

# Comparing Leadership within Student Engagement



## Introduction

The following report presents data comparing two sets of groups taken from the 2015 OSU Multi-Institutional Study of Leadership (MSL). The two groups are comprised of respondents who completed the OSU 2015 MSL and students who responded they have participated in at least one training or

Table 1  
*Sample & Response Rate*

Sample	Response Rate
Original Comparator	3.21% (N=37)
New Comparator	10.16% (N=117)

program leadership experience while at OSU. Originally, OSU submitted a sub-population of students who took a formal leadership course at OSU. However, upon analysis of the sub-population data, it was decided a comparison sample of students who have experienced a formal leadership training or program at least once would be created. This is due to the fact that when analyzing the data, there was an insufficient number for analysis of significant difference between the original OSU submitted subpopulation on the constructs of the social change model. Within this new comparison sample, students experienced at least one of the following during their time at OSU:

- Leadership Conference
- Leadership Retreat
- Leadership Lecture/Workshop Series
- Positional Leader Training
- Leadership Course
- Short-Term Service Immersion
- Emerging or New Leaders Program
- Living-Learning Leadership Program
- Peer Leadership Educator Team
- Outdoor Adventure Leadership Program
- Women’s Leadership Program
- Multicultural Leadership Program
- Leadership Certificate Program
- Leadership Capstone Experience
- Leadership Minor
- Leadership Major

The goal of establishing a comparison sample was to compare this data against the OSU main sample data. This goal attempts to answer the question, “*Do students who responded they participated at least once in a formal leadership training or program show more growth among the Social Change Model of Leadership Outcomes than students who responded “never” participating in a formal*

*leadership training or program?”* The following report provides data analysis and findings. Data used in this report were collected as part of the Multi-Institutional Study of Leadership 2015. For further information regarding that study, please visit [www.leadershipstudy.net](http://www.leadershipstudy.net). Additional 2015 MSL reports can be found on the Oregon State University Student Affairs Research Evaluation and Planning [website](#).

## Demographics

Three self-reported demographic data points are highlighted throughout the report and appendices: student status, student employment, and age. Table 2 displays highlighted student demographics which displayed the most significant relationships between input and environmental variables and core outcomes in the 2015 MSL.

Table 2

### *Highlighted Demographic Data Points*

Seniors		Work On-Campus		Non-Traditionally Aged		Traditionally Aged	
C	M	C	M	C	M	C	M
<b>59 &gt; 37.3</b>		<b>44.4 &gt; 24.8</b>		<b>13.2 &lt; 23.7</b>		<b>86.8 &gt; 76.3</b>	

\*C = Comparison sample; M = Main sample

Within the comparison sample, more students reported being a senior than the main sample. The same goes for students in the comparison sample who reported working on campus. However, fewer respondents from the comparison sample self-identified as non-traditionally aged than traditionally aged students as compared to the main sample. **Appendix A** displays the full table of student respondent’s demographics.

### **Growth across the Social Responsible Leadership Scale (SRLS)**

A higher proportion of students in the comparison sample reported more growth across all Social Change Model scales than students in the main sample. Table 3 displays the

Students who participate in least one training or program leadership experience displayed more growth across all SCM scales than students who reported having not participated.

SRLS scales and Table 4 displays the sub-scales for both students in the main and comparison samples.

Among all scales, the largest difference between samples is “Citizenship.”

Table 3

*Growth among SRLS Scale*

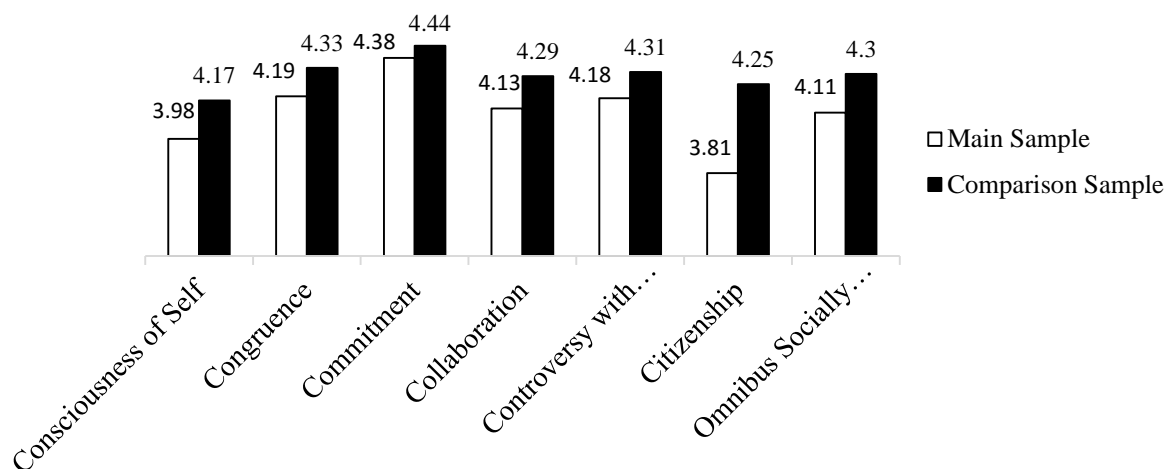


Table 4

*Comparison Growth Among Sub-Study Outcomes*

	<b>Main Sample</b>	<b>Comparison sample</b>
Resilience	3.86	<b>3.96</b>
Socio-Cultural Conversation	1.46	<b>1.80</b>
Social Perspective Taking	3.83	<b>3.93</b>
Spirituality: Search for Meaning	1.51	<b>1.94</b>
Social Change Behaviors	.90	<b>1.62</b>
Leadership Efficacy	3.06	<b>3.30</b>
Complex Cognitive Skills	3.10	<b>3.29</b>
Hope (Agency)	6.47	<b>6.65</b>
Hope (Pathways)	6.54	6.56
Sense of Belonging	3.53	<b>3.74</b>

