

# Factors Influencing Socially Responsible Leadership Development in College of Agriculture Students

Kristin A. Kovar<sup>1</sup> and Jon C. Simonsen<sup>2</sup>

## Abstract

*The purpose of this study was to examine factors impacting college student leadership development within a college of agriculture at the University of Missouri. This study employed descriptive relational survey methods to examine the impact of involvement factors (participation in organizations, community service and leadership education) on college student leadership development. The target population was all junior and senior students in the College of Agriculture, Food and Natural Resources at the University of Missouri (N=1,124). Out of the calculated sample size (n=287), 107 participants completed the online instrument (37.3%). In the examination of the leadership outcomes, the greatest mean was reported for the outcome of commitment and the lowest mean was reported for the outcome of change. Most students were involved with two to five different organizations during their college career. A majority (92.5%) of the students reported that they have engaged in community service during their college career, although 44.9% of respondents did not participate in community service on a regular basis. Students responded as being involved in one to two short-term leadership education programs, but no long-term leadership education programs. Eight separate linear regression models were analyzed to determine the impact of involvement factors on the development of socially responsible leadership.*

**Keywords:** socially responsible leadership; college student; leadership development

## Introduction

In a modern era of revolutionary leadership theories such as spiritual leadership, transformational leadership, and socially responsible leadership, colleges and universities are maintaining traditional hierarchical approaches to leadership (Kezar & Holcombe, 2017; Komives, Lucas, & McMahan, 2007) leaving college graduates unprepared to meet the leadership demands of current employers (Mytelka, 2012). Universities historically exist to develop the next generation of leaders and therefore it follows that graduates in every field of work or study will be expected to demonstrate leadership skills to be successful in their chosen careers (Perkin, 1997). Graduates should be prepared to participate in creating global communities dedicated to the common good of all citizens (Rost & Barker, 2000), which requires collaboration, social responsibility and ethics. Unfortunately, leadership experiences in college tend to focus on organizational structures with hierarchical frameworks (Komives; et al., 2007), focusing on a top-down approach to leadership and negating the idea of leadership for all.

Programs in agricultural leadership prepare students for careers in agricultural education, extension, management, human resources, governmental relations, strategic planning, organizational training, management consulting, community development, political officials and many other agri-

---

<sup>1</sup> Kristin Kovar is an Assistant Professor of Agricultural Education in the Department of Agriculture, Culinology and Hospitality Management at Southwest Minnesota State University. Southwest Minnesota State University, 1501 State St., Marshall, MN 56258, kristin.kovar@smsu.edu.

<sup>2</sup> Jon Simonsen is an Associate Professor of Agricultural Education and Leadership in the Division of Applied Social Sciences at the University of Missouri, 126 Gentry Hall, Columbia, MO 65211, simonsenj@missouri.edu.

business related fields. Typically, these careers are known for following the industrial paradigm of leadership, but preparing future leaders to enter the agricultural workforce is necessary for the growth and innovation of the agricultural industry (Grant, 2012). The College of Agriculture, Food and Natural Resources at the University of Missouri, which houses the Department of Agricultural Education and Leadership places an emphasis on the development of agricultural leaders that are capable of providing leadership in their careers and communities. These future leaders need to be fully versed in socially responsible leadership in order to meet the needs of current employers.

There is a need for agricultural leaders with a passion and competence for positive social change (Grant, 2012). For instance, the National Impact Study of Leadership Development in Extension (NISLDE) identified 13 broad leadership competencies necessary for Extension leaders. They were: (1) solving problems, (2) directing projects or activities, (3) forming and working with groups, (4) planning for group action, (5) managing meetings, (6) communicating effectively, (7) developing proficiency in teaching, (8) mobilizing for group action, (9) understanding and developing oneself, (10) understanding financial matters, (11) understanding leadership, (12) understanding society, and (13) understanding social change (Paxson, Howell, Michael, & Wong, 1993). Within these competencies are connections to the values of the Social Change Model (i.e., individual, group, and society). In addition, students interested in non-profit organizations, such as governmental and non-governmental agencies with an agenda for social justice, would benefit greatly from socially responsible leadership instruction. Socially responsible leadership is important to the field of agricultural leadership because it offers a foundational approach to leaders in the pursuit of positive social change.

