members) within the department, resulting from a few negative group members and cliques (the bad apple effect) which can create a deleterious effect on morale.

- For the most part when cases of incivility do occur, participants (faculty, graduate students and staff members) note that this is enabled and/or difficult to resolve, due to a partial system of checks and balances that fails to hold those in the academic power structure accountable. However, it is important to note that all groups (graduate students , faculty, and staff) describe both overt and covert (in the form of cliques, gossiping and social exclusion) incidences of relational aggression within their own peer groups.

- In a few cases, acts of incivility were believed to be related to identity presenting as racism, sexism, heterosexism, ableism, or political leanings. As community members noted, this has left some members of the department feeling unwelcome and/or undervalued.

- Graduate students mentioned the need for trainings on mentorship and advising and for clearer channels for providing feedback about problematic advising relationships, especially when such relationships show a recurrent pattern.

- Staff expressed the desire for more effective communication (i.e., that is more frequent, transparent, and emphatic) from leadership in guiding their work and lifting morale, especially during this time of disruption and uncertainty. They describe the need for communication that is two-way (as opposed to top down). This will create a sense of trust — and inspire staff support for the department's efforts to manage change now and moving forward.