

# Respondent Representativeness

A Supplement to the Penn State Community Survey Report 2020

## Comparison of Survey Respondents to Survey Population

Survey research is based on the idea that the experiences, beliefs, and attitudes of a sample or subset of a population can be extrapolated to the entire population. For this to hold true, there are several conditions which must be in place. One of these conditions is that the sample is representative of the population in terms of attributes that are likely to influence the experiences, beliefs, and attitudes of interest. In other words, if 50 percent of the population identify as women, and we think gender identity may influence responses, then 50 percent of the sample should be women. However, in the case of a voluntary survey, it is impossible to guarantee that the sample of respondents will be representative because we do not control who responds. This supplement to the 2020 Penn State Community Survey Report examines the assumption of representativeness by comparing the distribution of the survey population to that of the survey respondents on key attributes believed to influence responses.

In the tables below, population data are based on Pennsylvania State University Human Resources records and survey respondent data, with the exception of race/ethnicity data which is based on respondents' self-reported information from the survey. Because race/ethnicity categories in the survey are quite different from those in Penn State's data, race/ethnicity data for both the population and respondents are based on IPEDS reporting categories from Human Resources data. This approach is consistent with the 2020 Community Survey Report which prioritized the use of self-reported data over University data whenever possible. The approach employs the hypothesis that, when in conflict, respondents' self-reported roles (work, gender, etc.) were more salient in responses than official roles, as well as because respondents were offered additional questions based on the role they had identified.

In addition to demographic data available for the population, distributions are also provided for each budgetary planning unit. These units include colleges, campuses, and administrative support units. Academic units (colleges and campuses) include both employees and students. As a result, some individual survey responses were assigned to more than one unit. For example, student respondents might be assigned to a campus *and* a college (e.g., Berks and the College of Agricultural Sciences). Similarly, an employee respondent might belong to a central unit but work at a non-University Park campus (e.g., Development and Alumni Relations and Hershey). Members of the population were assigned to budgetary planning units based on a primary classification –either as a student or employee based on Penn State's records. Survey respondents were assigned to units based on their survey self-reported primary role as a student or employee for the reasons described above.

In terms of primary role in the Penn State community, the proportion of survey respondents who are executives/administrators and faculty/postdocs is greater than in the population and the proportions of staff exempt and students are less than that in the population (Table 1). As is often the case with surveys, the proportion of women respondents (61 percent) is greater than the proportion in the population (47 percent; Table 3). White people are disproportionately represented in the survey responses (68 percent compared to 63 percent in the population) and all other racial/ethnic groups are underrepresented. Findings by budgetary planning unit vary, but generally the proportion of survey respondents resembles that in the population.

*Table 1. Primary role*

<b>Role</b>	<b>Population</b>	<b>Survey Respondents</b>
Executive or administrator	0.3%	1.6%
Faculty or postdoc	6.4%	11.8%
Staff, exempt	6.4%	16.7%
Staff, nonexempt	9.5%	9.6%
Staff, technical	2.3%	1.9%
Student, graduate	13.6%	10.3%
Student, undergraduate	61.4%	48.0%

*Table 2. Collapsed primary role*

<b>Role</b>	<b>Population</b>	<b>Survey Respondents</b>
Executive or administrator	0.3%	1.6%
Faculty or postdoc	6.4%	11.8%
Staff	18.2%	28.2%
Student, graduate	13.6%	10.3%
Student, undergraduate	61.4%	48.0%

*Table 3. Gender*

<b>Gender</b>	<b>Population</b>	<b>Survey Respondents</b>
Woman	47.1%	60.8%
Man	52.7%	37.9%
Undeclared	0.1%	--
Nonbinary, gender nonconforming, genderqueer	--	0.9%
Other	--	0.4%

Note: Woman, man, and undeclared are the only gender options available in Penn State data.

