

Leadership Efficacy: Findings from the Multi-Institutional Study of Leadership

Center for the Study of Student Life

July 2016

INTRODUCTION

The Multi-Institutional Study of Leadership (MSL) is an international survey that investigates the extent to which higher education institutions develop student leaders. First administered in 2006, the MSL adapted a version of Astin's (1993) "input-environment-output" (I-E-O) college impact model to conceptually shape the study and the Social Change Model of Leadership Development (SCM) as the theoretical framework (HERI, 1996) with the goal of studying socially responsible leadership development. Over time, the MSL evolved to include a wider set of theoretical concepts beyond the SCM, including contemporary leadership theory, social psychology and human development, and critical and justice-based perspective (MSL, 2015). The Ohio State University is one of 97 colleges and universities that participated in the 2015 iteration of the study.

The survey was administered to a random sample of 4,000 undergraduate students on the Ohio State University's Columbus campus via an online survey during spring semester 2015. An additional 1,000 students who were involved in a leadership program were also surveyed for comparison purposes. A total of 1,571 students completed the survey (1,224 from the random sample and 347 from the leadership sample). The response rate was 30.6 percent for the random sample and 34.7 percent for the leadership sample. The response rate for national benchmark institutions (88 of the 97 schools that participated in 2015) was 31 percent.

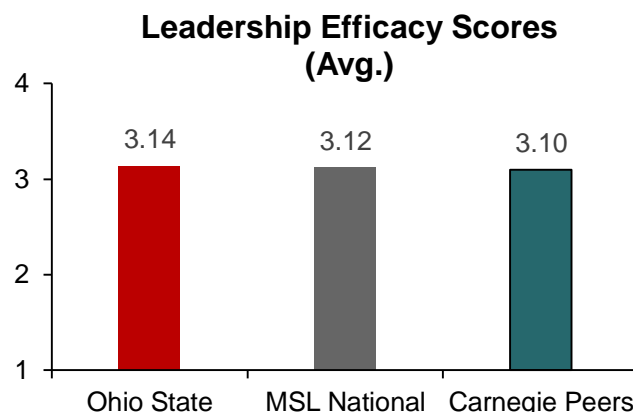
This report uses the random sample of respondents ($n = 1,224$) to examine leadership efficacy, which refers to individuals' beliefs in their likelihood to be successful when engaging in leadership (Bandura, 1997; Hannah et al., 2008). There are three parts to this report. First, responses to each item on the scale are summarized using frequency tables. Then, demographic comparisons in average leadership efficacy scores are presented, along with an indicator of any statistically significant group differences. Finally, relationships between average leadership efficacy scores and student engagement in a variety of academic, civic and co-curricular experiences are explored.

HIGHLIGHTS

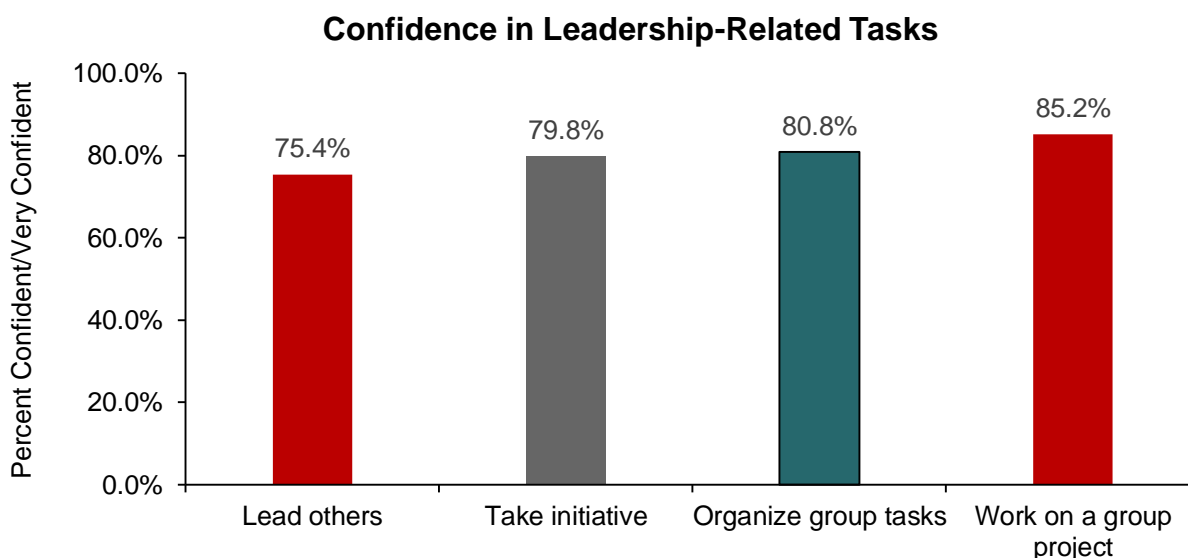
- There was a statistically significant difference in the leadership efficacy scores of international and domestic students, with international students reporting significantly lower confidence in their leadership skills ($M = 2.87$) than domestic students ($M = 3.15$).
- Students who were veterans of the military had significantly higher leadership efficacy scores ($M = 3.49$) than students who were not veterans ($M = 3.12$).
- First-year students had lower average leadership efficacy scores ($M = 2.97$) than students of higher academic ranks.
- Both being actively involved in a college organization and holding a leadership role in a college organization were positively associated with leadership efficacy.
- More frequent involvement in community service during college was positively related to students' leadership efficacy scores.
- Students who reported taking action in the community to address a social or environmental problem during college had significantly higher leadership efficacy scores than those who never did so.

