

Involvement, Engagement and Belonging: Low-Income and First Generation Students' Experiences

Center for the Study of Student Life

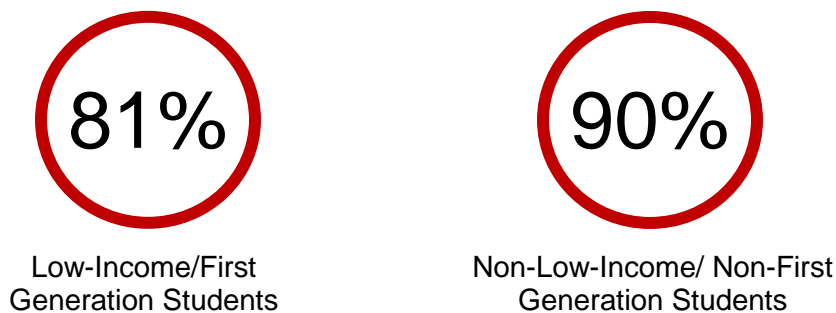
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EXECUTIVE SUMMARY

This report explores the involvement, engagement and sense of belonging on campus of low-income and first generation undergraduate students at The Ohio State University compared to their peers. Data for this report are from the 2018 Student Life Survey, an annual survey administered by the Center for the Study of Student Life. Four thousand undergraduate students on the Columbus campus were surveyed during January 2018; 18.2% responded ($N = 729$).

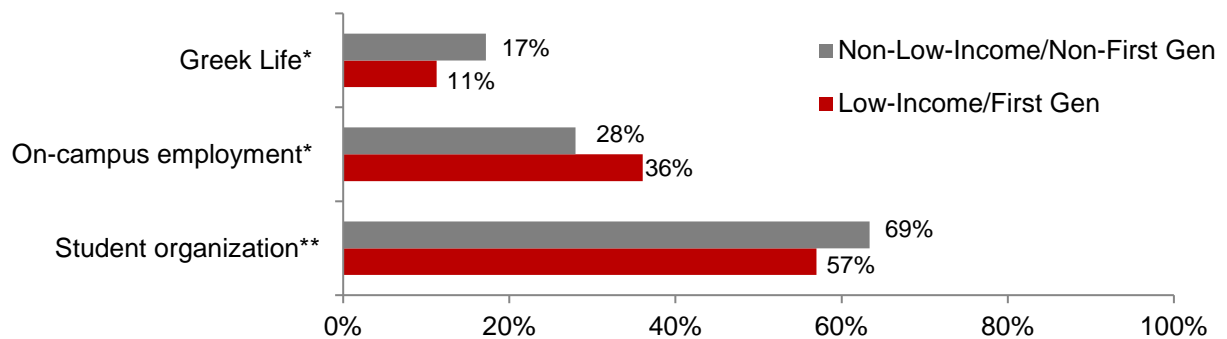
Students are categorized as low-income or first generation if they a) self-reported that their parent(s)/guardian(s) annual income was \$59,999 a year or less, b) self-reported that they were offered a federal Pell Grant or c) are coded as first generation according to Ohio State's Student Information System. In total, 39% of the sample are low-income or first generation students; 53% are not low-income or first generation and 8% were missing data on these variables and excluded from the analysis.

PERCENTAGE INVOLVED ON CAMPUS



- Low-income and first generation students are statistically significantly less likely to be involved on campus than their peers; their peers are *two times* more likely to be involved.

Percentage Participating in Campus Activities



- When asked why students got involved on campus, low-income and first generation students were significantly more likely to report getting involved for financial reasons (e.g. access to scholarships/funding opportunities) and less likely to get involved because a friend encouraged them or a parent/guardian encouraged them to get involved.

