

WVU Department of Physics and Astronomy Department

Climate Survey Report

Prepared by the Diversity, Equity, and Inclusivity Committee

Spring 2019

1. Overview

The (inaugural) 2019 WVU Department of Physics and Astronomy climate survey was administered online to faculty, staff, postdocs, graduate students, and undergraduate students from February 14-28, 2019. Survey responses were obtained anonymously and analyzed in aggregate. This document presents the results and a brief analysis.

As this is the first year of the survey, it is important to point out that the purpose of the survey is a longitudinal assessment of departmental efforts on diversity, equity, and inclusion. Given that data of this nature at the department level is rare, caution must be used in interpreting the results from any given question. The results will be more meaningful when compared to similar results from future years of the survey. We view this as an opportunity to identify ways to improve.

2. Results of the Survey

Here we describe participation rates and general results.

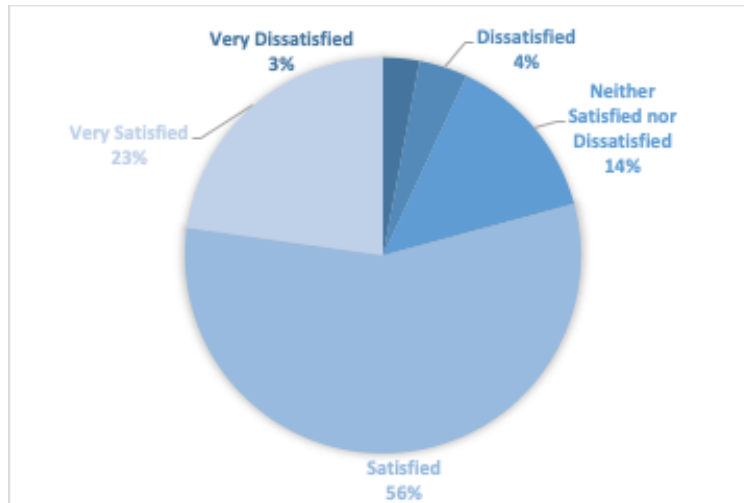
2a. Participation

A total of 101 people responded to the climate survey. The number of respondents by undergraduate students, graduate students, postdocs, faculty, and staff in the department is 18, 48, 4, 21, and 8, respectively (with two unreported). The total number of each group is approximately 75, 71, 19, 34, and 9, respectively. Corresponding response rates for the different groups was approximately 24%, 68%, 21%, 62%, and 89%. The total response rate was approximately $101/208 = 49\%$. [Typical internal surveys have a 30-40% response rate¹.] The response rate from graduate students, postdocs, faculty, and staff was quite high.

2b. Satisfaction with Overall Climate

Question 1 was “How satisfied are you with the overall climate in the WVU Department of Physics and Astronomy that you have experienced in the past 12 months?” Possible responses are “Very Dissatisfied,” “Dissatisfied,” “Neither Satisfied nor Dissatisfied,” “Satisfied,” or “Very Satisfied.” Giving these responses numerical scores from 1 to 5, respectively, the average response was 3.9 out of 5. The overall percentage of each response is given in the pie chart on the next page. Overall, 79% of respondents responded either “Very Satisfied” or “Satisfied,” and represented respondents from all titles. Conversely, 7% of respondents responded “Very Dissatisfied” or “Dissatisfied,” representing responses from the titles of postdoc, faculty, and graduate student.