LEADERSHIP EFFICACY: TRENDS AT OHIO STATE

The leadership efficacy scale asked respondents to rate their confidence on various tasks related to leadership on a 1 – 4 scale, with higher numbers indicating more confidence in their leadership. Leadership efficacy scores were computed by taking the mean score of all four items on the scale. Ohio State students received an average leadership efficacy score of 3.14 (SD = 0.65). This average score is comparable with the national average and with scores at other research-intensive institutions.



As illustrated by the following chart, most Ohio State students report high levels of confidence in their ability to carry out leadership-related tasks. Over three-quarters of the survey participants felt confident or very confident in their ability to lead others and take initiative to improve things. Over 80 percent felt confident in collaborative leadership activities.



Though overall levels of leadership efficacy are high at Ohio State, this varies based on student demographic and academic characteristics. In addition, leadership efficacy varies depending on a students' past experiences while in college. The following sections summarize student differences in average leadership efficacy scores based on student characteristics and experiences.

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

DEMOGRAPHIC COMPARISONS

Demographic differences in average leadership efficacy scale scores were examined using independent samples t-tests and/or analysis of variance (ANOVA). There were significant racial/ethnic differences in leadership efficacy, and international students had lower average leadership efficacy scores than domestic students. Meanwhile, students with higher academic rank and military/veteran students were found to have higher leadership efficacy. The finding that students who live on-campus have lower leadership efficacy is likely conflated with academic rank, as students who live in residence halls are primarily first-years or sophomores.