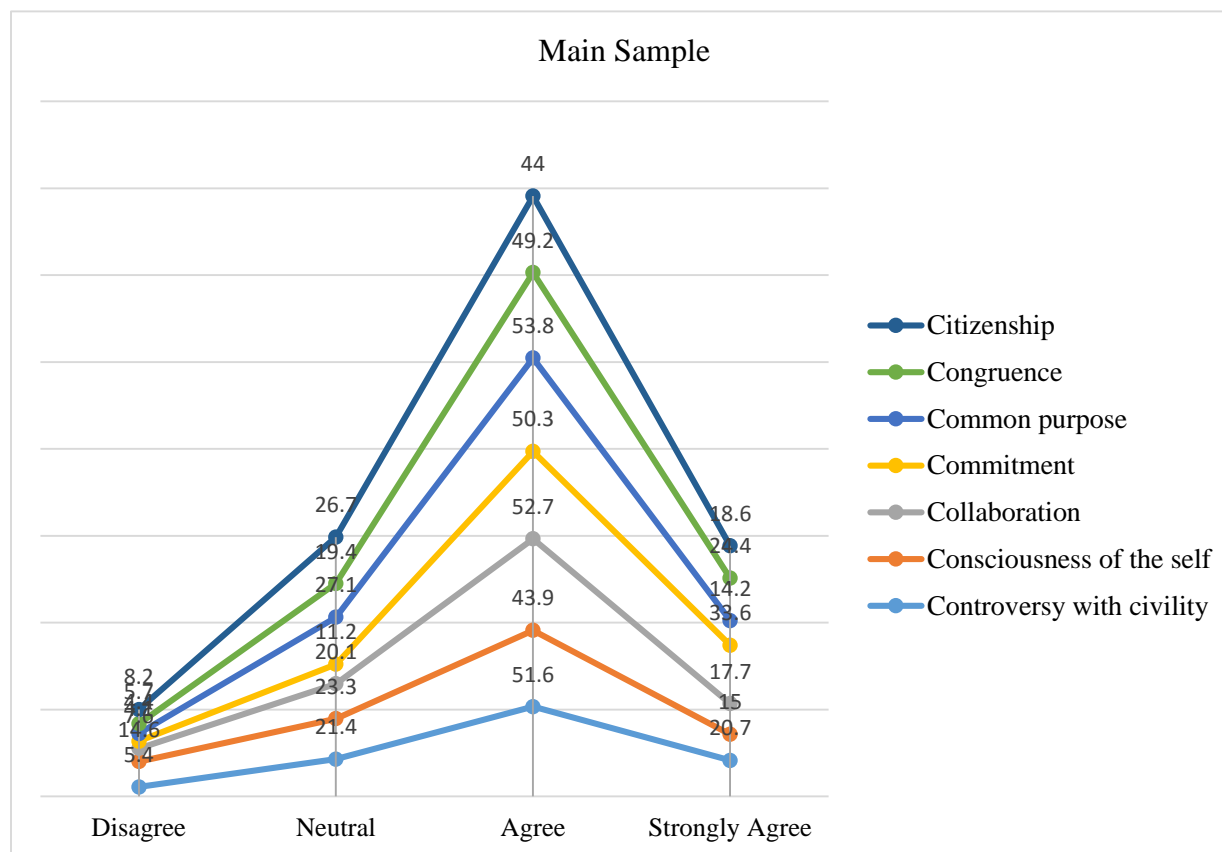
*\*The data is the mean score for the SCM scales*