Table 4. IPEDS Race and ethnicity

<b>Gender</b>	<b>Population</b>	<b>Survey Respondents</b>
American Indian/Alaskan Native	0.2%	0.1%
Asian	5.8%	5.1%
Black/African American	4.8%	4.1%
Hispanic/Latinx	6.2%	5.4%
International	8.6%	5.4%
Native Hawaiian/Pacific Islander	0.1%	--
Two or more races	2.6%	2.2%
Unknown	8.5%	10.0%
Missing	0.0%	--
White	63.1%	67.5%

Table 5. Budgetary planning units

<b>Budgetary Planning Unit</b>	<b>Population</b>	<b>Survey Respondents</b>
University Park (presented for comparison, not a budgetary planning unit)	53.7%	37.4%
<b>UP Colleges</b>		
Agricultural Sciences	4.1%	5.1%
Arts and Architecture	1.7%	2.0%
Business	6.3%	4.1%
Communications	2.7%	2.2%
Earth and Mineral Sciences	2.7%	2.4%
Education	3.3%	3.6%
Engineering	10.5%	8.2%
Health and Human Development	5.2%	6.3%
Information Sciences and Technology	3.4%	2.4%
International Affairs, School of	0.1%	0.1%
Law, Penn State	0.5%	0.6%
Liberal Arts	9.4%	9.8%
Nursing	2.0%	1.7%
Science	5.2%	5.5%

Table 6 continued

Budgetary Planning Unit	Population	Survey Respondents
<b>Commonwealth Campuses</b>		
Abington	3.8%	3.1%
Altoona	3.1%	2.5%
Beaver	0.6%	0.6%
Behrend	4.9%	3.8%
Berks	2.6%	2.1%
Brandywine	1.4%	1.5%
DuBois	0.5%	0.5%
Fayette	0.6%	0.8%
Greater Allegheny	0.5%	0.7%
Harrisburg	6.2%	5.2%
Hazleton	0.7%	0.8%
Lehigh Valley	1.0%	0.9%
Mont Alto	0.8%	0.8%
New Kensington	0.7%	0.7%
Schuylkill	0.6%	0.7%
Scranton	1.0%	1.0%
Shenango	0.4%	0.5%
Wilkes-Barre	0.4%	0.4%
York	0.9%	0.9%
<b>Special Mission Units</b>		
Dickinson Law, Carlisle	0.3%	0.4%
College of Medicine, Hershey	2.0%	3.0%
School of Graduate and Professional Studies, Great Valley	1.3%	0.8%

Table 5 continued.

Budgetary Planning Unit	Population	Survey Respondents
<b>Administrative Units</b>		
Affirmative Action	<0.1%	--
Budget Office	<0.1%	--
Community and Government Relations	<0.1%	--
Development and Alumni Relations	0.4%	1.6%
Educational Equity	0.1%	0.3%
Faculty Affairs	0.6%	--
Finance and Business	5.4%	4.6%
Global Programs	0.1%	0.3%
Graduate School	<0.1%	0.2%
Human Resources	0.3%	0.7%
Information Security	0.6%	--
Information Technology	0.6%	0.1%
Intercollegiate Athletics	0.6%	0.4%
Outreach	0.2%	
Research	1.6%	2.2%
Schreyer Honors College	<0.1%	--
Strategic Communications	<0.1%	0.2%
Student Affairs	0.6%	1.3%
Undergraduate Education	0.4%	0.9%
University Libraries	0.5%	1.1%
World Campus	15.1%	7.5%

Note: Units without entries did not have enough survey respondents to meet the survey threshold of 20 cases for reporting.

**This publication is available in alternative media on request.**

The University is committed to equal access to programs, facilities, admission, and employment for all persons. It is the policy of the University to maintain an environment free of harassment and free of discrimination against any person because of age, race, color, ancestry, national origin, religion, creed, service in the uniformed services (as defined in state and federal law), veteran status, sex, sexual orientation, marital or family status, pregnancy, pregnancy-related conditions, physical or mental disability, gender, perceived gender, gender identity, genetic information or political ideas. Discriminatory conduct and harassment, as well as sexual misconduct and relationship violence, violates the dignity of individuals, impedes the realization of the University's educational mission, and will not be tolerated. Direct all inquiries regarding the nondiscrimination policy to the Affirmative Action Office, The Pennsylvania State University, 328 Boucke Building, University Park, PA 16802-5901, Email: aao@psu.edu, Tel 814-863-0471. U.Ed. OPR20-04.