

### A CAMPUS FOCUS ON FIRST-GENERATION COLLEGE EXPERIENCE

AUTHORS Monica Elva Vaca-Cardenas<sup>1</sup>

Jana Fallin<sup>2</sup>

Paula Connors<sup>3</sup>

Whitney Jeter<sup>4</sup>

DIRECCIÓN PARA CORRESPONDENCIA: [mvaca@utm.edu.ec](mailto:mvaca@utm.edu.ec)

Reception date: 17 - 11 - 2019

Acceptance date 20 - 01 - 2020

#### ABSTRACT

The purpose of this study was to find out first-generation faculty and staff at Kansas State University to gain a better understanding of their unique challenges and needs to better support current first-generation college students and faculty on their academic pursuits. One hundred and nineteen current faculty, staff, and administrators who considered themselves first-generation students were surveyed through Qualtrics software. The data of this survey was analyzed by using the SPSS software package. One of the most significant findings of this study was that participants who were not involved in extracurricular activities viewed themselves as less successful than those who did. From the significant results of this study, the Teaching and Learning Center designed several faculty development opportunities for faculty, graduate students, and staff on campus to discuss about the topic and find ways on how to help first-generation students succeed.

**KEYWORDS:** First-Generation College Students; College Experience; First-Generation needs.

#### INTRODUCTION

Ward, Siegel, & Davenport's (2012) defined first-generation students as any individuals who obtained at least a bachelor's degree but whose parents did not complete a bachelor's degree. Currently over 6,000 1st Generation undergraduates attend Kansas State University, representing 31% of the total undergraduate population. Additionally, an amazing number of K-State faculty were also first-generation college students.

<sup>1</sup> College of Philosophy, Pedagogy of National and International Languages, Universidad Técnica de Manabí. Ecuador.

<sup>2</sup> Teaching and Learning Center, Kansas State University, USA. E-mail: [jfallin@ksu.edu](mailto:jfallin@ksu.edu)

<sup>3</sup> Teaching and Learning Center, Kansas State University, USA. E-mail: [pconnors@ksu.edu](mailto:pconnors@ksu.edu)

<sup>4</sup> Teaching and Learning Center, Kansas State University, USA. E-mail: [wjeter@ksu.edu](mailto:wjeter@ksu.edu)

Considering the large number of first-generation students, faculty, and staff at K-State, the Teaching and Learning Center (TLC) of Kansas State University felt it appropriate to conduct a survey directed at the K-State Faculty and Staff who self-reported first-generation college students, in hopes that such a study would inform about the unique challenges and needs that first generation students have, to better support current first-generation students.

The purpose of this case study was to find out first-generation faculty and staff at Kansas State University in an effort to gain a better understanding of their unique challenges and needs to better support current first-generation college students and faculty on their academic pursuits

## DEVELOPMENT

According to Ward, Siegel, & Davenport (2012), first-generation students represent between 22 % and 47 % of higher education enrolments and more than 4.5 million first-generation students have enrolled in higher education institutions (Pryor et al, 2010). Additionally, according to Engle & Tinto, (2008) the number of first-generation students on college campuses continues to increase. These statistics suggest that universities could benefit from this study due to the high percentages of first-generation college students are in need of attention.

Some of the commonalities associated with first-generation college students include the following: first-generation college students often come from minority backgrounds, they frequently have disabilities, and they are usually older (Bui, 2002). Many of them have a low-income status, defined by Engle & Tinto (2008) as a combined household income under \$25,000 per year. First-generation college students tend to leave higher education after the first year (Engle & Tinto, 2008); they often rate themselves low on academic proficiency scales (Gibbons, Borders, Wiles, Stephan, & Davis, 2006); they face more challenges than the average college student (Gibbons & Borders, 2010); and they have less experience with math and science (Horn & Nunez, 2000) than their peers. Understandably, it is difficult to retain first-generation students until graduation (Engle & Tinto, 2008; Pascarella, Pierson, Wolniak, & Terenzini, 2004).

Because of the fact that first-generation students are the first one in the family to pursue a 4-year degree, they often confront many challenges and barriers. According to Harvey & Housel (2011), & Hsiao (1992), their challenges and barriers are related mainly to family issues; as well as to cultural, social, and academic transitions. First-generation college students are a group identified for struggling with two important issues: college attendance and retention (Ishitani, 2003). In addition, in a study by Barry, Hudley, Kelly, and Cho (2009) it was determined that this group of students experienced higher levels of stress; nevertheless, they are less likely than their peers to discuss their feelings about it.