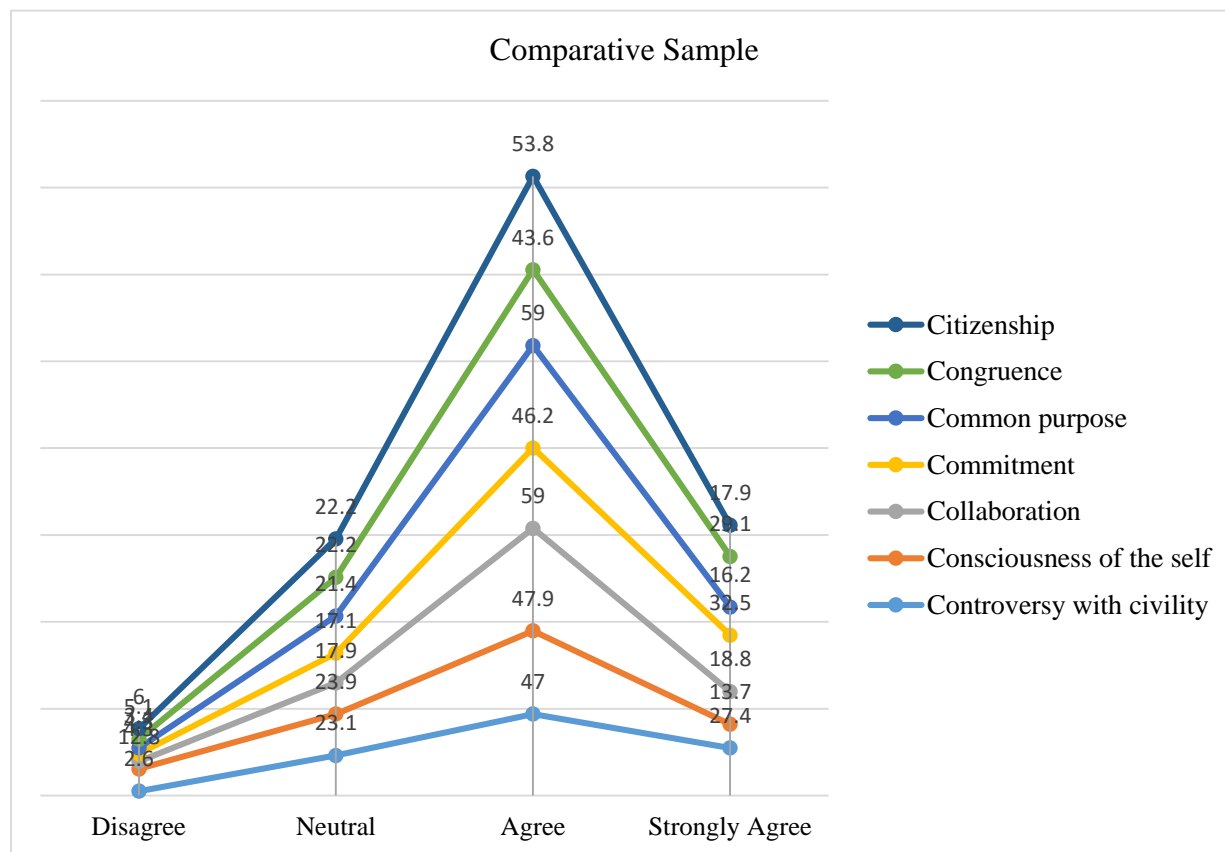
## Pre-College Experiences with Leadership

Participants were asked several questions about their high school and pre-college experiences with leadership and their beliefs about values and constructs related to the Social Change Model (SCM). Student's reported pre-college involvement in several leadership experiences including: involvement in high school clubs, recreational sports, or service; involvement in community organizations; and pre-college leadership training. The data analysis concluded that respondents in the comparator sample group reported "very often" to participating in pre-college leadership experiences at a significantly higher rate than students in the main sample. Furthermore, students were asked to think back before college and to respond to one question related to each of the Social Change Model of Leadership scales. The questions in Table 5 pertain to the scale listed in italics. **Appendix B** and **Appendix C** display more detailed data regarding student's high school experiences with leadership and how students responded to the pre-test of the Pre-test SCM & Sub-Study Values/Outcomes.

Table 5

### *Pre-College Social Change Model of Leadership Scales*





### Experiences with Leadership since Starting College

The majority of respondents from the main sample responded “Never” (78.9%) to the question, “Since starting college, have you ever participated in a leadership training or leadership education experience of any kind (ex. Leadership conference, alternative

spring break, leadership course, club president’s retreat)?” Table 7 displays data comparing the main sample to the comparator sample of students who responded “Yes” to the question, “*Since starting college, have you every participated in a leadership training or leadership education experience of any kind (ex. Leadership conference, alternative spring break, leadership course, club president’s retreat)*” and selected demographics. More traditionally-aged, senior status students, and students who indicated

Table 6

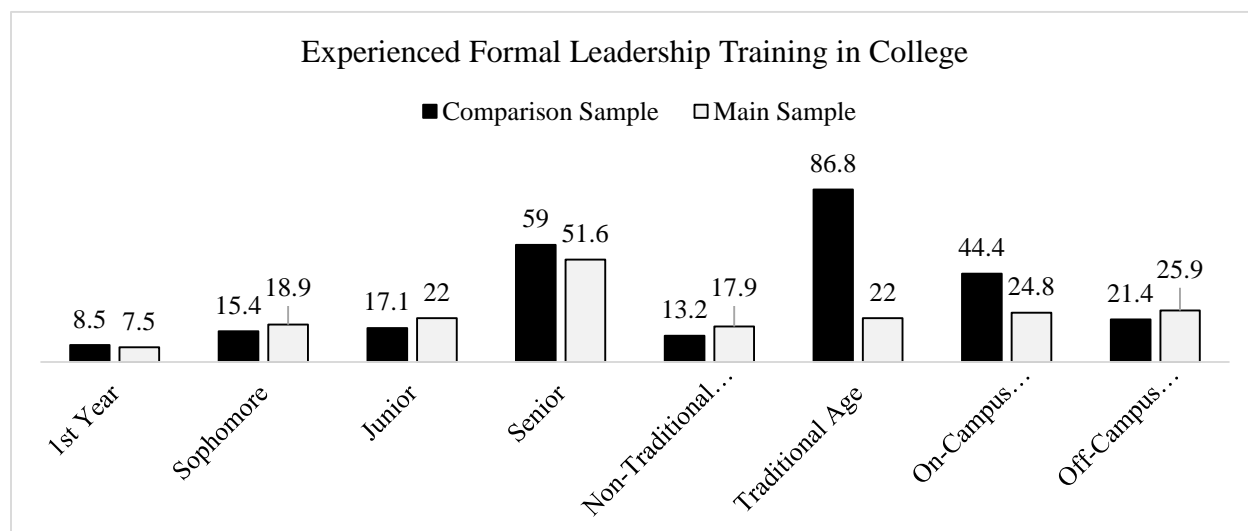
*Experienced a formal leadership training*

	<b>Main sample</b>	<b>Comparator Sample</b>
Yes	21.1	100
No	78.9	0

they work on-campus experienced formal leadership training more than students with the same demographics in the main sample.