In addition to the need for socially responsible leadership skills, it is important to acknowledge that colleges and universities operate under a hierarchical leadership paradigm (Kezar & Holcombe, 2017; Komives; et al., 2007). In order to be successful in today's society, college students need a non-hierarchical approach to experiencing leadership (Bischetti, 2001). With a focus on hierarchical experiences, college students are not being educated in all aspects of leadership, specifically modern paradigms such as socially responsible leadership, which could be related to the lack of leadership abilities noted by current employers. An examination of factors that influence college student leadership development is critical for the preparation of socially responsible leaders, particularly in a college of Agriculture, which is career-based, preparing students primarily for a career in the agricultural industry.

Research is needed in the field of agricultural leadership, specifically in conjunction with socially responsible leadership to meet the demands of several areas of the National Research Agenda (Roberts, Harder, & Brashears, 2016) for the American Association for Agricultural Education. Research priority three states the need for a determination of "competencies needed for an agriculture and natural resource workforce" (p. 31) while priority five seeks data to measure "outcomes and impacts of educational programs in agriculture" (p. 43). A main goal of this research is to not only determine the levels of socially responsible leadership in college students, but to utilize the findings in offering recommendations for the preparation of the workforce and in designing programs to meet societal needs. Finally, research priority six demands an impact on local communities through the participation of all members in "social, economic, cultural and political life" (p. 50) to create a sustainable community fostering connections among all stakeholders with an ultimate goal of thriving in an environment of change. The core of socially responsible leadership and the Social Change Model, which serves as the conceptual framework for this study, is positive societal change. In turn, this lends itself toward the use of a post-industrial paradigm of leadership research. A further goal of this study is to further academic discussions of ways of developing agricultural leaders competent and confident in their abilities so that they are able to impact their communities in making positive societal change.

### Conceptual Framework

The framework that guided this study was the Social Change Model (SCM) of leadership development. Under this framework, leadership is defined as “a purposeful, collaborative, values-based process that results in positive social change” (Komives, Wagner, & Associates, 2009, p. xii). Under this framework, a model for undergraduate college student leadership emerged through the combined efforts of the Higher Education Research Institute and the Eisenhower Leadership Development program, (HERI, 1996). With a concern that college students needed to value collective action and the ability to work with others toward socially responsible goals, leadership educators and scholars conceptualized the SCM of leadership development. These scholars also had a concern for the prevalence of a positional leadership paradigm through traditional hierarchical leadership instruction methods which fueled this need as well.

The SCM encourages highly participatory, non-hierarchical leadership where leadership is a process, not a position, and is accessible to all people. The concept does not refute the idea of positional leadership, but instead focuses on the process the leader goes through and their attitude toward positive social change. The SCM of leadership development has two central goals: to assist students in their leadership self-awareness and leadership competence and to facilitate positive social change (HERI, 1996). The model was specifically designed for students to “increase their self-knowledge, enhance leadership competence, and result in positive social change on campus or in the community beyond” (Roberts, 2007, p. 57).

The model examines leadership development from three different perspectives: Individual Values, Group Values, and Society/Community Values (Figure 1).



Figure 1. Social Change Model of Leadership Development. (HERI, 1996)

Within the Individual Values perspective, concepts such as development of personal qualities, self-awareness, and personal values are examined. Specific values within the Individual Values perspective include Consciousness of Self, Congruence, and Commitment. Within the Group Values

perspective, collaboration and interaction between the group and individual are examined. The Group Values perspective encompasses Collaboration, Common Purpose, and Controversy with Civility. Within the Society/Community Values, the focus is placed on bringing about change for the common good. The Community Values perspective contains Citizenship. These seven values collectively contribute to the eighth critical value, Change.