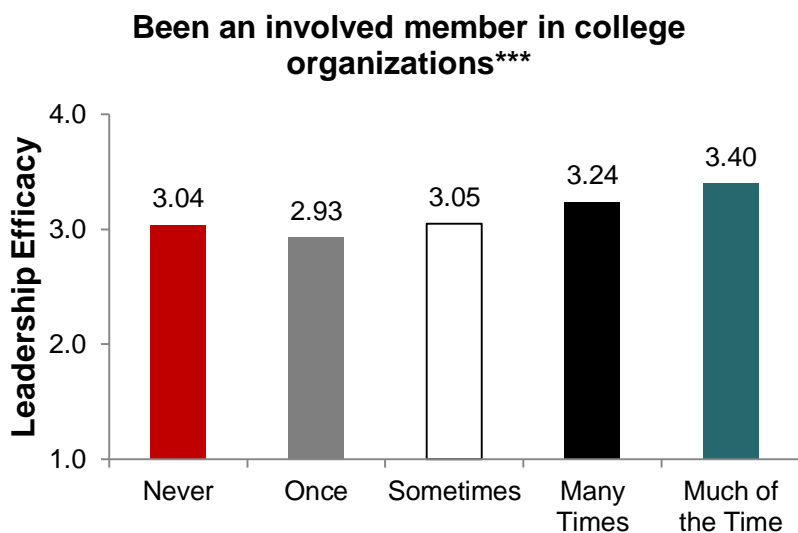
		Means	Statistically Significant	
Gender	Male (<i>n</i> = 436)	3.15		
	Female (<i>n</i> = 559)	3.13		
Sexual Orientation	Heterosexual (<i>n</i> = 905)	3.14		
	Bisexual, Gay/Lesbian, Queer, Questioning (<i>n</i> = 90)	3.08		
First Generation	First generation student (<i>n</i> = 124)	3.10		
	Non-first generation student (<i>n</i> = 863)	3.14		
International Student	International student (<i>n</i> = 53)	2.87	**	
	Domestic student (<i>n</i> = 943)	3.15		
Race/Ethnicity	White/Caucasian (<i>n</i> = 745)	3.15		
	Middle Eastern/Northern African (<i>n</i> = 10)	3.38		
	African American/Black (<i>n</i> = 49)	3.23		
	Asian American (<i>n</i> = 63)	2.84	***	
	Latino(a)/Hispanic (<i>n</i> = 12)	3.44		
	Race not Listed (<i>n</i> = 42)	2.90		
Varsity Athletes	Athlete (<i>n</i> = 16)	3.05		
	Non-athlete (<i>n</i> = 996)	3.14		
	Military/Veteran	Veteran (<i>n</i> = 36)	3.49	**
		Non-veteran (<i>n</i> = 962)	3.12	
	Class Rank	Freshman/First-year (<i>n</i> = 174)	2.97	
Sophomore (<i>n</i> = 236)		3.16	**	
Junior (<i>n</i> = 272)		3.19		
Senior (4th year and beyond) (<i>n</i> = 322)		3.19		
Age	Traditional age (18 - 23) (<i>n</i> = 887)	3.14		
	Non-traditional age (24 or older) (<i>n</i> = 111)	3.11		
Transfer	Started college at Ohio State (<i>n</i> = 718)	3.14		
	Started college elsewhere (<i>n</i> = 294)	3.13		
Enrollment	Part-time enrollment (<i>n</i> = 42)	3.05		
	Full-time enrollment (<i>n</i> = 970)	3.14		
Residence	Off-campus housing (<i>n</i> = 699)	3.17	*	
	On-campus housing (<i>n</i> = 292)	3.06		

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

RELATIONSHIPS BETWEEN LEADERSHIP EFFICACY, INVOLVEMENT AND SOCIAL CHANGE BEHAVIORS

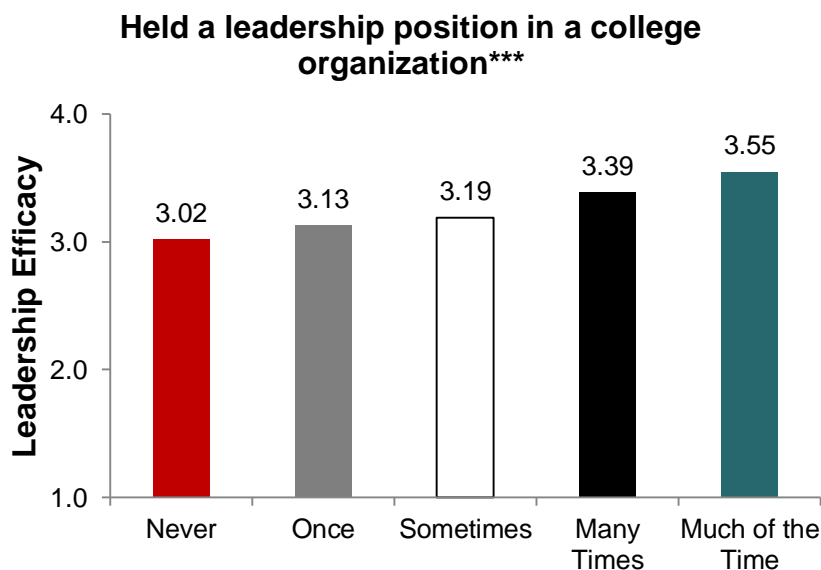
INVOLVEMENT AND LEADERSHIP EFFICACY

The relationships between leadership efficacy and student involvement in co-curricular activities, both on- and off-campus, were examined using statistical tests of significance to determine if students involved in different types of activities demonstrated significantly different average leadership efficacy scores. The activities examined include participation in leadership training, involvement in college organizations, involvement in off-campus community organizations, and holding a leadership position in either college or off-campus organizations.