In addition to all the struggles and barriers first-generation college students must face when starting college, they also face more needs than their peers. For instance, first-generation college students are more likely to need remedial course work and

attend college part time (Warburton, Bugarin, Nunez, & Carroll, 2001). In general, according to Lippincott & German (2007) first-generation students require exclusive counselling needs related to academic functioning, adjustment to college life, and family-of-origin issues. Consequently, first-generation students need support and assistance not only academically and economically, but psychologically and culturally too.

### *Methodology*

This is a quantitative case study, where a survey was conducted. In order to identify the faculty and staff at KSU who were first-generation college students, the Teaching and Learning Center sent out emails to locate them on campus through the list-serve system. After that, the Center invited the ones who identified themselves as first-generation college students to participate in a survey. For the purpose of this study and drawing on Ward et al.'s (2012) precedent, this study defined first-generation college students based on the following criteria: (a) Parents attended college but did not complete their degree, and (b) Parents did not attend college at all.

For this case study, the researches applied a 15 to 20-minute survey with mainly closed -ended questions. For the purpose of this quantitative article only closed-ended questions were analyzed. The application of the survey was facilitated through Qualtrics Online Survey Software (2014). It was organized by the following variables: 1. Motivation to pursue college study, 2. Funding for college study, 3. Challenges and barriers during college study, 4. Acclimating to college life, 5. The college experience and 6. Demographic information

One hundred and nineteen current faculty, staff and administrators who identified themselves as first-generation college students voluntarily participated in this survey; including 27.1% professors, 25.7% associate professors, 21.4 assistant professors, 17.1% Instructors and 8.6% other rank. However, four participants were eliminated from the analyses because they were non-first-generation by the established criteria. Thus, one hundred and fifteen participants were the valid sample of this study. The researchers offered confidentiality and anonymity to the participants.

### *Findings*

Interestingly, the majority of the participants, with a 77%, had parents who did not attend college (Table 1). Table 2 shows that there were more female participants than male participants. The average age of participants in this study was 50 (Table 3) who are mostly Caucasian with an 83% (Table 4). 57.9% have a Doctoral degree as their highest level of education (Table 5), and 33% of them have worked at K-State for 1- 5 years (Table 6). From these results we can infer that the majority of first-generation students on this study not only succeed in their studies but they also acquired the highest academic degree which is a PhD. This results goes against the tendency stated by Engle & Tinto (2008), that first-generation students leave higher education after the first year.

Table 1. Of the choices below, please indicate which one best describes you.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Parents attended college, but did not complete their degree	26	22.6	22.6	22.6
	Parents did not attend college at all	89	77.4	77.4	100.0
	Total	115	100.0	100.0	

Table 2. What is your gender?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	50	43.5	43.9	43.9
	Female	64	55.7	56.1	100.0
	Total	114	99.1	100.0	
Missing	System	1	.9		
Total		115	100.0		

Table 3. What is your age?

N	Valid	111
	Missing	4
Mean		49.95
Std. Deviation		12.502

Table 4. What is your ethnicity?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	African-American/Black	5	4.3	4.4	4.4
	Caucasian/White	95	82.6	83.3	87.7
	Hispanic/Latino(a)	8	7.0	7.0	94.7
	Asian-American	1	.9	.9	95.6
	Native-American	3	2.6	2.6	98.2
	Other (Please specify)	2	1.7	1.8	100.0
	Total	114	99.1	100.0	
Missing	System	1	.9		
Total		115	100.0		

Table 5. What is your highest level of education?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bachelor's degree	16	13.9	14.0	14.0
	Master's degree	32	27.8	28.1	42.1
	Doctorate degree	66	57.4	57.9	100.0
	Total	114	99.1	100.0	
Missing	System	1	.9		
Total		115	100.0		

Table 6. How many years have you worked at K-State?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-5	38	33.0	33.6	33.6
	6-10	16	13.9	14.2	47.8
	11-15	18	15.7	15.9	63.7
	16-20	8	7.0	7.1	70.8
	21-25	7	6.1	6.2	77.0
	More than 25	26	22.6	23.0	100.0
	Total	113	98.3	100.0	
Missing	System	2	1.7		
Total		115	100.0		

Unexpectedly, those who had at least one person to help them acclimate to college-life felt less confident in study and test taking skills compared to those who had no one help them acclimate to college life (Table 7 & 8).