As the post-industrial paradigm of leadership suggests that leadership is relational and change-oriented, the social change model of leadership development is concerned with similar central principles. This framework guided us in the examination of variables impacting the socially responsible leadership outcomes of college students. The dependent variables in this study are the socially responsible leadership outcomes expressed through the Social Change Model which serves as the frame for this study. Specifically, the variables examined are Consciousness of Self, Congruence, Commitment, Collaboration, Common Purpose, Controversy with Civility, Citizenship and Change. Each value is then associated with one of three values: Individual, Group, and Society/Community. In turn, each level is tied to the others. Personal leadership development at the individual level helps facilitate the process at the group level. Similarly, collaborative group experiences enhance a leader's development at the individual level (Wagner, 2006). The independent variables consistent in the literature as attributing to leadership development among college students include: gender, organizational involvement, community service participation, and leadership education. As a fixed variable, gender is strongly supported in the literature as a variable of interest (Dugan, 2006; Dugan & Komives, 2007; Dugan & Komives, 2010; Eagly & Carli, 2003; Eagly, Johannesen-Schmidt, & van Engen, 2003; Fisher, Overland, & Adams, 2010; Kezar & Moriarty, 2000). Historically, gender has been studied in all paradigms of leadership and should be continued to be examined as those paradigms and approaches change. The remaining variables of interest can all be considered types of involvement.

### **Purpose and Objectives**

The purpose of this study was to examine factors impacting college student's development of socially responsible leadership within a College of Agriculture, Food and Natural Resources at the University of Missouri. The following research objectives were generated to guide the study:

1. Describe college students' development of socially responsible leadership based on the eight outcomes of the Socially Responsible Leadership Scale-R2.
2. Describe college students' level of organizational involvement and participation.
3. Describe college students' involvement in community service.
4. Describe college students' participation in leadership education.
5. Describe the extent to which gender, participation in organizations, community service, and leadership education contribute to college students' socially responsible leadership outcomes within the College of Agriculture, Food and Natural Resources.

### **Methods**

This study employed descriptive relational survey methods to examine the impact of involvement factors (participation in organizations, community service and leadership education) on college student leadership development. Relational research methods test for statistical associations between variables without inferring causal relationships (Ary, Jacobs, Razavieh, & Sorensen, 2006). In addition, researchers are able to identify the nature of the relationship between variables such as strength and direction of association utilizing correlational research methods, identifying those variables most highly related to a particular outcome (Ary, et al., 2006).

The target population was all junior and senior students in the College of Agriculture, Food, and Natural Resources at the University of Missouri ( $N = 1,124$ ). The sample was a simple random sample of the stated population. With randomization, a representative sample from a population provides the ability to generalize to a population (Creswell, 2009). The frame was obtained through the administrative office of the College of Agriculture, Food and Natural Resources. Junior and senior level students were selected because of their increased probability of exposure to leadership due to the amount of time gaining experiences in college.

With a total population of 1,124 (525 juniors and 599 seniors) in the College of Agriculture, Food and Natural Resources, the sample size was calculated to be 287 with a 95% confidence level and a  $\pm 5$  confidence interval. One hundred seven participants completed the online instrument (37.3%). An additional 39 participants (13.6%) attempted to complete the instrument, but were removed from the study due to incomplete responses, such as replying to only the first two sections of the Socially Responsible Leadership Scale.

There were 43 male (40.2%) and 64 female (59.8%) participants in this study. A total of 50 juniors (46.7%) and 57 seniors (53.3%) completed the online instrument. The majors with the largest numbers of participants were Animal Sciences (20.6%), Parks, Recreation, & Tourism (12.1%), and Hospitality Management (10.3%).