* $p < .05$, ** $p < .01$, *** $p < .001$

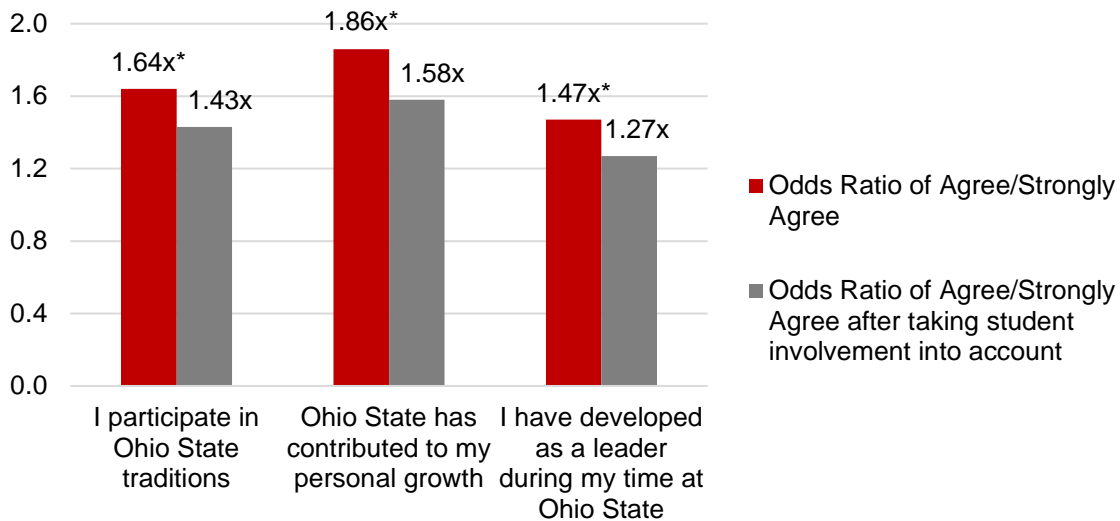
The following chart and highlights depict that there are statistically significant differences between low-income/first generation students and their peers. Compared to low income/first generation students, these students' peers are:

- 1.64 times more likely to report participating in Ohio State traditions
- 1.86 times more likely to report that Ohio State has contributed to their personal growth
- 1.47 times more likely to report that they have developed as a leader during their time at Ohio State

However, once taking into account whether students are involved on campus:

- There are not statistically significant differences in low-income/first generation student responses compared to their peers.

Odds of Non-Low-Income/Non-First Generation Students Agreeing with Statements compared to Low-Income/First Generation Students¹



¹Scarlet bars represent results of logistic regression with no controls; Gray bars represent results from logistic regression model after controlling for campus involvement.

INTRODUCTION

This report explores the involvement, engagement and sense of belonging on campus of low-income and first generation undergraduate students at The Ohio State University compared to their peers. Involvement in on-campus activities during college plays a critical role in student success, from bolstering a student's sense of belonging to increasing retention and academic success (Tinto, 2006-2007; Morrow & Ackermann, 2012). Involvement fosters experiential learning during college, which is linked to getting a good job after graduation, workplace engagement, overall well-being and alumni attachment (Gallup, 2014). Many research studies find that low-income and first generation college students are less likely to be involved on campus, have lower satisfaction with the campus environment and have a lower sense of belonging, all of which are associated with lower retention and graduation rates (for examples of such research, see Kim & Sax, 2009; Pike & Kuh, 2016; Soria & Stebleton, 2012). Therefore, it is important to understand low-income and first generation college students' involvement on campus as well as their perception of their engagement and sense of belonging.

METHODS

Data for this report come from the 2018 Student Life Survey. The Student Life Survey is administered annually by the Center for the Study of Student Life to examine trends in student engagement and sense of belonging, as well as to improve institutional practices and address current issues affecting students at Ohio State.

The 2018 Student Life Survey was administered to a random sample of 4,000 undergraduate students and 3,000 graduate and professional students on the Columbus campus during spring semester. A total of 1,357 students responded to the survey, for an overall response rate of 19.4%. The response rate was 18.3% among undergraduate students and 20.8% among graduate and professional students. See Appendix A for a summary of respondents' demographic and academic characteristics split by income level/first generation status.

LOW-INCOME AND FIRST GENERATION STUDENTS

This report examines only undergraduate students' experiences ($N = 729$) with a focus on low-income and first generation students. To understand the experiences of low-income and first generation students more broadly, three variables were used to determine whether a student is low-income or a first generation student.