Table 7. Group Statistics

	Who helped acclimate to college	N	Mean	Std. Deviation	Std. Error
Study_Skills_REC	Somone	82	2.9268	1.31262	.14495
	No one	32	3.5313	1.31944	.23325
Testing_Skills_REC	Somone	81	2.8395	1.33657	.14851
	No one	32	3.5938	1.36451	.24121

Table 8. Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Study_Skills_REC	Equal variances assumed	.013	.910	-2.206	112	.029	-.60442	.27399	-1.14730	-.06154
	Equal variances not assumed			-2.201	56.353	.032	-.60442	.27462	-1.15447	-.05437
Testing_Skills_REC	Equal variances assumed	.401	.528	-2.687	111	.008	-.75424	.28071	-1.31049	-.19799
	Equal			-	55.84	.010	-.75424	.28326	-	-

	variances not assumed			2.66 3	6				1.3217 3	.1867 6
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In spite of the fact that first-3generation students face more challenges than the average college student (Gibbons & Borders, 2010), the result suggests that the participants of this study, who did not have at least one person to help them acclimate to college-life felt more confident.

Participants indicated that the “library” was a service that helped them when they were studying at college. However, participants who took advantage of a combination of resources such as library, advising center, and tutoring center felt more confident about their study and test taking skills compared to participants who just took advantage of library resources (See table 9, 10, and 11).

Table 9. Descriptives of Services and Resources

		N	Mea n	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimu m	Maximu m
						Lower Boun d	Upper Boun d		
Study skills	.00	17	3.00	1.275	.309	2.34	3.66	2	5
	Tutoring	4	3.00	1.826	.913	.09	5.91	1	5
	Student Services	4	2.50	1.291	.645	.45	4.55	1	4
	Advising	13	2.62	1.325	.368	1.81	3.42	1	5
	Library	26	2.31	1.087	.213	1.87	2.75	1	5
	Other	9	2.89	1.537	.512	1.71	4.07	1	5
	Combination/More than 1	41	3.37	1.337	.209	2.94	3.79	1	5
	Total	114	2.90	1.337	.125	2.66	3.15	1	5
Test taking skills	.00	17	2.76	1.251	.304	2.12	3.41	2	5
	Tutoring	4	3.50	1.915	.957	.45	6.55	1	5
	Student Services	4	2.75	1.500	.750	.36	5.14	1	4
	Advising	12	2.67	1.497	.432	1.72	3.62	1	5
	Library	26	2.31	1.087	.213	1.87	2.75	1	5
	Other	9	2.56	1.424	.475	1.46	3.65	1	5
	Combination/More than 1	41	3.56	1.324	.207	3.14	3.98	1	5
	Total	113	2.95	1.381	.130	2.69	3.20	1	5

Table 10. ANOVA - Services and Resources

		Sum of Squares	df	Mean Square	F	Sig.
Study skills	Between Groups	19.922	6	3.320	1.952	.079
	Within Groups	182.016	107	1.701		
	Total	201.939	113			
Test taking skills	Between Groups	30.348	6	5.058	2.924	.011
	Within Groups	183.334	106	1.730		
	Total	213.681	112			

Table 11. Multiple Comparisons - Services and Resources

Bonferroni							
Dependent Variable	(I) Programs_helped	(J) Programs_helped	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Study skills	.00	Tutoring	.000	.725	1.000	-2.26	2.26
		Student Services	.500	.725	1.000	-1.76	2.76
		Advising	.385	.481	1.000	-1.11	1.88
		Library	.692	.407	1.000	-.57	1.96
		Other	.111	.538	1.000	-1.56	1.78
		Combination/More than 1	-.366	.376	1.000	-1.54	.81
	Tutoring	.00	.000	.725	1.000	-2.26	2.26
		Student Services	.500	.922	1.000	-2.37	3.37
		Advising	.385	.746	1.000	-1.94	2.71
		Library	.692	.700	1.000	-1.49	2.87
		Other	.111	.784	1.000	-2.33	2.55
		Combination/More than 1	-.366	.683	1.000	-2.49	1.76
	Student Services	.00	-.500	.725	1.000	-2.76	1.76
		Tutoring	-.500	.922	1.000	-3.37	2.37
		Advising	-.115	.746	1.000	-2.44	2.21