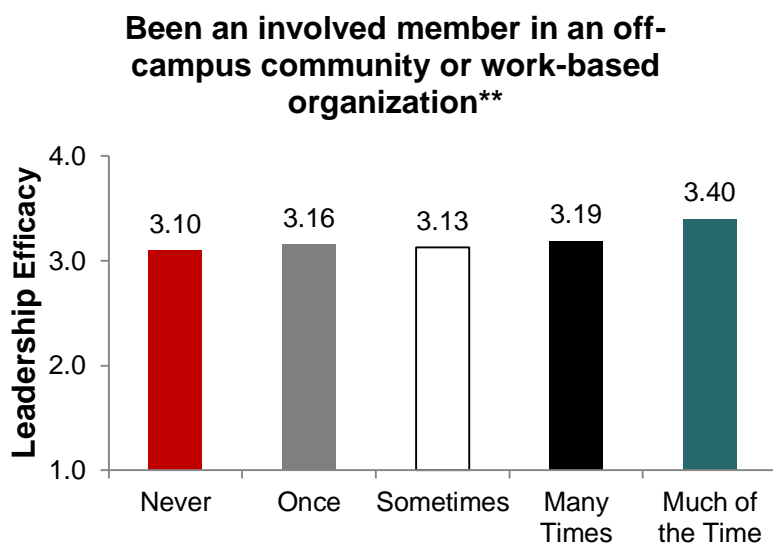
Involvement in college organizations was positively associated with leadership efficacy, though the effect was primarily observed for students who were involved more frequently. The 39.1 percent of students who participated in college organizations many or much of the time had greater average leadership efficacy scores than students who were not involved in college organizations at all, or who were only involved once or sometimes during college.

In addition, there was a positive relationship between leadership efficacy and student organization leadership. The 19.3 percent of students who reported holding a leadership position in a college organization many or much of the time had significantly higher average leadership efficacy scores than the 68.2 percent of students who held a leadership position never or once. Holding a leadership position once during college was not associated with significantly higher leadership efficacy scores than never holding a leadership position.



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

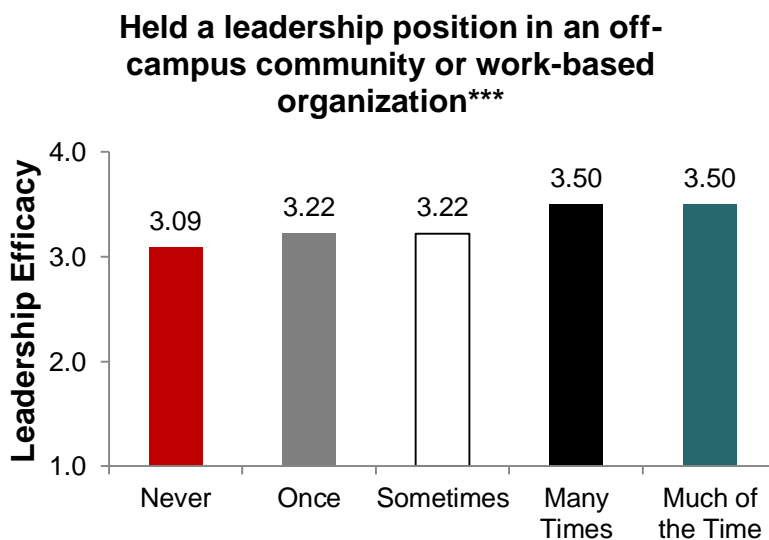
The prior findings suggest a positive relationship between leadership efficacy and students' involvement in, and leadership of, on-campus organizations. There was also a positive association between student involvement in off-campus community organizations and leadership efficacy.



More frequent involvement in off-campus organizations was associated with higher leadership efficacy. However, this effect was primarily observed for the 7.4 percent of students who reported being involved in these organizations much of the time. Students involved in off-campus organizations less frequently did not demonstrate a statistically significant increase in leadership efficacy, compared to those who were never involved.

In addition, there was a positive relationship between holding a leadership position in an off-campus community organization and leadership efficacy. The 8.6 percent of students who held a leadership position in an off-campus organization many or much of the time had significantly higher average leadership efficacy scores than the 78.1 percent of students who did not hold a leadership position in an off-campus organization during college.

Together, the findings for both on-campus and off-campus organization involvement suggest that frequently being involved in these organizations, and taking leadership positions within them, is associated with higher leadership efficacy.



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

Finally, participation in leadership training during college was associated with leadership efficacy scores. Students who participated in leadership training during college had significantly higher average leadership efficacy scores than students who did not participate in a leadership training. Approximately a third of students had participated in some type of leadership training during college.

