

**A Description of College of Agriculture and Related Sciences Student Behaviors Regarding  
Postsecondary Education**

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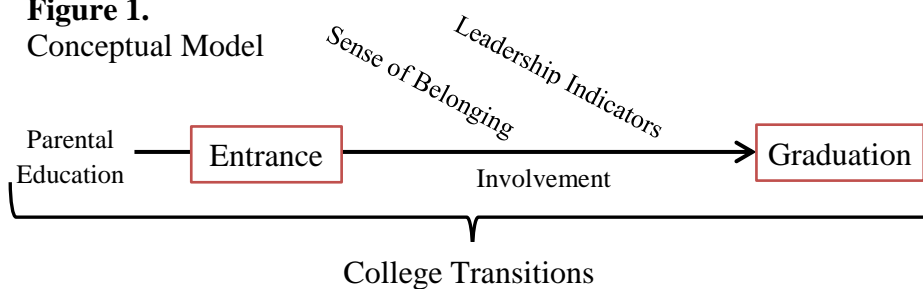
## Introduction

College degree attainment has been described as a pathway to meritocratic societal outcomes (Seidman, 2005; Torche, 2011). First-generation college students (FGCS) have been documented as historically disenfranchised from college outcomes (Cataldi et al., 2018; Choy, 2001). In addition, career outcomes are equivalent for first- and continuing-generation (CGCS) graduates who obtain a bachelor's degree (Ford, 2018; Torche, 2011). Data support that FGCS are enrolling in agriculture and the related sciences at higher rates than in other disciplines. Lesser levels of engagement and involvement by FGCS in college experiences have been historically correlated to departure (Dika & D'Amico, 2016; Pascarella et al., 2004). Though recent studies have been used to document that FGCS are not less engaged in college, but differently engaged compared to their CGCS counterparts (Yee, 2016).

## Conceptual Framework

This research was founded on Astin's (1977, 1991) I-E-O model and theory of involvement. According to Astin (1977), inputs interact with experiences to shape outcomes for those experiences. Additionally, Astin (1991) posits experiences have varying effects on outcomes based on quality and quantity of involvement.

**Figure 1.**  
Conceptual Model



## Methodology

This study utilized secondary datasets to explore experiences of students at The Ohio State University (OSU), and compare differences between generational status and colleges. Responses to OSU's Student Life Survey, 2019 cohort ( $n = 726$ ), and Multi-institutional Study of Leadership, 2018 cohort ( $n = 2635$ ) were used to describe the student experiences. Descriptive statistics were calculated for the variables of on-campus involvement, leadership capacity, leadership efficacy, leadership motivation, and sense of belonging.

## Results and Findings

A majority of students, regardless of generational status, at OSU were engaged in student organizations. For students affiliated with the College of Food, Agricultural, and Environmental Sciences (CFAES), the two on-campus activities respondents participated in the most were student organizations (69.4%), and on-campus jobs (53.1%). As seen in Table 1, the level of participation in activities by CFAES students is greater than that of the overall university. First-generation students affiliated with CFAES were found to participate more than CGCS peers in undergraduate research, and capstone experiences. Other findings from this study include more FGCS are *not involved* compared to CGCS for OSU, and less CFAES students were reported as *not involved* compared to OSU students.

As seen in Table 2, respondents either were neutral, or agreed with each of the constructs for leadership, regardless of field of study, or generational status. It was found that no differences

existed for the leadership indicator constructs, or sense of belonging measures by field of study, or generational status within the sample at OSU.

**Table 1.**

*Percentage On-campus Participation by College, and Generational Status*

Activity	University		CFAES	
	Total	First-Gen	Total	First-Gen
Student Organization	58.9	53.8	69.4	54.5
Social Fraternity or Sorority	12.1	5.5	18.3	18.1
Intramural Sports	15.1	10.3	20.4	18.1
Service	12.4	13.8	20.4	18.1
Undergraduate Research	13.0	10.3	24.5	27.2
On-campus Job	31.5	35.1	53.1	45.4
Learning Community	12.0	6.2	14.2	0.0
Capstone	7.7	9.7	14.2	27.2
Not Involved	16.9	24.1	10.2	9.1

**Table 2.**

*Scale Means for Targeted Variables*

Variables	University		Generational Status	
	Overall	Ag. Related	Continuing	First-Gen
Leadership Capacity <sup>a</sup>	4.14	4.15	4.15	4.16
Leadership Efficacy <sup>a</sup>	3.08	3.11	3.11	3.11
Leadership Motivation <sup>a</sup>	3.91	3.91	3.91	3.90
MSL Sense of Belonging <sup>a</sup>	3.69	3.73	3.66	3.71
SLS Sense of Belonging <sup>b</sup>	18.4	18.9	18.4	18.4

*Note.* Scale scores are calculated based on survey responses.

<sup>a</sup> Scale score averaged, range 1 – 5, with neutral of 3.

<sup>b</sup> Scale score summed, range 6 – 24, with no neutral.

Colleges of similar size and diversity characteristics were found to have similar levels of sense of belonging, and leadership indicators. College of Education and Human Ecology was found to be less involved than CFAES, regardless of students' generational status.

### **Conclusions, Implications, and Recommendations**

Findings and conclusion are not transferable. Students affiliated with CFAES, regardless of generational status, at OSU participate more than peers in other colleges. Additionally, there is no difference by field of study or generational status for leadership indicators or sense of belonging within the sample. These findings are offered to begin describing the way students engage by college affiliation and field of study, as called for by previous research (Azmitia et al., 2018; Torche, 2011). The lack of difference in leadership indicators and sense of belonging between FGCS and CGCS should be further explored, as previous literature suggests a disparate effect of generational-status on these indicators (Soria & Stebleton, 2012). Further investigation is needed to explore the potential effects of the higher rate of participation in undergraduate research on participation in graduate education for FGCS students affiliated with CFAES, which has been documented as an area where FGCS do not participate equally (Choy, 2001).

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