Table 7

*Student Status: Experienced a formal leadership training*



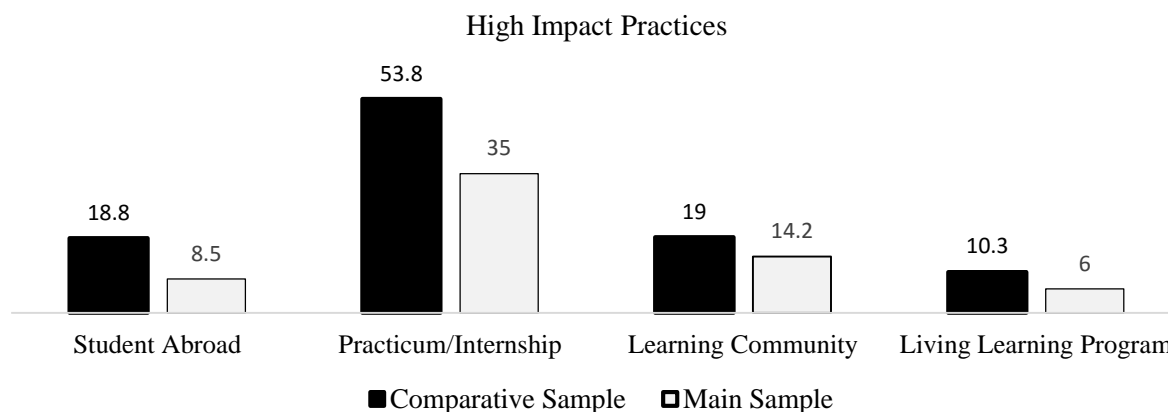
## High Impact Practices

George Kuh (2008) defines High Impact Practices (HIPs) as student involvement in learning practices that research proposes increases the rates of student retention and student engagement. Research suggests that student's participation in HIPs also increases rates of student retention

More students in the Comparator Sample had experienced a Practicum/Internship than students in the main sample who have never participated in a leadership experience.

and engagement (Kuh, 2008). Table 8 looks at the main sample and comparative sample in regard to students who responded "Yes" to the question, "Which of the following have you engaged in during your college experience?" **Appendix E** displays a further breakdown of students who responded "No" to experiencing a High Impact Practice. Overall, more students in the comparative sample indicated experiencing a High Impact Practice than students in the main sample.

Table 8

*“Yes” High Impact Practice Involvement***Socio-Cultural Discussions**

Previous research supports the importance of involvement with students whose background is different than yours. Research has shown evidence of growth in complex thinking and socio-cognitive growth, as well as an increase to openness to diversity in relation to socio-cultural conversations (Hurtado, 2005; Astin, 1993; Pascarella & Terenzini, 1991; Terenzini, Pascarella & Blimling, 1996).

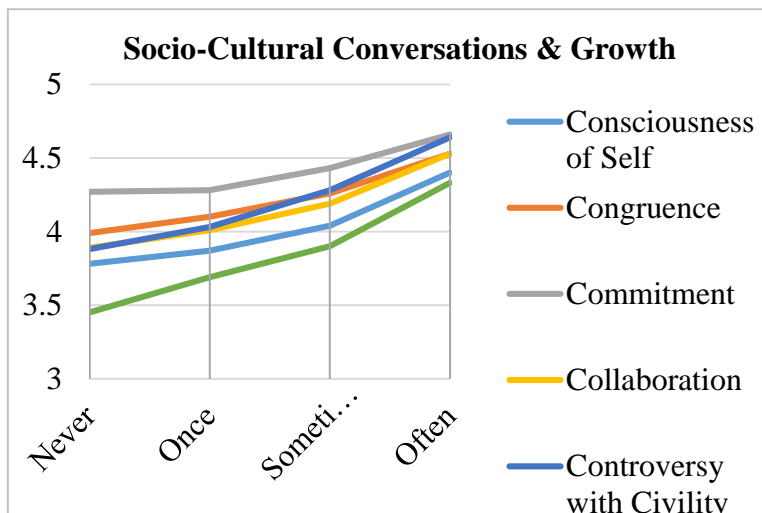
Overall, engaging in socio-cultural conversations with peers was a significant predictor for all six leadership capacities and a strong environmental predictor of growth across the SCM values.

According to Hurtado (2005), “Attention to diversity in the curriculum and co-curriculum, particularly in the first two years of college, results in student development along many dimensions of complex thinking and social cognitive growth.” In addition, several research has found that student’s interpersonal environments (including interactions with others) have the greatest impact on changes in values, attitudes, beliefs, and actions (Astin, 1993; Pascarella & Terenzini, 1991; Terenzini, Pascarella & Blimling, 1996).

In the 2015 MSL survey, students were asked a series of questions about their interactions with other students outside of class in an average school year. More respondents from the main sample answered

“Sometimes,” “Often,” or “Very Often” to questions asked about talking about different lifestyles/customs and discussions with students whose personal values were different from their own. However, when compared to the comparative sample, more students responded “Some-times,” “Often,” or “Very Often” across all six questions regarding socio-cultural conversations with others. Engaging in socio-cultural

Table 9

*Main Sample Socio-Cultural Conversations Growth*

conversations with peers was a significant predictor for all seven leadership capacities and a strong environmental predictor of growth across the SCM values. Students who reported “often” scored significantly higher on all SCM than their peers who responded, “Sometimes,” “Once,” and “Never.”