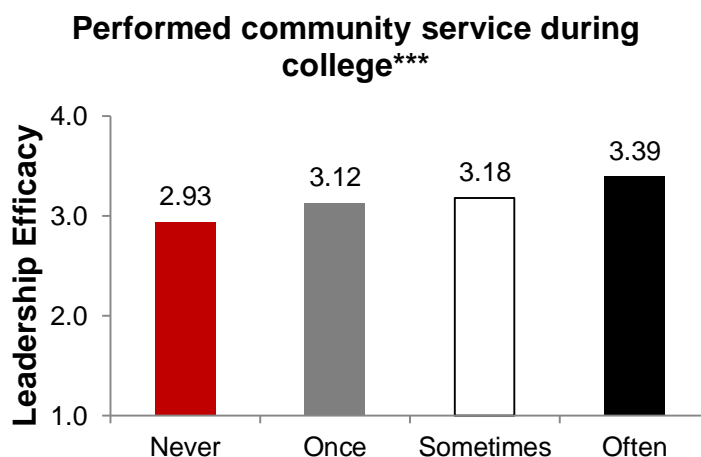
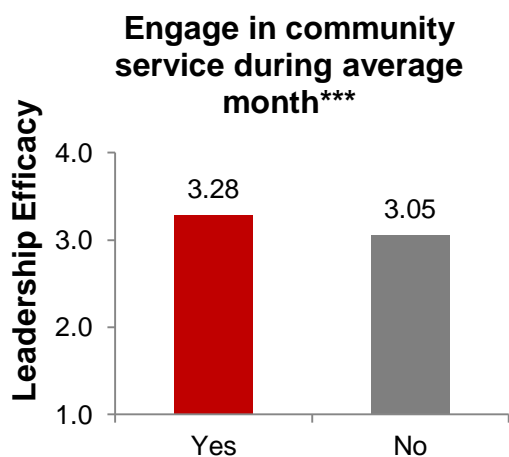
These findings suggest that experiences such as participating in leadership training, being involved in an organization on- or off-campus, and holding a leadership position are associated with higher confidence in one's own leadership skills. However, these findings should not be interpreted causally. While they could be due to a causal relationship between these experiences and leadership efficacy, these findings could also indicate that students who are attracted to these experiences already have a higher sense of leadership efficacy.



SOCIAL CHANGE BEHAVIORS AND LEADERSHIP EFFICACY

This section explores relationships between leadership efficacy and social change behaviors. Social change behaviors include participating in community service, taking action on social issues, attending political rallies, raising awareness about issues, and being involved in organizations that address social, community, or environmental issues

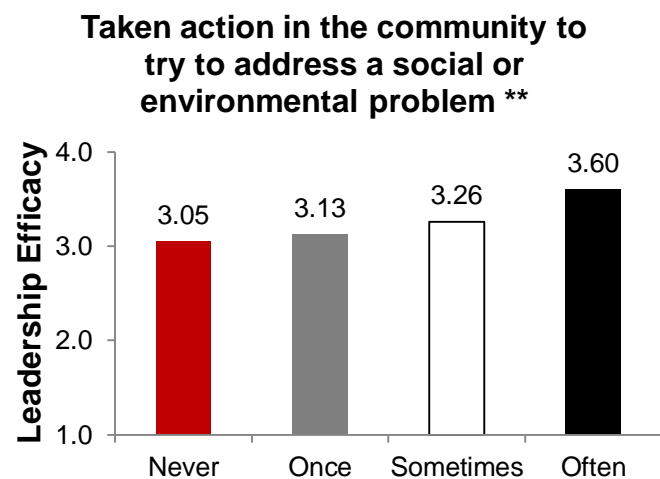
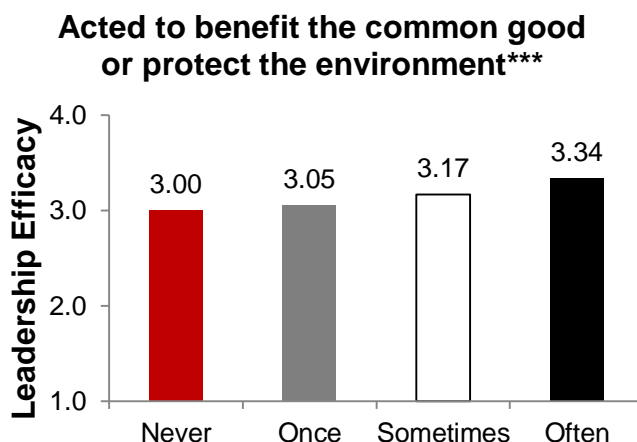
Just under 40 percent of students reported that they engaged in community service in an average month, and these students had significantly higher leadership efficacy than those who did not engage in any community service. In addition, there was a positive association between how frequently students engaged in community service during college and their leadership efficacy. Students who engaged in community service once or sometimes during college had higher average leadership efficacy scores than those who never engaged in community service. Students who performed community service often during college were the most confident in their leadership skills.