					0		
		Library	.192	.700	1.00 0	-1.99	2.37
		Other	-.389	.784	1.00 0	-2.83	2.05
		Combination/More than 1	-.866	.683	1.00 0	-2.99	1.26
	Advising	.00	-.385	.481	1.00 0	-1.88	1.11
		Tutoring	-.385	.746	1.00 0	-2.71	1.94
		Student Services	.115	.746	1.00 0	-2.21	2.44
		Library	.308	.443	1.00 0	-1.07	1.69
		Other	-.274	.566	1.00 0	-2.03	1.49
		Combination/More than 1	-.750	.415	1.00 0	-2.04	.54
	Library	.00	-.692	.407	1.00 0	-1.96	.57
		Tutoring	-.692	.700	1.00 0	-2.87	1.49
		Student Services	-.192	.700	1.00 0	-2.37	1.99
		Advising	-.308	.443	1.00 0	-1.69	1.07
		Other	-.581	.504	1.00 0	-2.15	.99
		Combination/More than 1	-1.058*	.327	.034	-2.08	-.04
	Other	.00	-.111	.538	1.00 0	-1.78	1.56
		Tutoring	-.111	.784	1.00 0	-2.55	2.33
		Student Services	.389	.784	1.00 0	-2.05	2.83
		Advising	.274	.566	1.00 0	-1.49	2.03
		Library	.581	.504	1.00 0	-.99	2.15
		Combination/More than 1	-.477	.480	1.00 0	-1.97	1.02
	Combination/More than 1	.00	.366	.376	1.00 0	-.81	1.54
		Tutoring	.366	.683	1.00 0	-1.76	2.49



		Student Services	.866	.683	1.00 0	-1.26	2.99
		Advising	.750	.415	1.00 0	-.54	2.04
		Library	1.058*	.327	.034	.04	2.08
		Other	.477	.480	1.00 0	-1.02	1.97
Test taking skills	.00	Tutoring	-.735	.731	1.00 0	-3.01	1.54
		Student Services	.015	.731	1.00 0	-2.26	2.29
		Advising	.098	.496	1.00 0	-1.45	1.64
		Library	.457	.410	1.00 0	-.82	1.73
		Other	.209	.542	1.00 0	-1.48	1.90
		Combination/More than 1	-.796	.379	.802	-1.98	.38
	Tutoring	.00	.735	.731	1.00 0	-1.54	3.01
		Student Services	.750	.930	1.00 0	-2.14	3.64
		Advising	.833	.759	1.00 0	-1.53	3.20
		Library	1.192	.706	1.00 0	-1.01	3.39
		Other	.944	.790	1.00 0	-1.52	3.40
		Combination/More than 1	-.061	.689	1.00 0	-2.21	2.08
	Student Services	.00	-.015	.731	1.00 0	-2.29	2.26
		Tutoring	-.750	.930	1.00 0	-3.64	2.14
		Advising	.083	.759	1.00 0	-2.28	2.45
		Library	.442	.706	1.00 0	-1.76	2.64
		Other	.194	.790	1.00 0	-2.27	2.65
		Combination/More than 1	-.811	.689	1.00 0	-2.96	1.33
	Advising	.00	-.098	.496	1.00 0	-1.64	1.45
		Tutoring	-.833	.759	1.00 0	-3.20	1.53

		Student Services	-.083	.759	1.000	-2.45	2.28
		Library	.359	.459	1.000	-1.07	1.79
		Other	.111	.580	1.000	-1.69	1.92
		Combination/More than 1	-.894	.432	.855	-2.24	.45
	Library	.00	-.457	.410	1.000	-1.73	.82
		Tutoring	-1.192	.706	1.000	-3.39	1.01
		Student Services	-.442	.706	1.000	-2.64	1.76
		Advising	-.359	.459	1.000	-1.79	1.07
		Other	-.248	.509	1.000	-1.83	1.34
		Combination/More than 1	-1.253*	.330	.005	-2.28	-.23
	Other	.00	-.209	.542	1.000	-1.90	1.48
		Tutoring	-.944	.790	1.000	-3.40	1.52
		Student Services	-.194	.790	1.000	-2.65	2.27
		Advising	-.111	.580	1.000	-1.92	1.69
		Library	.248	.509	1.000	-1.34	1.83
		Combination/More than 1	-1.005	.484	.845	-2.51	.50
	Combination/More than 1	.00	.796	.379	.802	-.38	1.98
		Tutoring	.061	.689	1.000	-2.08	2.21
		Student Services	.811	.689	1.000	-1.33	2.96
		Advising	.894	.432	.855	-.45	2.24
		Library	1.253*	.330	.005	.23	2.28
		Other	1.005	.484	.845	-.50	2.51

