

# Physics Department Student Climate Survey Report

Institutional Analysis, September 2017

## Executive summary

In Spring 2017, the Physics Department ran a survey of students to “gauge the climate of the Department [...] and help us set priorities for improving that climate going forward”. This report, produced by Institutional Analysis, presents analysis of the survey responses.

There were 84 respondents to the survey, of which 33 self-identified as undergraduate students and 51 as graduate (PhD) students (all of the demographic properties of respondents are based on self-identification in the survey responses). Based on Registrar’s Office counts of enrolled students in that quarter, this represents a 19% response rate among undergraduates and 31% among graduates. Female students were more likely to respond than males (34% vs. 24% overall) with this effect being somewhat more pronounced among undergraduates. The response rate for under-represented minority (URM) students (defined as Black, Hispanic, Native American or Pacific Islander) was 12 out of 22, or 55%, against 26% among non-URM students.

In order to analyze differences in subpopulation responses to individual questions, we defined two groups: a “minority group” consisting of respondents who identified with at least one minority category (see below) and a “non-minority group” of all other respondents. 54% of respondents fell into the minority group. Several clear differences emerged between the minority and non-minority groups, of which some were observed among both undergraduates and graduate students while others were observed in only one group.

The first set of climate-related questions asked respondents whether they viewed a particular aspect of their student experience as important, and then how satisfied they were with that aspect. Here, among other things, both undergraduate and graduate minority students were more likely to think it important that “differences are valued”, and were less satisfied with this aspect. Minority and non-minority students placed a lot of importance on being “valued and included by peers, administrators and faculty”, but minority students were again less satisfied with this aspect. Other differences from these questions are presented below.

The second set of questions asked for agreement or disagreement with a list of statements. Here there were fewer clear differences between the two groups. The results from those questions are again presented below.

Given the relatively small size of the response data set and the amalgamation of multiple minority populations into a single unit of analysis, the results from the survey should be interpreted with caution. Having said that it is clear that there are high-level differences between respondents who fall into minority categories and those who do not.

Additionally, the survey reveals areas of higher and lower satisfaction and agreement across all students.

## Survey details and definitions

In order to analyze the survey, respondents were split into a “minority group” and a “non-minority” group. The minority group was defined as those respondents who self-identified with any of the following demographic categories:

- Not male
- Not heterosexual
- Not white or Asian
- Having some disability

45 out of the 84 respondents (54%) fell into at least one of these categories.

The first set of questions asked respondents to rate an aspect of their experience on a 7-point scale anchored by “1 – Least important” and “7 – Most important”, and then to rate their satisfaction with that aspect from “1 – Least satisfied” to “7 – Most satisfied”. In the charts on this section, we first show the percentage of each group selecting 5, 6 or 7 on the importance scale, and then, *of those respondents*, the percentage selecting 5, 6 or 7 on the satisfaction scale. In other words we only show the satisfaction of those respondents who indicated that the aspect was important.

The importance/satisfaction items were as follows:

- Spirit of cooperation among fellow students
- Clarity of requirements and expectations for degree
- Resources to succeed in my coursework and degree program
- Acknowledgement of my academic progress
- Support for professional development
- Valued and included by my peers, the administration, and faculty
- Ample opportunities to demonstrate my talents
- Differences are valued

The relatively small number of responses means that results should be interpreted with caution, but as a guide to the between-groups difference, for each question we indicate in the chart title the result of a chi-squared test for difference between the percentage of minority group students indicating satisfaction with the aspect and the percentage of non-minority group students indicating satisfaction (specifically, we test whether the split of minority group students between satisfaction and non-satisfaction is significantly different from what we would expect it to be if they followed the non-minority group split).

The second set of questions asked respondents to rate agreement with a series of statements, from “1 – I do not agree at all” to “7 – I agree completely”. For these questions we show the percentage of respondents selecting 5, 6 or 7 on this scale. A similar chi-squared test result is shown to gauge the significance of the difference in responses between the two groups.

The agreement statements were as follows:

- I am well prepared to complete my degree program
- I am optimistic about my post-graduation career prospects

- My advisor is an asset to my academic work
- My advisor is an asset to my professional development
- I am satisfied with my living conditions
- I am confident about my personal financial situation
- I know where to get help on campus if I have a health concern
- I am familiar with counseling and other mental health services on campus
- I have strong social support from fellow students in the department
- I often participate in social activities with my fellow students in the department
- I am able to balance my academic and family life\*
- I am open and comfortable expressing my LGBT identity in the department\*

(\* ) Not analyzed due to low response count/restriction to specific subpopulation.

There was a third set of questions asking whether the department “has been a welcoming environment” for various subpopulations and a fourth asking whether the respondent “felt comfortable discussing the following topics in the department”. Following these questions was the section on demographics.