Parental Income. For a student to be considered low-income in this report, the student had to self-report that their parent(s) or guardian(s) total annual income was \$59,999 a year or less. Of the 729 undergraduates in the sample, 102 fall into this category (14%), 284 report a family income of \$60,000 a year or higher (39%) and 343 (47%) did not respond or did not know their family income.

Pell Grant Eligibility. In addition to parental income status and due in part to the large amount of missing data in the parental income variable, students were also identified as low-income if they reported they are Pell Grant eligible. "Pell Grant eligible" refers to students who self-identified that they were offered or were eligible for a federal Pell Grant. Federal Pell Grants are available to students with financial need; it is estimated that 90% of Pell recipients have family incomes of less than \$50,000 a year (Davey, 2017). Of the 729 undergraduates in the survey, 56 (7.7%) did not respond to this question, 54 (7.4%) said "I don't know," 181 (24.8%) identified as Pell Grant eligible and 438 (60.1%) did not identify as Pell Grant eligible. According to data from the Integrated Post-Secondary Data System (IPEDS) from the 2015-2016 academic year, 20% of Ohio State undergraduate students received Pell Grants, meaning Pell Grant eligible students

are slightly overrepresented in the Student Life Survey data. It should be noted that the IPEDS statistic excludes students who were eligible for Pell Grants who did not take them.

First Generation. First generation student status was derived from Ohio State’s Student Information System. This system identifies students who did not have a parent or guardian complete a Bachelor’s degree. In the sample, 157 students (21.5%) were first generation students which is a similar proportion to the Ohio State student undergraduate population on the Columbus campus during Autumn 2017 (21.1%). It should be noted that first generation status is not necessarily an indicator of being low-income.

From these three variables (parental income, Pell Grant eligible status, first generation), a composite variable was created if a student met any of the three criteria of being a low-income or a first generation student. Analyses were conducted using this composite variable and students are referred to as low-income/first generation if they met any of the above criteria. Thirty-nine percent of students in the sample are either low-income, Pell Grant eligible or first generation college students. There are important overlaps among these groups as well: 58% of first generation students are Pell-eligible; 52% of low-income students are also first generation students; 74.5% of Pell Grant eligible students are low-income according to their survey responses.

	Low-Income		Pell Grant Eligible		First Generation ¹		Low-Income / Pell / First Generation ²	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Yes	102	14.0%	181	24.8%	157	21.5%	287	39.4%
No	284	39.0%	438	60.1%	572	78.5%	386	53.0%
Don’t know / Prefer not to answer	222	30.5%	54	7.4%	n/a	n/a	n/a	n/a
Missing data	121	16.6%	56	7.7%	n/a	n/a	56	7.7%

¹Data are from Student Information System.

²Defined as missing data if student is not first generation but has missing data on income and Pell-eligibility status.

CAMPUS INVOLVEMENT

Campus involvement is a key variable analyzed in this report. Campus involvement is measured as participation in one or more of the following activities: a student organization, Student Life sponsored program, social fraternity or sorority, community service or service-learning, undergraduate research, intramural sports, on-campus student employment or a learning community.