¹<https://www.surveygizmo.com/resources/blog/survey-response-rates/>

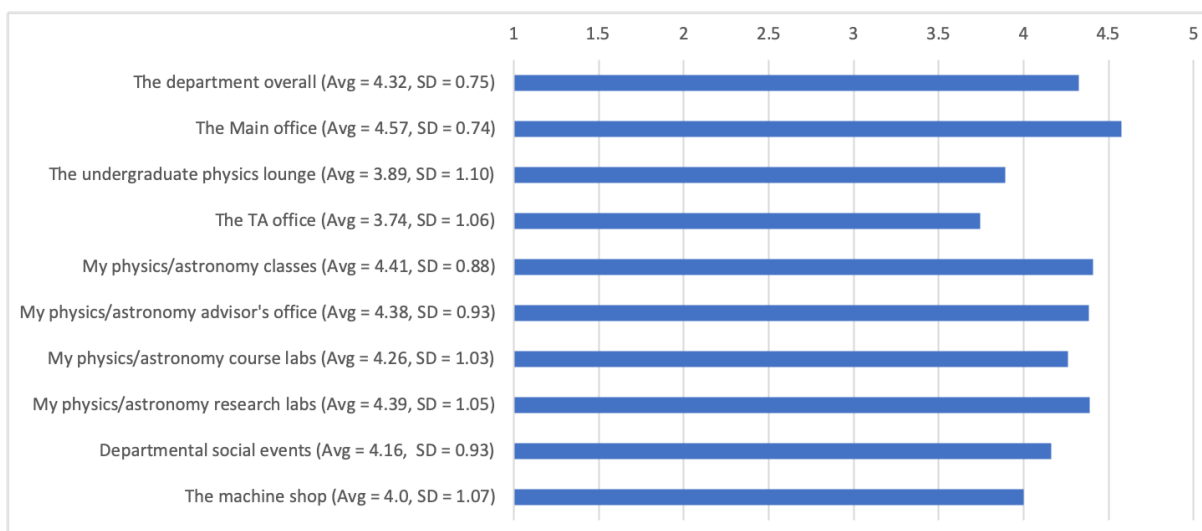


The results can further be broken down demographically. It is important to note that underrepresented groups have a very low number of respondents (potentially just a few people), so one should use caution when interpreting the results for these groups. Undergraduate students, graduate students, postdocs, faculty, and staff had averages of 4.3, 3.9, 3.3, 3.7, and 4.1. Thus, average levels of satisfaction are relatively similar among all five groups, with Undergraduate students and staff having the highest level of satisfaction with the overall department climate. By reported gender, male and female each had averages of 4.0, with small number statistics for those preferring not to say or non-binary. The results suggest that male and female members of the department have equal average overall satisfaction with the department climate. The averages by race and ethnicity were 3.0, 4.0, 3.0, 3.6, 4.1, and 4.0 for “Hispanic/Latinx /Native American/Alaskan Native/Pacific Islander,” “Middle Eastern/North African,” “African American/Black,” “Asian American/Asian,” “White,” and “Multi-racial.” The results suggest that “White,” “Middle Eastern/North African,” and “Multi-racial” members of the department reported being the most satisfied. In contrast, “Asian American/Asian” members are moderately satisfied, and “Hispanic/Latinx/Native American/Alaskan Native/Pacific Islander” and “African American/Black” members have the lowest satisfaction scores. In summary, aggregate satisfaction levels are reasonably high, but there are individuals and groups for whom satisfaction levels are lower. This is an important area for growth and improvement in the department climate.

2c. Feeling of Inclusion By Location

Question 2 was “In the past 12 months, I have felt accepted and/or included in...”, followed by the following options: 1 = “Strongly Disagree,” 2 = “Disagree,” 3 = “Neutral,” 4 = “Agree,” 5 = “Strongly Agree,” or “Not Applicable.” Average results with standard deviations for ten different department locations is given in the chart on the next page.