## Mentorship

Overall findings across previous studies indicate that mentoring efforts increase student retention rates (Nora & Crisp, 2007). Pascarella & Terenzini (1996) found student-faculty interactions (including career counseling, advising,

Students who work on-campus reported having a mentor more than students who work off-campus.

personal counseling, intellectual discussions, and informal socializing) contribute to the social integration and satisfaction of students. According to Rendon (1994) the more likely students view interactions as positive and feel they are integrated into the campus environment as valued members, the more likely students will persist in those interactions.

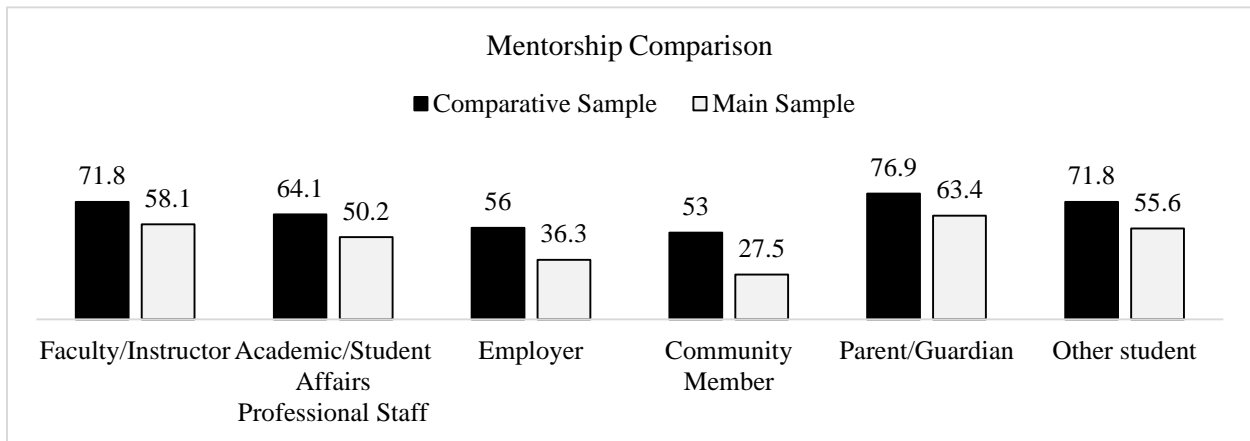
Data analysis found within the main sample that respondents identified “Other students” as mentors if they were earlier in their college careers (Freshman/Sophomore). Overall, students indicated “Faculty-Instructor” or “Parent-Guardian” more frequently as being a mentor during college than

“Academic or Student Affairs Professional Staff”, “Employer,” “Community Member,” and “Other Students.” Lastly, respondents in the comparative sample group responded “Yes” at significantly higher rates to having a mentor than students in the main sample. In addition, when conducting cross-tabulation based on student status, age, and student employment, students in the comparator sample reported “Yes” to having a mentor at significantly higher rates than students in the main sample who also reported “Yes”.

**Appendix D** displays additional data tables regarding experiences with mentors and selected student demographics.

Table 10

*Mentorship Comparison – Students who responded “Yes”*



## References

- Astin, A. W. (1993). *What matters in college?: Four critical years revisited*(Vol. 1). San Francisco: Jossey-Bass.
- Dugan, J.P., & Komives, S.R. (2007). Developing leadership capacity in college students: Findings from a national study. *A Report from the Multi-Institutional Study of Leadership*, College Park, MD: National Clearinghouse for Leadership Programs.
- Kuh, G. D. (2008). Excerpt from High-Impact Educational Practices: What They Are, Who Has Access to Them, and Why They Matter. *Assoc. of Am. Colleges and Univ., Washington, DC*.
- Higher Education Research Institute. (1996). *A social change model of leadership development: Guidebook version III*. College Park, MD: National Clearinghouse for Leadership Programs.
- Hurtado, Sylvia. "Linking Diversity and Educational Purpose: How Diversity Affects the Classroom Environment and Student Development." (2001).
- Hurtado, S. (2005). The next generation of diversity and intergroup relations research. *Journal of Social Issues*, 61(3), 595-610. Doi: 10.1111/j.1540-4560.2005.00422.x
- Nora, A., & Crisp, G. (2007). Mentoring students: Conceptualizing and validating the multi-dimensions of a support system. *Journal of College Student Retention: Research, Theory & Practice*, 9(3), 337-356. Doi: 10.2190/CS.9.3.e
- Pascarella, E. T., & Terenzini, P. T. (1976). Informal Interaction with Faculty and Freshman Ratings of Academic and Non-Academic Experience of College 1. *The Journal of Educational Research*, 70(1), 35-41. Doi: 10.1007/BF01191156
- Rendon, L. I. (1994). Validating culturally diverse students: Toward a new model of learning and student development. *Innovative Higher Education*, 19(1), 33-51.

Terenzini, P. T., & Pascarella, E. T. (1991). Twenty years of research on college students: Lessons for future research. *Research in Higher Education*, 32(1), 83-92. Doi: 10.1007/BF00992835

Terenzini, P. T., Pascarella, E. T., & Blimling, G. S. (1996). Students' out-of-class experiences and their influence on learning and cognitive development: A literature review. *Journal of College Student Development*, 37(2), 149-162.