ANALYSIS

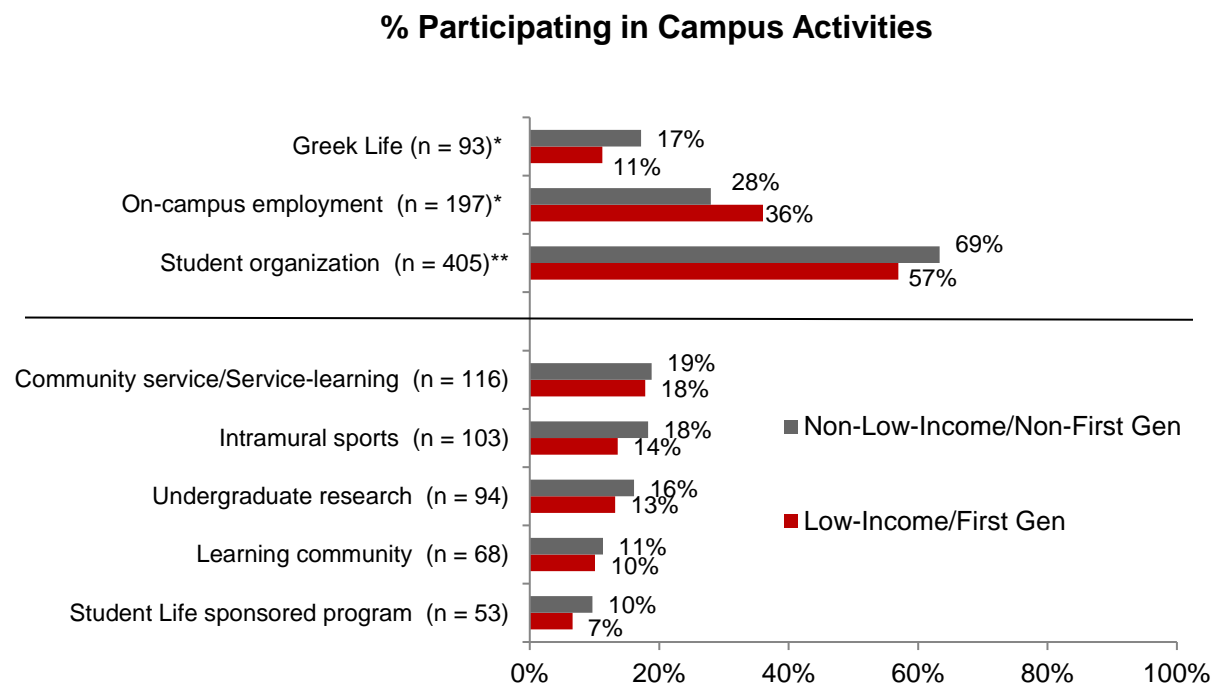
To examine differences in low-income/first generation students’ involvement, engagement and belonging compared with that of their peers, descriptive statistics are presented for student responses and chi-square tests of independence, *t*-tests and logistic regression are used to determine if there are statistically significant relationships. Analyses are restricted to students with information available on their low-income/first generation status and campus involvement status (*n* = 630).

FINDINGS

CAMPUS INVOLVEMENT

Among all undergraduate students, 82% report being involved in at least one of eight ways on campus. The following chart summarizes the percentage of students who report being involved in each activity by low-income/first generation status. On average, low-income/first generation students are involved in significantly fewer activities on campus than their peers; low-income/first generation students are involved in 1.6 activities compared to 1.8 activities of their peers ($p < .05$). Eighty-one percent of low-income/first generation students are involved in at least one campus activity compared to 90% of their peers ($\chi^2 = 10.6$; $p < .001$).

The following chart presents students' involvement in each of the eight campus activities that are considered involvement on campus. Activities where there are statistically significant differences between low-income/first generation students and their peers appear at the top of the chart (Greek Life, on-campus employment, student organizations).



2.0x

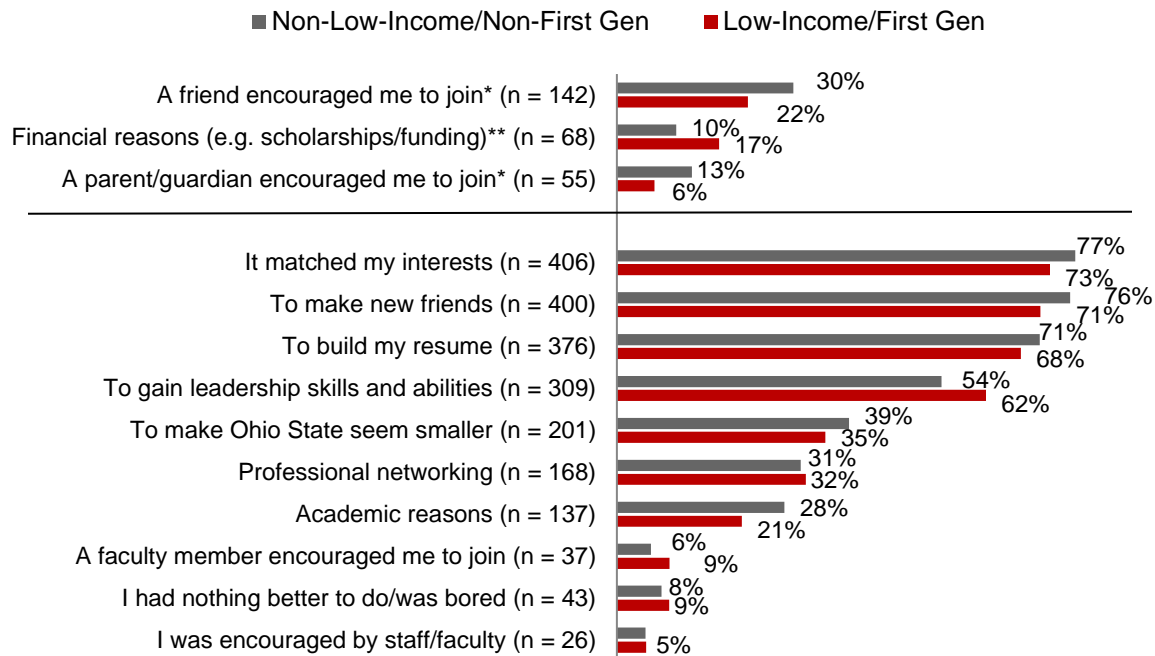
Non-low-income/non-first generation students are 2.0x more likely than their peers to be involved on campus.¹