## Results

The responses to the survey questions on importance/satisfaction and statement agreement are summarized in the charts which conclude this report. Answers to the demographic questions indicate:

- 13% of respondents identify with a sexual orientation other than heterosexual; a smaller percentage identified with a gender other than male or female
- 19% of respondents indicated that they had a disability
- 11% of respondents were married or in a domestic partnership

In the questions about whether the department has been a welcoming environment (a yes/no question), the percentages of respondents indicating “yes” were as follows:

- Race/ethnicity: 79%
- Disability status: 88%
- Gender or gender identity: 69%
- Sexual orientation: 86%

These responses were slightly lower for respondents self-identifying in the corresponding minority group, although the differences were not large. Individually, each observation may not be statistically significant as such, though taken together they suggest that the environment is perceived as less welcoming by minority students.

In the questions about whether respondents felt comfortable discussing the dimensions of diversity listed, the percentages indicating “yes” were as follows:

- Race/ethnicity: 71%
- Disability status: 74%
- Gender or gender identity: 72%

- Sexual orientation: 75%

Here the differences for subpopulations were slightly more visible, with the “yes” percentages among corresponding minority groups again being lower across the board. For both sets of yes/no questions there was little apparent difference between white and Asian respondents on the race/ethnicity items.

## **Charts**

Charts showing response patterns to the first two blocks of questions appear below and conclude the report.