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

In addition to engaging in community service, other types of social change behaviors include taking direct action to address a social or environmental issue, being actively involved in organizations that address social and environmental issues, or taking part in efforts to raise awareness of social problems. These types of social change behaviors were also positively associated with students' leadership efficacy.

There was a positive association between taking action to benefit the common good or protect the environment and leadership efficacy scores. Students who reported often taking action to benefit the common good or protect the environment, though making up only 15.1 percent of the sample, had significantly higher average leadership efficacy scores than students who reported doing this less frequently. However, taking action to benefit the common good or protect the environment once during college was not associated with higher leadership efficacy compared to never doing so.



Similarly, there was a positive relationship between community action and leadership efficacy scores. In particular, 5.8 percent of students who reported often taking action within the community to address a social or environmental problem had higher average leadership efficacy scores than students who took action less frequently. The 19.6 percent of students who did this sometimes during college had higher leadership efficacy than those who never did so.

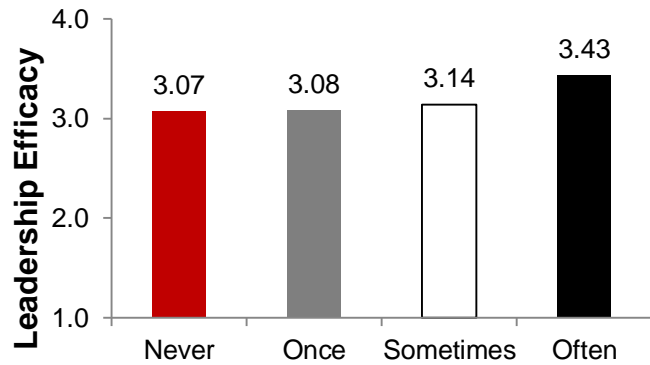
Taking direct action to address a social or environmental issue is positively related to leadership efficacy, particularly when students report taking these actions often during college. However, the direction of this relationship cannot be assumed based on these findings alone. While the experience of taking action to address social and environmental issues could theoretically result in higher leadership efficacy, students who already had higher leadership efficacy may be more likely to take these actions during college.

In addition to taking direct action to individually address social or environmental issues, students can enact social change behaviors by being involved in organizations that address social issues or by working collaboratively to address community needs. The next section analyzes the relationship between these collective actions and students' leadership efficacy during college.

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

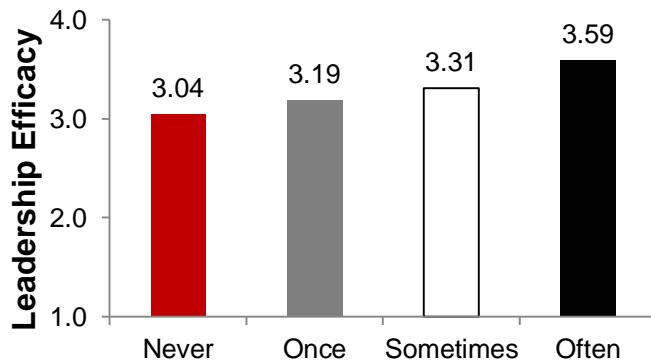
Overall, there was a positive association between involvement in organizations that address social or environmental needs and leadership efficacy. However, similar to the trends observed with prior social change behaviors, the largest difference in leadership efficacy was observed in the 14.6 percent of students who reported that they were often involved in these types of organizations. However, students who were involved in these organizations once or sometimes did not have significantly different scores than students who were never involved in these types of organizations. A very similar trend was observed for involvement in organizations that address the concerns of the community. These findings suggest that involvement in these types of organizations may be associated with higher leadership efficacy, but primarily for those students who are often involved.

Actively involved with an organization that addresses a social or environmental issue ***



In addition to being involved with a community organization, students can work collaboratively toward social change by communicating with leaders about community concerns, or by working with others to improve the campus or community. Findings suggest that both of these actions are associated with higher leadership efficacy.