Wagner, W. (2007). The social change model of leadership: A brief overview. *Concepts & Connections*, 15(1), p. 9.

## Appendix A

### *Demographics*

	<b>Main sample</b>	<b>Comparator sample</b>
Male	43.6	40.4
Female	56.4	59.6
Students of Color	13.8	16.7
White/Caucasian	72	68.4
Race not Listed	1.8	1.8
Multiracial	12.4	13.2
First-year	17.4	8.5
Sophomore	18.7	15.4
Junior	26.6	17.1
Senior+	37.3	<b>59</b>
Full-time	93.3	96.6
Part-time	6.7	3.4
Traditional Age (under 24)	76.3	<b>86.8</b>
Non-Traditional Age (24 or Older)	<b>23.7</b>	<b>13.2</b>
Transfer Student	<b>37.4</b>	<b>30.8</b>
First-Generation Student	18.7	18.6
Reported Disability	11.1	13.2
Military	3.5	3.5
Work off-campus	25.9	21.4
Work on-campus	24.8	<b>44.4</b>
Live Off-Campus	75.9	75.4
Live On-Campus	24.1	24.6

## Appendix B

Table 1

*Pre-test SCMI & Sub-Study Values/Outcomes*

	<b>Main sample</b>	<b>Comparator Sample</b>
Pre-test Omnibus	3.80	3.89
Pre-test Resilience	3.54	3.58
Pre-test Social Perspective Taking	3.56	3.62
Pre-test Spirituality	1.50	<b>1.77</b>
Pre-test Leadership Efficacy	2.73	<b>2.94</b>
Pre-Test Complex Cognitive Skills	2.92	2.94
Pre-test Hope	3.84	3.88

*\* Omnibus refers to growth across all six values of the Social Change Model*

*\*The data is the mean score for the SCM scales and sub-study scales.*

## Appendix C

Table 1

### High School Leadership Experiences

Looking back to when you were in high school, how often did you engage in the following activities:  
(Select one response for each)