\*. The mean difference is significant at the 0.05 level.

Participants who did not get involved with anything felt less personal growth than those involved in 2 clubs or organizations and 4 clubs or organizations. (See tables 12, 13, & 14). Additionally, participants who did not get involved with anything felt less supported by classmates than those involved in 1 club or organization. (See tables 12, 13, & 14).

Table 12. Descriptives - Personal Growth – Supported by classmates

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
I felt my personal growth was encouraged while attending college	None	19	2.58	1.071	.246	2.06	3.09	1	5
	1 club/org	32	1.91	.928	.164	1.57	2.24	1	4
	2 clubs/org	32	1.44	.669	.118	1.20	1.68	1	4
	3 clubs/orgs	19	1.89	1.150	.264	1.34	2.45	1	5
	4 clubs/orgs	10	1.50	.707	.224	.99	2.01	1	3
	5 or more clubs/orgs	2	1.00	.000	.000	1.00	1.00	1	1
	Total	114	1.83	.977	.091	1.65	2.01	1	5
I felt supported by my classmates	None	19	3.11	.875	.201	2.68	3.53	1	5
	1 club/org	32	2.28	.851	.150	1.97	2.59	1	5
	2 clubs/org	32	1.97	.822	.145	1.67	2.27	1	4
	3 clubs/orgs	19	2.47	.905	.208	2.04	2.91	1	5
	4 clubs/orgs	10	2.20	.789	.249	1.64	2.76	1	3
	5 or more clubs/orgs	2	1.00	.000	.000	1.00	1.00	1	1
	Total	114	2.33	.928	.087	2.16	2.51	1	5

Table 13. ANOVA - Personal Growth – Supported by classmates

		Sum of Squares	df	Mean Square	F	Sig.
I felt my personal growth was encouraged while attending college	Between Groups	18.319	5	3.664	4.420	.001
	Within Groups	89.515	108	.829		
	Total	107.833	113			
I felt supported by my classmates	Between Groups	19.770	5	3.954	5.505	.000
	Within Groups	77.564	108	.718		
	Total	97.333	113			

Table 14. Multiple Comparisons - Personal Growth – Supported by classmates

Bonferroni							
Dependent Variable	(I) Involvement	(J) Involvement	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
I felt my personal growth was encouraged while attending college	None	1 club/org	.673	.264	.182	-.12	1.46
		2 clubs/org	1.141*	.264	.001	.35	1.93
		3 clubs/orgs	.684	.295	.336	-.20	1.57
		4 clubs/orgs	1.079*	.356	.045	.01	2.15
		5 or more clubs/orgs	1.579	.677	.323	-.45	3.61
	1 club/org	None	-.673	.264	.182	-1.46	.12
		2 clubs/org	.469	.228	.628	-.21	1.15
		3 clubs/orgs	.012	.264	1.000	-.78	.80
		4 clubs/orgs	.406	.330	1.000	-.58	1.40
		5 or more clubs/orgs	.906	.664	1.000	-1.09	2.90
	2 clubs/org	None	-1.141*	.264	.001	-1.93	-.35
		1 club/org	-.469	.228	.628	-1.15	.21
		3 clubs/orgs	-.457	.264	1.000	-1.25	.33
		4 clubs/orgs	-.063	.330	1.000	-1.05	.93
		5 or more clubs/orgs	.438	.664	1.000	-1.55	2.43
	3 clubs/orgs	None	-.684	.295	.336	-1.57	.20
		1 club/org	-.012	.264	1.000	-.80	.78
		2 clubs/org	.457	.264	1.000	-.33	1.25
		4 clubs/orgs	.395	.356	1.000	-.67	1.46
		5 or more clubs/orgs	.895	.677	1.000	-1.14	2.93
	4 clubs/orgs	None	-1.079*	.356	.045	-2.15	-.01
		1 club/org	-.406	.330	1.000	-1.40	.58
		2 clubs/org	.063	.330	1.000	-.93	1.05
		3 clubs/orgs	-.395	.356	1.000	-1.46	.67
		5 or more clubs/orgs	.500	.705	1.000	-1.62	2.62
	5 or more clubs/orgs	None	-1.579	.677	.323	-3.61	.45
		1 club/org	-.906	.664	1.000	-2.90	1.09
		2 clubs/org	-.438	.664	1.000	-2.43	1.55
		3 clubs/orgs	-.895	.677	1.000	-2.93	1.14
		4 clubs/orgs	-.500	.705	1.000	-2.62	1.62
I felt supported by my classmates	None	1 club/org	.824*	.245	.016	.09	1.56
		2 clubs/org	1.137*	.245	.000	.40	1.87
		3 clubs/orgs	.632	.275	.353	-.19	1.46
		4 clubs/orgs	.905	.331	.110	-.09	1.90
		5 or more clubs/orgs	2.105*	.630	.017	.21	4.00
	1 club/org	None	-.824*	.245	.016	-1.56	-.09
		2 clubs/org	.313	.212	1.000	-.32	.95
		3 clubs/orgs	-.192	.245	1.000	-.93	.54
		4 clubs/orgs	.081	.307	1.000	-.84	1.00