Communicated with campus or community leaders about a pressing concern ***

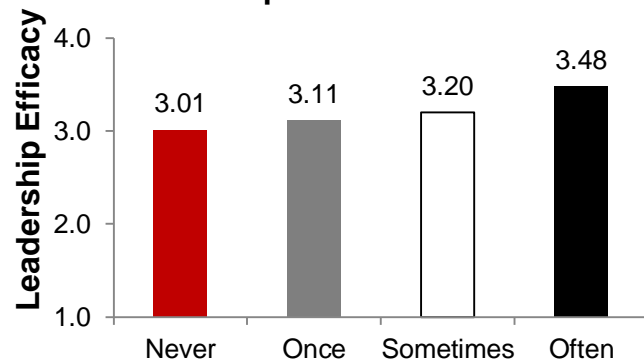


Overall, there was a positive association between communicating with campus leaders about a pressing concern and leadership efficacy. Students who reported communicating with leaders about community concerns more frequently had higher average leadership efficacy scores. Students who reported doing this even once had higher confidence in their leadership skills than those who had never done this. Overall, about 38.5 percent of students reported communicating with a community leader about a pressing concern at least once during college.

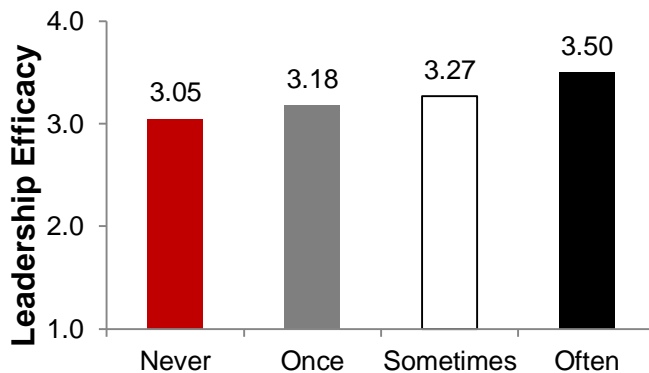
* $p < .05$, ** $p < .01$, *** $p < .001$

Overall, there is a positive association between working collaboratively to make the campus or community a better place and average leadership efficacy scores. Students who reported that they often did this had significantly higher leadership efficacy scores than students who did so never or less frequently. Students who did this sometimes had higher leadership efficacy than those who never did. Working collaboratively to improve the campus/community once was not associated with higher leadership scores compared to those who never did.

Worked with others to make the campus or community a better place ***



Worked with others to address social inequality? ***



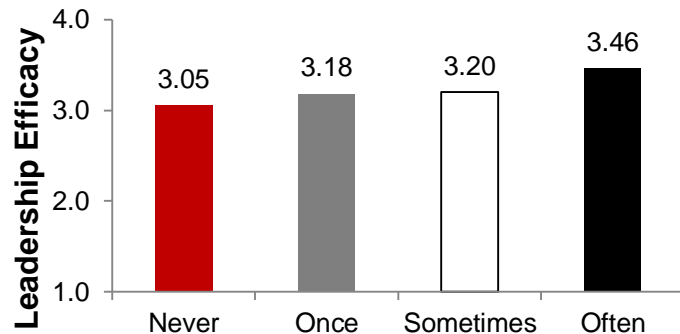
Students who reported working with others to address social inequality more frequently during college had higher average leadership efficacy. In particular, students who reported doing this sometimes or often during college had significantly higher average leadership efficacy scores than those who never did. However, a relatively small proportion of students reported having done this during college. Only 16.8 percent reported working collaborative to address inequality sometimes during college, while 6.0 percent reported doing this often.

Together, these findings suggest that collective action and communicating with others to improve the community or address social issues is positively associated with leadership efficacy. Students who report doing this more often are also more likely to feel confident in their leadership abilities.