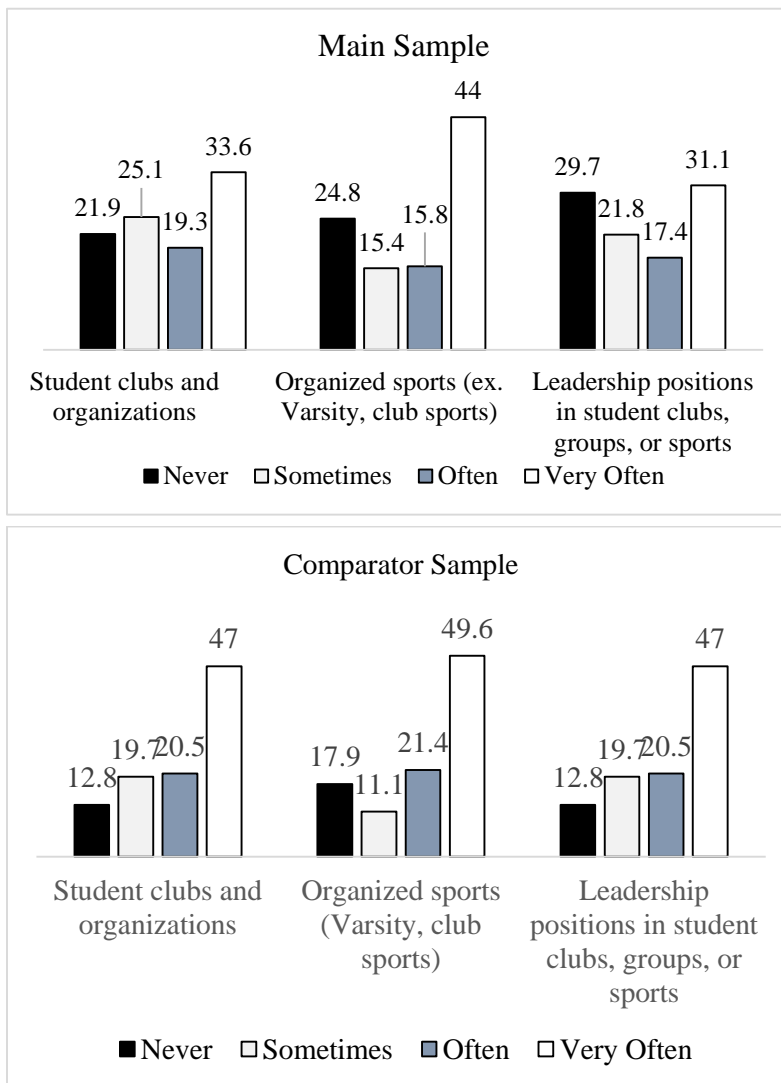
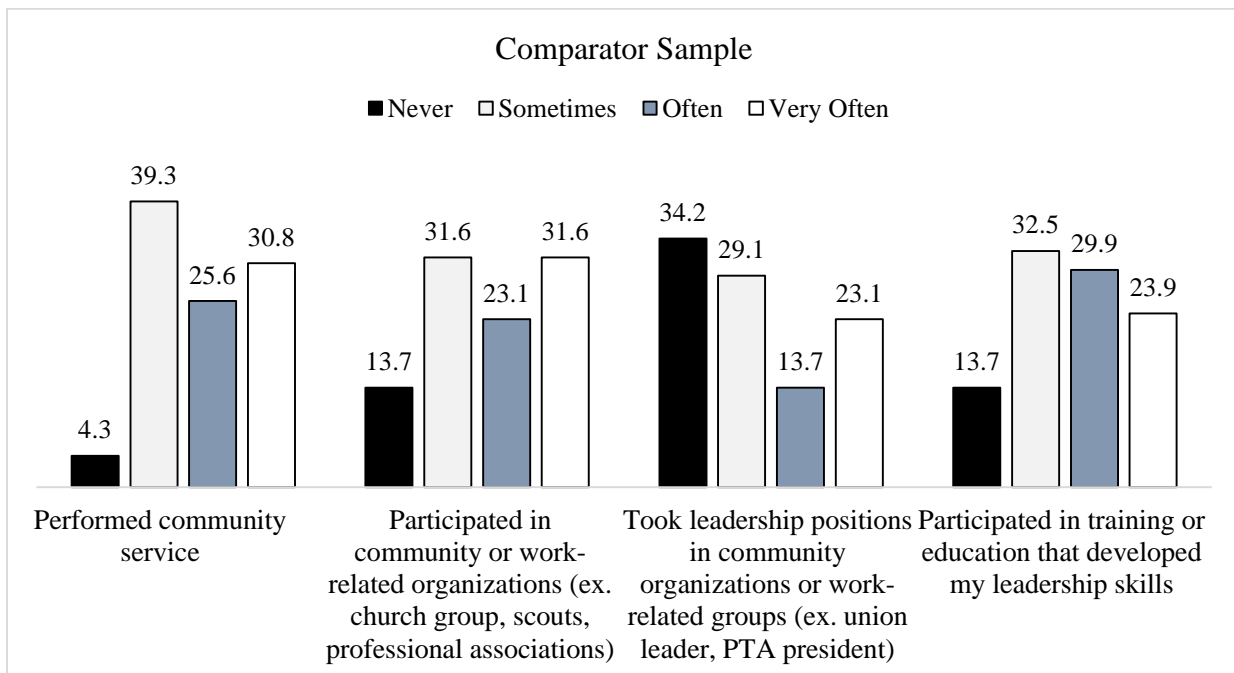
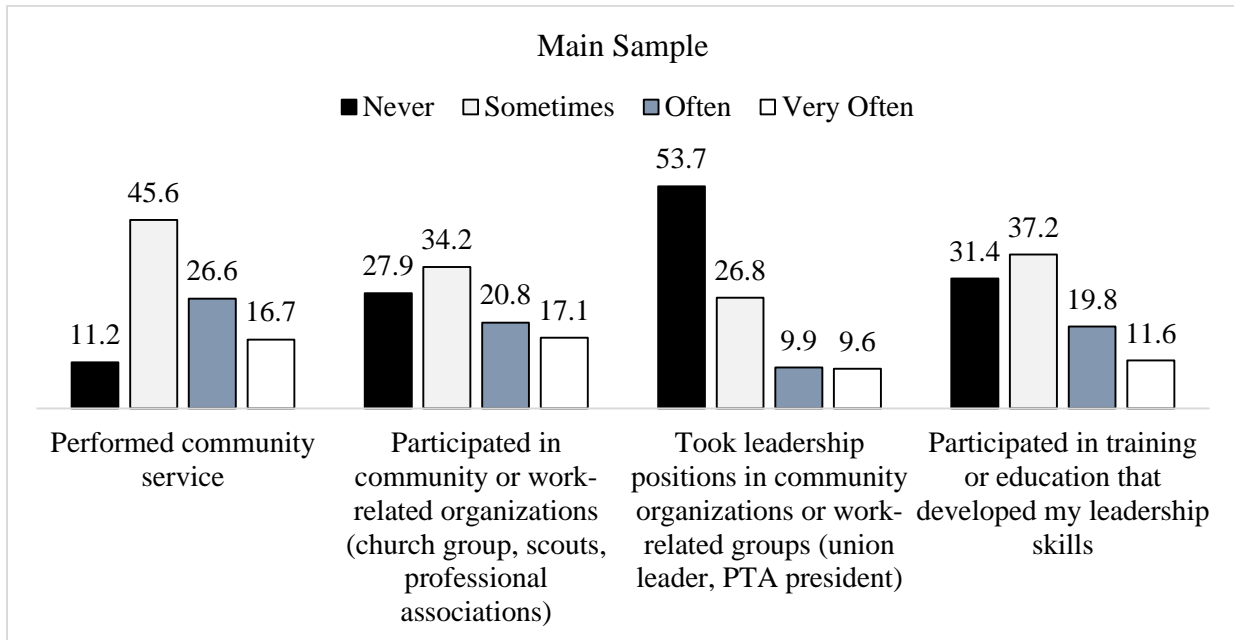


Table 2

*Pre-College Leadership Experiences*

*Looking back to before you started college, how often did you engage in the following activities? (Select one response for each)*



## Appendix D

Table 1

*Mentorship Comparison—Students who responded “Yes”*

	Main sample		Comparator Sample	
	Yes	No	Yes	No
Faculty/Instructor	58.1	41.9	<b>71.8</b>	28.2
Academic or Student Affairs Professional Staff	50.2	49.8	<b>64.1</b>	35.9
Employer	36.3	63.7	<b>56</b>	44
Community Member	27.5	72.5	<b>53</b>	47
Parent/Guardian	63.4	36.6	<b>76.9</b>	23.1
Other student	55.6	44.4	<b>71.8</b>	28.2