	2 clubs/org	5 or more clubs/orgs	1.281	.618	.606	-.57	3.14
		None	-1.137*	.245	.000	-1.87	-.40
	3 clubs/orgs	1 club/org	-.313	.212	1.000	-.95	.32
		3 clubs/orgs	-.505	.245	.631	-1.24	.23
		4 clubs/orgs	-.231	.307	1.000	-1.15	.69
		5 or more clubs/orgs	.969	.618	1.000	-.89	2.82
	4 clubs/orgs	None	-.632	.275	.353	-1.46	.19
		1 club/org	.192	.245	1.000	-.54	.93
		2 clubs/org	.505	.245	.631	-.23	1.24
		4 clubs/orgs	.274	.331	1.000	-.72	1.27
		5 or more clubs/orgs	1.474	.630	.317	-.42	3.36
	5 or more clubs/orgs	None	-.905	.331	.110	-1.90	.09
		1 club/org	-.081	.307	1.000	-1.00	.84
		2 clubs/org	.231	.307	1.000	-.69	1.15
		3 clubs/orgs	-.274	.331	1.000	-1.27	.72
		5 or more clubs/orgs	1.200	.656	1.000	-.77	3.17
	5 or more clubs/orgs	None	-2.105*	.630	.017	-4.00	-.21
		1 club/org	-1.281	.618	.606	-3.14	.57
		2 clubs/org	-.969	.618	1.000	-2.82	.89
		3 clubs/orgs	-1.474	.630	.317	-3.36	.42
		4 clubs/orgs	-1.200	.656	1.000	-3.17	.77

\*. The mean difference is significant at the 0.05 level.

Results also show that, participants who did not get involved with anything felt less welcomed than those involved in 2 clubs or organizations (See tables 15, 16, & 17). As well, participants who did not get involved with anything felt people took less interest in them than those involved in 2 clubs or organizations (See tables 15, 16, & 17). Finally, participants who did not get involved with anything viewed themselves as less successful than those involved in 1 and 2 clubs or organizations (See tables 15, 16, & 17).

Table 15. Descriptives - Feeling welcomed - People taking an interest - Viewing self as a successful student

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
I felt welcomed at college	None	19	2.53	.964	.221	2.06	2.99	1	4
	1 club/org	32	2.03	.595	.105	1.82	2.25	1	3
	2 clubs/org	32	1.84	.808	.143	1.55	2.13	1	3
	3 clubs/orgs	19	2.21	.713	.164	1.87	2.55	1	3
	4 clubs/orgs	10	2.00	.816	.258	1.42	2.58	1	3