The instrument utilized in this study was an online questionnaire separated into three sections. The first section was comprised of the Socially Responsible Leadership Scale-Revised version two (SRLS-R2). The SRLS-R2 was obtained with permission through the National Clearinghouse for Leadership Programs at the University of Maryland. This section was used to measure the dependent variables in the study which were students' values and outcomes of the Social Change Model (SCM). We created the second and third sections of the instrument to measure the independent variables in the study, as well as determine the demographics of the population. The second section of the instrument was used to measure the students' college leadership experiences, including participation organizations, community service activities and leadership education. To examine organizational involvement, the instrument focused on type of organization, leadership positions held, length of involvement, and number of different organizations involvement. Pertaining to community service activities, the instrument sought to determine the type of service, frequency of service, and percentage of students involved. Regarding leadership education, the instrument examined the length of experience and level of participation. Students were asked to report their involvement with short-term, moderate-term, and long term leadership experiences. Examples of short-term experiences included an individual or one-time workshop, retreat, conference, lecture or training. Moderate-term experiences included a single leadership course, multiple or on-going retreats, conferences, institutes, workshops, and/or trainings. Long-term experiences included a multi-semester leadership program, leadership certificate program, leadership major or minor. Finally, the third segment of the instrument was utilized to obtain demographic information from the participants, such as gender, class level and college major.

A panel of experts outside the research team, comprised of an Assistant Professor in Agricultural Education, an Assistant Professor in Educational Leadership and Policy Analysis, along with two doctoral candidates well versed in survey design, examined the questionnaire for face and content validity. Along with a factor analysis, the SRLS-R2 was previously pilot tested and found to be reliable (Dugan, 2006). Utilizing test-retest, a pilot test was conducted to estimate the reliability of the second section of the instrument. The Pearson  $r$  ranged from .44 to .94 with a mean of .79 for all 29 participants. Cronbach's alpha ( $\alpha=.72$ ) was determined for the second portion of the instrument, which consisted of 17 items.

Data were analyzed through SPSS. The alpha level was established *a priori* at .05. Descriptive statistics describing the sample were reported in addition to means and standard deviations. Objective one was analyzed by describing the mean and standard deviation for each of the eight outcomes on the SRLS-R2. Objective two was analyzed by describing frequency and percentage of participation in specific organizations, the number of organizations students claimed participation, as well as the leadership position held in organizations. The mean and standard deviation of student perception of overall involvement was also reported. Objective three was analyzed by describing percentages and frequencies of student responses regarding participation in community service, including degree of participation, origin and type of service. The mean and standard deviation of student perception of overall involvement was also reported. The fourth objective was analyzed by describing the frequency and percentage of participation in short, moderate, and long leadership education experiences, as well as participation in specific leadership education programs. The mean and standard deviation of student perception of overall involvement was also reported. Finally, the fifth objective utilized multiple linear regression models to determine the variance in the leadership outcomes due to gender, organizational involvement, community service participation, and the various methods of leadership education. The dependent variables were the eight socially responsible leadership outcomes and the independent variables were organizational involvement, community service participation and leadership education. In this study gender is considered a confounding variable because it is not the focus of the study, but statistically it is related to the independent variables. The method utilized to control for the extraneous variable is to build the variable into the research design as an independent variable in the study. The analysis of more than one predictor in the regression model allows for a greater potential for predictive power as compared to a simple linear regression which only examines one predictor variable.

### Findings

Students responded to questionnaire items to determine the level of socially responsible leadership development. Of the eight outcome variables of the Socially Responsible Leadership Scale, the outcome of commitment, which reflected the students' perception of an investment in an idea or person, both in terms of intensity and duration that motivates the individual and drives the collective effort, had the greatest mean of 4.44 ( $SD = .51$ ). In contrast, the outcome with the lowest mean was change with 3.76 ( $SD = .46$ ). Change is the desire of making a better world and a better society for oneself and others through the collective efforts of individuals, groups, and communities working together to make that change. Out of the four larger constructs, Individual, Group, Society and Change, the highest mean was found in Individual ( $M = 4.19$ ,  $SD = .45$ ), while the lowest mean was found in Society ( $M = 3.76$ ,  $SD = .46$ ; Table 1).