Table 2

*Mentorship & Student Status— Students who responded “Yes”*

Mentor	First Year		Sophomore		Junior		Senior (4 <sup>th</sup> year +)	
	M	C	M	C	M	C	M	C
Faculty/Instructor	52.4	70	57.6	72.2	55.9	65	62.3	73.9
Academic or Student Affairs Professional Staff	45.7	70	53.8	66.7	50.8	55	50.2	65.2
Employer	10.1	10	29.5	38.9	38.5	57.9	50	66.7
Community Member	17.8	50	25.9	72.2	29.1	50	31.7	49.3
Parent/Guardian	66.8	70	66.1	83.3	59.7	60	63	81.2
Other student	60.1	80	62.9	72.2	49.8	65	53.9	72.5

*M = Main; C = Comparator*

Table 3

*Mentorship & Age*

Mentor	Main Sample			
	Traditional Age		Non-Traditional Age	
	Yes	No	Yes	No
Faculty/Instructor	60	40	51.5	48.5
Academic or Student Affairs Professional Staff	50.5	49.5	47.4	52.6

Employer	35.6	64.4	36.5	63.5
Community Member	26	74	29.7	70.3
Parent/Guardian	70.8	29.2	38.7	61.3
Other student	61.1	38.9	36.5	63.5
<b>Comparator Sample</b>				
<b>Mentor</b>	<b>Traditional Age</b>		<b>Non-Traditional Age</b>	
	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>No</b>
Faculty/Instructor	71.7	28.3	73.3	26.7
Academic or Student Affairs Professional Staff	64.6	35.4	60	40
Employer	51	49	86.7	13.3
Community Member	51.5	48.5	60	40
Parent/Guardian	77.8	22.2	73.3	26.7
Other student	69.7	30.3	86.7	13.3

Table 4

*Mentorship & Student Employment*

	<b>Main Sample</b>			
	<b>On-Campus</b>		<b>Off-Campus</b>	
<b>Mentor</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>No</b>
Faculty/Instructor	70	30	54	46
Academic or Student Affairs Professional Staff	57.3	42.7	49.4	50.6
Employer	58.9	41.1	50.6	49.4
Community Member	30.7	69.3	33	67
Parent/Guardian	70.7	29.3	57.4	42.6
Other student	65	35	46.9	53.1
<b>Comparator Sample</b>				
<b>Mentor</b>	<b>On-Campus</b>		<b>Off-Campus</b>	
	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>No</b>
Faculty/Instructor	88.5	11.5	64	36
Academic or Student Affairs Professional Staff	73.1	26.9	60	40
Employer	78.4	21.6	64	36
Community Member	55.8	44.2	48	52
Parent/Guardian	86.5	13.5	76	24
Other student	80.8	19.2	76	24

## Appendix E

Table 1

### *High Impact Practices Involvement across Comparison Groups*

	Main sample		Comparator Sample	
	Yes	No	Yes	No
Study Abroad	8.5	91.5	18.8	80.3
Practicum/Internship	35	65	53.8	46.2
Learning community	14.2	85.8	19	81
Living Learning Program	6	94	10.3	89.7
Research w/ Faculty	14.5	85.5	25	75
1st Yr Seminar course	37.5	62.5	39.3	60.7
Culminating Senior Experience	11.7	88.3	24.1	75.9

Table 2

### *High Impact Practices & Class Standing\_Responded "Yes"*

HIPs	First Year		Sophomore		Junior		Senior (4 <sup>th</sup> year +)	
	M	C	M	C	M	C	M	C
Study Abroad	2.6	10	8.0	11.1	6.5	15	12.9	23.5
Practicum/Internship	7.3	10	25	38.9	35.2	60	52.8	62.3
Learning community	10.3	30	13.2	27.8	14.8	20	16.2	14.7
Living Learning Program	9.4	10	6.4	16.7	5.6	10	4.4	8.8
Research w/ Faculty	9.4	20	12	38.9	14	25	18.6	22.1
1st Yr Seminar course	58.8	60	38.2	38.9	31.1	25	31.8	40.6
Culminating Senior Experience	1.7	20	2.8	11.1	3.1	5.0	26.9	33.8

*M = Main; C = Comparator*

Table 3

### *High Impact Practices & Student Employment\_Responded "Yes"*

HIPs	Work On-Campus		Work Off-Campus	
	M	C	M	C
Study Abroad	10.5	19.2	6	16.7
Practicum/Internship	46.2	59.6	39.9	76
Learning community	14.7	11.5	13.4	16.7
Living Learning Program	9	9.6	2	4.2
Research w/ Faculty	27	30.8	10.8	20.8
1st Yr Seminar course	40.2	40.4	28.9	28
Culminating Senior Experience	19.2	32.7	10.5	20.8

*M = Main; C = Comparator*

Table 4

*High Impact Practices & Age\_Responded “Yes”*

<b>HIPs</b>	<b>Traditional</b>		<b>Non-Traditional</b>	
	<b>M</b>	<b>C</b>	<b>M</b>	<b>C</b>
Study Abroad	8.4	19.4	7.3	13.3
Practicum/Internship	34.1	53.5	38.1	60
Learning community	13.3	17.3	12.8	20
Living Learning Program	6.7	12.2	1.8	0
Research w/ Faculty	15.6	25.5	10.6	20
1st Yr Seminar course	43.3	39.4	19.4	33.3
Culminating Senior Experience	11.7	24.5	11	20

*M = Main; C = Comparator*