	5 or more clubs/orgs	2	1.50	.707	.500	-4.85	7.85	1	2
	Total	114	2.08	.789	.074	1.93	2.23	1	4
I felt people took an interest in me during my college experience	None	19	2.89	.875	.201	2.47	3.32	1	4
	1 club/org	32	2.16	.920	.163	1.82	2.49	1	4
	2 clubs/org	30	1.70	.837	.153	1.39	2.01	1	4
	3 clubs/orgs	19	2.26	.991	.227	1.79	2.74	1	5
	4 clubs/orgs	10	2.00	1.054	.333	1.25	2.75	1	4
	5 or more clubs/orgs	2	1.00	.000	.000	1.00	1.00	1	1
	Total	112	2.14	.985	.093	1.96	2.33	1	5
I viewed myself as a successful student	None	19	2.47	.964	.221	2.01	2.94	1	4
	1 club/org	32	1.63	.793	.140	1.34	1.91	1	4
	2 clubs/org	32	1.59	.615	.109	1.37	1.82	1	3
	3 clubs/orgs	19	1.74	1.098	.252	1.21	2.27	1	4
	4 clubs/orgs	10	1.60	.516	.163	1.23	1.97	1	2
	5 or more clubs/orgs	2	1.00	.000	.000	1.00	1.00	1	1
	Total	114	1.76	.865	.081	1.60	1.92	1	4

Table 16. ANOVA Table 15. Descriptives - Feeling welcomed - People taking an interest - Viewing self as a successful student.

		Sum of Squares	df	Mean Square	F	Sig.
I felt welcomed at college	Between Groups	6.707	5	1.341	2.279	.052
	Within Groups	63.582	108	.589		
	Total	70.289	113			
I felt people took an interest in me during my college experience	Between Groups	19.722	5	3.944	4.752	.001
	Within Groups	87.992	106	.830		
	Total	107.714	111			
I viewed myself as a successful student	Between Groups	12.565	5	2.513	3.768	.003
	Within Groups	72.040	108	.667		
	Total	84.605	113			

Table 17. Multiple Comparisons - Table 15. Descriptives - Feeling welcomed - People taking an interest - Viewing self as a successful student.

Bonferroni						
Dependent Variable	(I) Involvement	(J) Involvement	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval
						Lower Bound
I felt welcomed at college	None	1 club/org	.495	.222	.420	-.17
		2 clubs/org	.683*	.222	.040	.02
		3 clubs/orgs	.316	.249	1.000	-.43
		4 clubs/orgs	.526	.300	1.000	-.37
		5 or more clubs/orgs	1.026	.570	1.000	-.69
	1 club/org	None	-.495	.222	.420	-1.16
		2 clubs/org	.188	.192	1.000	-.39
		3 clubs/orgs	-.179	.222	1.000	-.85
		4 clubs/orgs	.031	.278	1.000	-.80
		5 or more clubs/orgs	.531	.559	1.000	-1.15
	2 clubs/org	None	-.683*	.222	.040	-1.35
		1 club/org	-.188	.192	1.000	-.76
		3 clubs/orgs	-.367	.222	1.000	-1.03
		4 clubs/orgs	-.156	.278	1.000	-.99
		5 or more clubs/orgs	.344	.559	1.000	-1.34
	3 clubs/orgs	None	-.316	.249	1.000	-1.06
		1 club/org	.179	.222	1.000	-.49
		2 clubs/org	.367	.222	1.000	-.30
		4 clubs/orgs	.211	.300	1.000	-.69
		5 or more clubs/orgs	.711	.570	1.000	-1.00
	4 clubs/orgs	None	-.526	.300	1.000	-1.43
		1 club/org	-.031	.278	1.000	-.87
		2 clubs/org	.156	.278	1.000	-.68
		3 clubs/orgs	-.211	.300	1.000	-1.11
		5 or more clubs/orgs	.500	.594	1.000	-1.28
	5 or more clubs/orgs	None	-1.026	.570	1.000	-2.74
		1 club/org	-.531	.559	1.000	-2.21
		2 clubs/org	-.344	.559	1.000	-2.02
		3 clubs/orgs	-.711	.570	1.000	-2.42
		4 clubs/orgs	-.500	.594	1.000	-2.28
I felt people took an interest in me during my college experience	None	1 club/org	.738	.264	.091	-.05
		2 clubs/org	1.195*	.267	.000	.39
		3 clubs/orgs	.632	.296	.524	-.26
		4 clubs/orgs	.895	.356	.202	-.17
		5 or more clubs/orgs	1.895	.677	.092	-.14
	1 club/org	None	-.738	.264	.091	-1.53
		2 clubs/org	.456	.232	.771	-.24