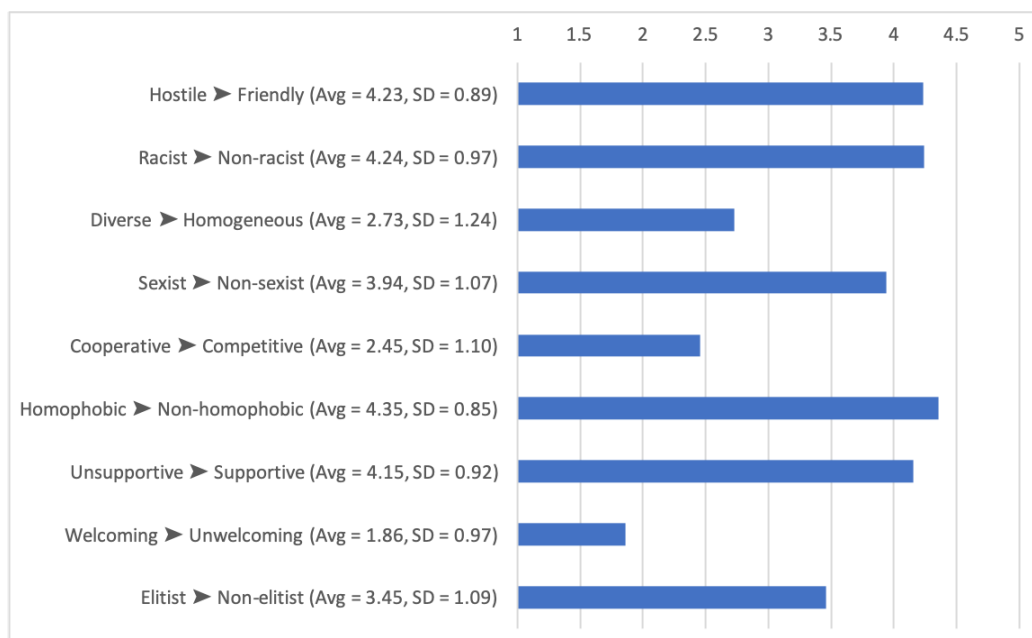
The average response to “The department overall” was approximately 4.3 out of 5, with 84 responses of “Strongly Agree” or “Agree” and 3 responses of “Strongly Disagree” or “Disagree.” (The “Strongly Disagree” respondent gave favorable responses to other questions, so it is likely it was selected in error.)



Of the other locations, all had averages of at least 3.7 out of 5, which are positive scores. The “main office” ranked as the most accepting/inclusive space in the department, with a score over 4.5. The only locations at or below 4 were “The TA office,” “The undergraduate physics lounge,” and “The machine shop,” though they still had overall positive scores. Thus, there is an overall positive sense of inclusion in the department as a whole and in locations in White Hall.

2d. Department Descriptors

Question 3 was “Based on your direct experiences in the last 12 months, select one option on the scale that best represents how you would rate the climate in the WVU Department of Physics and Astronomy.” Responses could range from 1 to 5, with 1 corresponding to the descriptor on the left and 5 corresponding to the descriptor on the right.



Average results for ten different descriptor ranges is given in the graph on the previous page. Averages for the questions were, respectively, 4.2, 4.2, 2.7, 3.9, 2.5, 4.35, 4.2, 1.9, and 3.5.

We further break down the questions on homophobia and sexism. The average score on the “Homophobic -> Non-homophobic” question among those identifying as LGBTQ+ was 4.0 (compared to 4.35 for the whole department). The average score on the “Sexist -> Non-sexist” for respondents identifying as female was 3.68 (compared to 4.0 for the whole department). In the context of the small number statistics, both suggest that these groups are not viewing the department significantly differently than the whole. In summary, the results were largely positive.

2e. Occurrences of Unfair Treatment

Question 5 was “Over the past 12 months, how often have YOU experienced being unfairly treated in the WVU Department of Physics and Astronomy?” Possible responses were “Never”, “1-2 times”, and “3 or more times”.

Question 5 was “Over the past 12 months, how often have YOU experienced being unfairly treated in the WVU Department of Physics and Astronomy?” Possible responses were “Never,” “1-2 times,” and “3 or more times.” The results were that 75 reported “Never,” 20 reported “1-2 times,” and 6 reported “3 or more times,” for a total of 26% reporting at least one. When broken down demographically, 9 of 19 (47%) identifying as female reported “1-2 times” or “3 or more times,” as did 8 of 28 (29%) of respondents not identifying as “White.” It is challenging to assess the results in comparison to other departments or schools because there are not many data sets to compare to. In a recent survey² of 471 undergraduate women that attended the American Physical Society's Conference for Undergraduate Women in Physics (CUWiP) 2017 meeting, it was reported that 73% of undergraduates experienced gender harassment at their home institutions over the previous two year period. It is difficult to compare our results with the APS study because the APS question was about “gender harassment” while our question was about “unfair treatment” (which may include instances of “gender harassment”), it suggests the department performed better than in this CUWiP study.

3. Summary

In summary, the first annual WVU Department of Physics and Astronomy survey had a good participation rate. Assessing the results on an absolute scale is difficult, so results from future years will be useful to assess the results and their trends. Numerous results seem quite good, and there are a number of areas for improvement.

² https://www.eurekalert.org/pub_releases/2019-04/aps-wcp041819.php