¹Results of analysis taking into consideration race/ethnicity, gender, class rank, age and international student status; results statistically significant at $p < .01$.

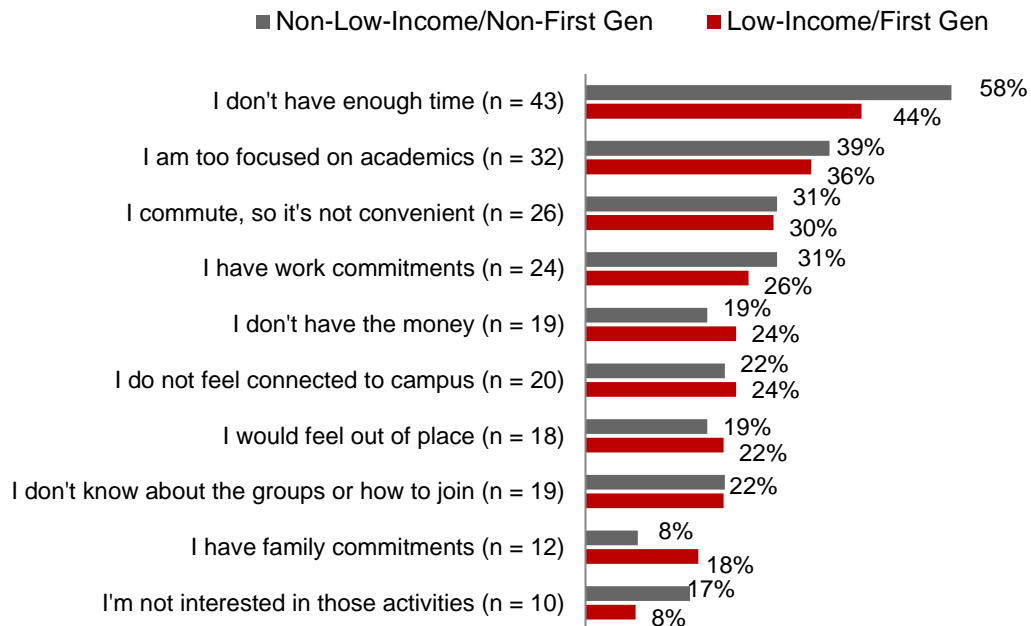
* $p < .05$, ** $p < .01$, *** $p < .001$

The following charts investigate whether there are differences in students' reasons for getting involved on campus or not getting involved. Among the reasons for getting involved, there were statistically significant differences in low-income/first generation students' responses compared to their peers (presented at the top of the first chart). When analyzing reasons students reported for not getting involved, there were not statistically significant differences in reasons by income/first generation status.