		3 clubs/orgs	-.107	.264	1.000	-.90
		4 clubs/orgs	.156	.330	1.000	-.84
		5 or more clubs/orgs	1.156	.664	1.000	-.84
	2 clubs/org	None	-1.195*	.267	.000	-2.00
		1 club/org	-.456	.232	.771	-1.15
		3 clubs/orgs	-.563	.267	.561	-1.37
		4 clubs/orgs	-.300	.333	1.000	-1.30
		5 or more clubs/orgs	.700	.665	1.000	-1.30
	3 clubs/orgs	None	-.632	.296	.524	-1.52
		1 club/org	.107	.264	1.000	-.69
		2 clubs/org	.563	.267	.561	-.24
		4 clubs/orgs	.263	.356	1.000	-.81
		5 or more clubs/orgs	1.263	.677	.974	-.77
	4 clubs/orgs	None	-.895	.356	.202	-1.96
		1 club/org	-.156	.330	1.000	-1.15
		2 clubs/org	.300	.333	1.000	-.70
		3 clubs/orgs	-.263	.356	1.000	-1.33
		5 or more clubs/orgs	1.000	.706	1.000	-1.12
	5 or more clubs/orgs	None	-1.895	.677	.092	-3.93
		1 club/org	-1.156	.664	1.000	-3.15
		2 clubs/org	-.700	.665	1.000	-2.70
		3 clubs/orgs	-1.263	.677	.974	-3.30
		4 clubs/orgs	-1.000	.706	1.000	-3.12
I viewed myself as a successful student	None	1 club/org	.849*	.237	.008	.14
		2 clubs/org	.880*	.237	.005	.17
		3 clubs/orgs	.737	.265	.096	-.06
		4 clubs/orgs	.874	.319	.108	-.08
		5 or more clubs/orgs	1.474	.607	.253	-.35
	1 club/org	None	-.849*	.237	.008	-1.56
		2 clubs/org	.031	.204	1.000	-.58
		3 clubs/orgs	-.112	.237	1.000	-.82
		4 clubs/orgs	.025	.296	1.000	-.86
		5 or more clubs/orgs	.625	.595	1.000	-1.16
	2 clubs/org	None	-.880*	.237	.005	-1.59
		1 club/org	-.031	.204	1.000	-.64
		3 clubs/orgs	-.143	.237	1.000	-.85
		4 clubs/orgs	-.006	.296	1.000	-.89
		5 or more clubs/orgs	.594	.595	1.000	-1.19
	3 clubs/orgs	None	-.737	.265	.096	-1.53
		1 club/org	.112	.237	1.000	-.60
		2 clubs/org	.143	.237	1.000	-.57
		4 clubs/orgs	.137	.319	1.000	-.82
		5 or more clubs/orgs	.737	.607	1.000	-1.09

	4 clubs/orgs	None	-.874	.319	.108	-1.83
		1 club/org	-.025	.296	1.000	-.91
		2 clubs/org	.006	.296	1.000	-.88
		3 clubs/orgs	-.137	.319	1.000	-1.09
		5 or more clubs/orgs	.600	.633	1.000	-1.30
	5 or more clubs/orgs	None	-1.474	.607	.253	-3.30
		1 club/org	-.625	.595	1.000	-2.41
		2 clubs/org	-.594	.595	1.000	-2.38
		3 clubs/orgs	-.737	.607	1.000	-2.56
		4 clubs/orgs	-.600	.633	1.000	-2.50

\*. The mean difference is significant at the 0.05 level.

According to Lippincott & German (2007) first-generation students require exclusive counseling needs related to academic functioning, adjustment to college life, and family issues. The results indicate that the needs first-generation students require can be better support when they get involved in different clubs or organizations where they can feel confident, supported, welcomed, successful and feel that people take interest on them.

## CONCLUSIONS

Significant findings of this study showed that the participants who were not involved in extracurricular activities viewed themselves as less successful, less confident, less supported by classmates, less welcomed, they felt less personal growth, and felt people took less interest in them, than those who were involved in extracurricular activities. Thus, findings suggest that it is important for students to get involved and make connections.

All in all, these important findings give light to universities to take action and look for ways of helping first-generation college students to succeed.

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