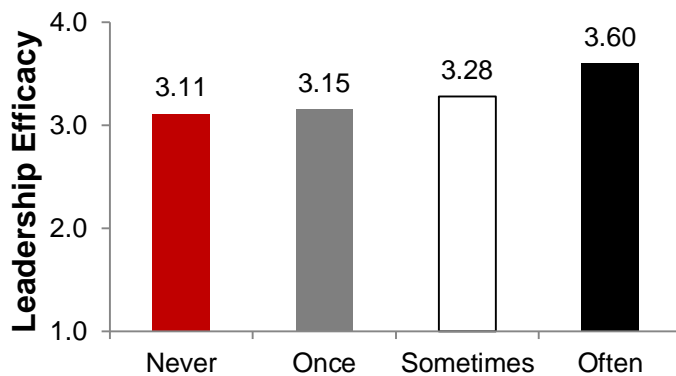
* $p < .05$, ** $p < .01$, *** $p < .001$

The last type of social change behavior analyzed are those related to raising awareness of, and provoking change in, social problems. Acting to raise awareness about a campus, community or global problem was positively associated with leadership efficacy. Students who did this sometimes or often had significantly higher leadership efficacy scores than those who never did so. Just over half (52.9 percent) of respondents indicated that they had never acted to raise awareness of a social problem.

Acted to raise awareness about a campus, community or global problem *



Took part in a protest, rally, march or demonstration?



Similarly, taking part in a protest, rally, march or demonstration during college was associated with higher leadership efficacy scores. The highest leadership efficacy scores were observed among the very small proportion (2.2 percent) of students that reported taking part in protests often. This was one of the least common social change behaviors, with over three-quarters of the respondents indicating that they had never taken part in a protest, rally, march or demonstration during college.

Social change actions aimed at raising awareness of social problems and advocating for change are related to higher leadership efficacy. As with prior findings, caution should be used in interpreting these findings as the direction and causal nature of these relationships are not clear. These findings could indicate that students who have higher leadership efficacy are more likely to engage in social change behaviors, or that students who engage in these behaviors during college develop better leadership efficacy.

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

CONCLUSION

The aim of this report was to explore the nature of college student leadership efficacy using a random sample of Ohio State undergraduate students who took the MSL during the spring 2015 semester. Analyses were used to investigate overall levels of leadership efficacy and to explore the relationships between leadership efficacy and students' experiences during college.

Results indicate that more frequent involvement in student and off-campus organizations is associated with higher leadership efficacy. In particular, students who take leadership positions within these organizations demonstrated higher leadership efficacy. Students who reported working collaboratively with others to effect social change also demonstrated higher leadership efficacy. Finally, leadership efficacy was positively associated with behaviors related to raising awareness and advocating for social change. With each of these activities, the highest leadership efficacy scores were observed among those who were often or frequently involved.

One limitation of these findings is that causal conclusions cannot be established because information about involvement, behaviors and leadership efficacy were collected at the same point in time. While these findings could indicate that involvement and social change behaviors promote the development of higher leadership efficacy, they could also indicate that students with higher levels of leadership efficacy are more likely to become involved in these types of organizations and behaviors during college. In fact, it may be that the relationship between students' experiences and their leadership efficacy is reciprocal in nature. Recommendations drawn from these findings include providing students with ample and diverse opportunities to practice leadership and work toward social change, both on-campus and in the community, while also providing students with the support to develop confidence in their own leadership.

SOURCES

- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: Harper Collins.
- Connor, K. M. & Davidson, J. R. T. (2003). Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety*, 18:76–82.
- Day, D. V., Harrison, M. M., & Halpin, S. M. (2009). *An integrative approach to leader development: Connecting adult development, identity, and expertise*. New York, NY: Routledge.
- Dugan, J. P., Kodama, C., Correia, B., & Associates. (2013). *Multi-Institutional Study of Leadership insight report: Leadership program delivery*. College Park, MD: National Clearinghouse for Leadership Programs.
- Dugan, J. P., Bohle, C. W., Woelker, L. R., & Cooney, M. A. (2014). The role of social perspective-taking in developing students' leadership capacities. *Journal of Student Affairs Research and Practice*, 51(1), 1–15.
- Gehlbach, H. (2004). A new perspective on perspective taking: A multidimensional approach to conceptualizing an aptitude. *Educational Psychology Review*, 16(3), 207-234.
- Hannah, S. T., Avolio, B. J., Luthans, F., & Harms, P. D. (2008). Leadership efficacy: Review and future directions. *Leadership Quarterly*, 19, 669-692.
- Higher Education Research Institute. (1996). *A social change model of leadership development: Guidebook version III*. College Park, MD: National Clearinghouse for Leadership Programs.
- Multi-Institutional Study of Leadership. (2015). Retrieved from <http://leadershipstudy.net/>
- Underwood, B., & Moore, B. (1982). Perspective-taking and altruism. *Psychological Bulletin*, 91(1), 143-173.

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