Reasons for Getting Involved on Campus



Reasons for Not Getting Involved on Campus



*p < .05, **p < .01, ***p < .001

SENSE OF BELONGING AND ENGAGEMENT

To examine the association between being a low-income/first generation student and one's attitudes about and sense of belonging to Ohio State, chi-square tests of independence were used. First, associations between student responses and low-income/first generations status were examined; there were statistically significant differences in student responses for three statements (highlighted in red at the top of the chart). Second, analyses were conducted to see if differences between low-income/first generation students and their peers remained after taking into account whether students were involved on campus (presented in the last column " χ^2 net of involvement^a"). Differences were no longer statistically significant after taking involvement into account.

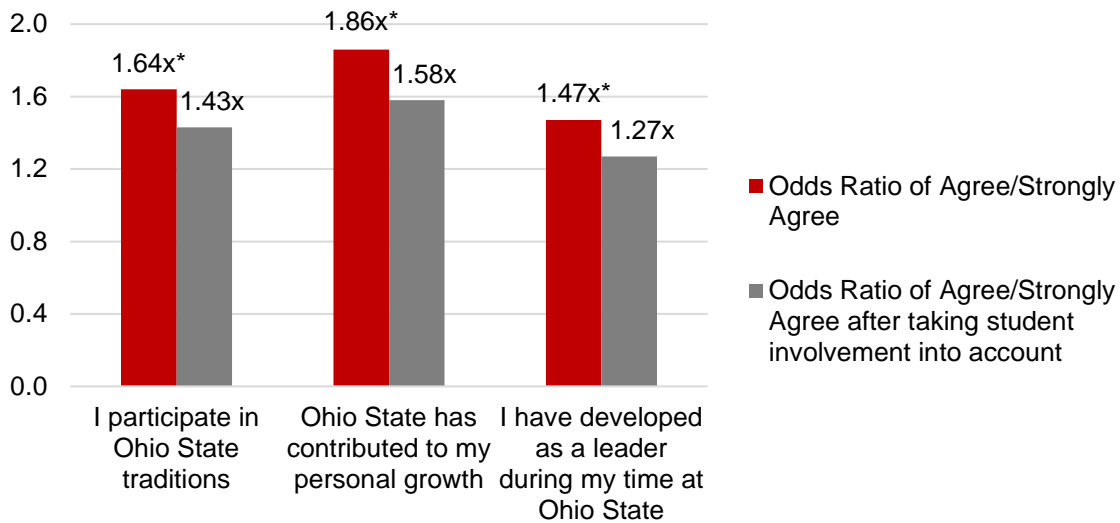
% Agree or Strongly Agree	Low- Income / First Gen.	Non-Low- Income / First Gen.	χ^2	χ^2 net of involvement ^a
I participate in Ohio State traditions	71.5% (n = 176)	80.5% (n = 289)	6.58*	3.19
Ohio State has contributed to my personal growth	87.8% (n = 216)	93.0% (n = 334)	4.83*	2.49
I have developed as a leader during my time at Ohio State	72.0% (n = 177)	79.1% (n = 283)	4.05*	1.46
I feel that I am a member of the Ohio State community	82.8% (n = 202)	88.1% (n = 317)	3.34	1.44
I have relationships with other Ohio State students	90.6% (n = 221)	93.9% (n = 338)	2.32	0.48
I have relationships with Ohio State faculty	62.6% (n = 154)	60.0% (n = 216)	0.42	0.99
I have relationship with Ohio State staff	65.9% (n = 162)	65.8% (n = 237)	0.00	0.13
I feel a sense of belonging to campus	81.3% (n = 200)	85.5% (n = 307)	1.91	0.62
Ohio State offers me opportunities to engage in difficult dialogues	81.3% (n = 200)	81.9% (n = 294)	0.03	0.07
Ohio State has helped me progress in my career development	89.0% (n = 219)	90.3% (n = 324)	0.24	0.00
My experiences at Ohio State have helped me to set <i>personal</i> goals	90.6% (n = 222)	90.3% (n = 324)	0.02	0.52
My experiences at Ohio State have helped me to set <i>professional</i> goals	89.4% (n = 219)	90.3% (n = 325)	0.13	0.00
Academic programs meet my needs	83.7% (n = 200)	89.2% (n = 313)	3.78	3.30
Programs and services at Ohio State meet my needs	85.8% (n = 206)	86.6% (n = 304)	0.07	0.00
I would recommend Ohio State to other students	91.7% (n = 220)	94.6% (n = 330)	1.92	0.96
Overall, I am satisfied with my experiences at The Ohio State University	89.2% (n = 214)	93.1% (n = 325)	2.87	1.44
I intend to complete my degree at Ohio State	98.3% (n = 235)	98.3% (n = 344)	0.00	0.20