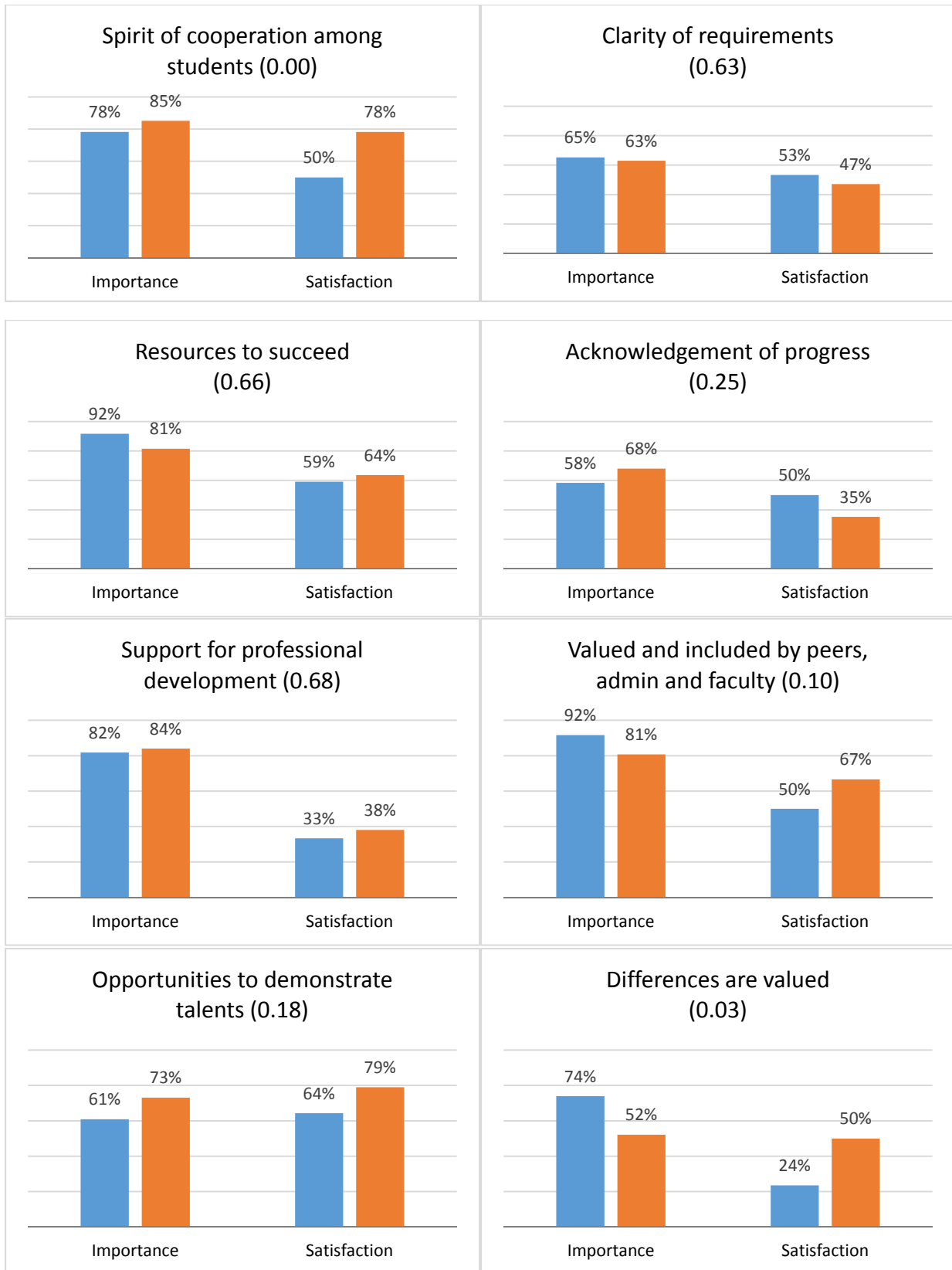
## Undergraduate Students

■ Minority ■ Non-minority

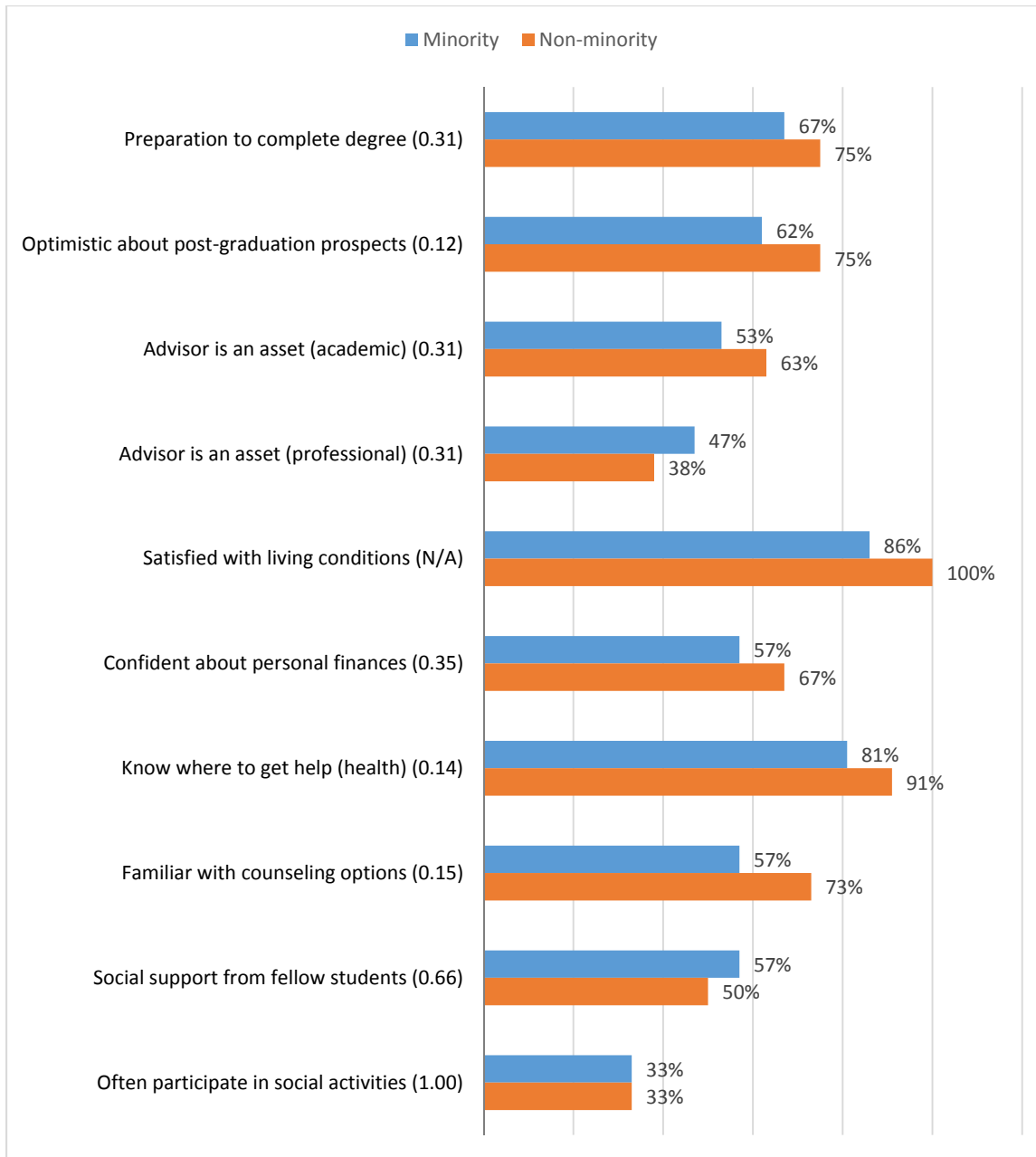


**Graduate Students**

■ Minority ■ Non-minority



## Undergraduate students



## Graduate students