^aResults from chi-square test of independence controlling for, or taking into account, whether a student was involved on campus

* $p < .05$, ** $p < .01$, *** $p < .001$

The following chart summarizes the information from the prior table. The chart depicts that compared to low-income/first generation students, their peers are statistically significantly 1.64 times more likely to report participating in Ohio State traditions, 1.86 times more likely to report that Ohio State has contributed to their personal growth and 1.47 times more likely to report that they have developed as a leader during their time at Ohio State. However, once taking into account whether students are involved on campus there were not statistically significant differences in low-income/first generation student responses compared to their peers.

Odds of Non-Low-Income/First Generation Students Agreeing with Statements compared to Low-Income/First Generation Students¹



¹Scarlet bars represent results of logistic regression with no controls; Gray bars represent results from logistic regression model controlling for campus involvement.

Additional analyses using logistic regression examined the relationship between low-income/first generation student status on each outcome to determine if involvement had a more positive association for low-income/first generation students than their peers, but the effects of involvement were similar and positive for all students. Additional models also included controls for gender, race/ethnicity, class rank, age and international student status. Net of these controls, there were not statistically significant differences in low-income/first generation students' responses to each statement, either before or after controlling for involvement. This suggests that some of the differences between low-income/first generation students' responses and their peers could be accounted for by these other demographic characteristics. In particular, race/ethnicity is an important predictor of these differences since race/ethnicity and low-income/first generation status are correlated (for example, 66% of African American students, 52% of Latinx students and 49% of Asian or Asian American students are low-income or first generation students compared to 35% of white students).

* $p < .05$, ** $p < .01$, *** $p < .001$

CONCLUSION

This report examines the involvement, engagement and sense of belonging of low-income/first generation students at The Ohio State University compared to their peers who are not low-income or first generation students. Findings suggest that low-income/first generation students are less likely to be involved on campus than their peers, particularly in student organizations or Greek life, although this population is more likely to be employed on campus. However, low-income/first generation students are equally likely to agree that they are engaged on campus and feel a sense of belonging on campus. Although low-income/first generation students are statistically significantly less likely to report participating in Ohio State traditions, having developed as a leader while on campus or that Ohio State has contributed to their personal growth, these differences disappear after accounting for whether students are involved on campus.

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APPENDIX A: PARTICIPANT DEMOGRAPHICS

The following demographics are presented for the analytic sample of 630 undergraduate students who had information available on their campus involvement and low-income/first generation status.

	Low-Income/First Generation		Non-Low-Income/First Generation	
	<i>n</i>	Percent	<i>n</i>	Percent
Total	258	--	372	--
Involved on Campus (% Yes)	208	80.6%	334	89.8%
Gender^b				
Female	136	60.2%	208	66.2%
Male	89	39.4%	102	32.5%
Transgender/Self-Defined	1	0.4%	4	1.3%
Race/Ethnicity^b				
African American/Black/African	21	8.2%	11	3.0%
Asian	34	13.2%	35	9.6%
Latinx	16	6.2%	15	4.1%
White	152	59.1%	282	77.3%
Other race / Multiracial	34	13.2%	22	6.0%
Citizenship^a				
International student	22	8.5%	25	6.7%
Domestic student	236	91.5%	347	93.3%
Age^a				
Traditional age (18-24)	241	93.4%	361	97.0%
Non-traditional age (25+)	17	6.6%	11	3.0%
Academic Level (by credit hours)^a				
First-year undergraduate	50	19.4%	96	25.8%
Second-year undergraduate	70	27.1%	95	25.5%
Third-year undergraduate	56	21.7%	88	23.7%
Fourth-year+ undergraduate	82	31.8%	93	25.0%

a. Source: Student Information System.

b. Source: Student self-reported.