Table 1

*Mean Outcomes of Socially Responsible Leadership Scale (N = 107)*

Socially Responsible Construct	<i>M</i>	<i>SD</i>
Commitment	4.44	.51
Congruence	4.18	.53
Common Purpose	4.10	.44
Collaboration	4.06	.45
Citizenship	4.00	.55
Consciousness of Self	3.95	.50
Controversy with Civility	3.85	.40
Change	3.76	.46

*Note:* 1 = Strongly Disagree, 2 = Disagree, 3 = Neither Agree nor Disagree, 4 = Agree, 5 = Strongly Agree

When examining the experiences of organizational involvement, students were able to choose from 49 different agricultural club offerings in the College of Agriculture, Food and Natural Resources including a None of the Above and Other. Fifteen respondents (14.0%) identified themselves as participants of the Pre-Veterinary Medicine Club. Sixteen respondents (15.0%) chose None of the Above, while 32 respondents (29.9%) chose Other. When asked the number of different organizations the student is involved with, the majority ( $f = 88$ , 74.7%) of the participants in this study were involved with two to five different organizations during their college career. Eight respondents (7.5%) indicated having no organizational involvement and two respondents (1.8%) indicated participating in more than five organizations during their college career. Regarding the participation in leadership roles, we determined the frequency of student participation in leadership roles and found 14 students (13.1%) identified as serving as president during their college career. An additional 14 students (13.1%) identified as serving as vice president of an organization during their college career. Fifteen students (14.0%) identified as serving as secretary of an organization during their college career. Finally, 28 students (26.2%) identified as serving as a committee chair in an organization. When asked to describe their overall level of involvement in organizations during their college career (1 = Not involved, 4 = Very involved), the calculated mean was 3.01 ( $SD = 0.85$ ).

Students were then asked to report their involvement in community service participation. A majority ( $f = 99$ , 92.5%) of the students reported engaging in community service during their college career. Further, a majority ( $f = 72$ , 67.3%) of students reported never taking a course that required a service component during their college career. Concerning one-time community service events, 57.0% of respondents ( $f = 61$ ) participated in 1-3 one-time events, 15.0% ( $f = 16$ ) participated in 4-6 one-time events and 2.8% ( $f = 3$ ) participated in more than seven one-time service events. In addition, 25.2% of respondents ( $f = 27$ ) indicated they had not participated in any one-time community service events. Regarding participation of students in community service on a regular basis, 44.9% of respondents ( $f = 48$ ) did not participate in community service on a regular basis, 24.3 % of respondents ( $f = 26$ ) participated in community service once a month, 22.4% of respondents ( $f = 24$ ) participated in community service once a week and 8.4% of respondents ( $f = 9$ ) participated in community service several times a week. Seventy two respondents (67.3%) completed community service with a student organization, 49 (45.8%) completed community service on their own, 43 (40.2%) completed community service as part of class, 33 (30.8%) completed community service in conjunction with a church. One respondent (0.9%) chose Other as the type of community service completed. The three most frequent types of service included fundraising ( $f = 52$ , 48.6%), environmental clean-up ( $f = 45$ , 42.1%), and collecting food or supplies ( $f = 40$ , 37.4%). In addition, when asked to describe their overall level of involvement in community service during their college career (1 = Not Involved, 4 = Very Involved), the calculated mean was 2.65 ( $SD = 0.70$ ).

Regarding leadership education, length of experience was indicated as impactful by the literature and therefore, the research sought to determine differences in length of leadership education. Regarding short-term experiences, 49.5% of respondents ( $f = 53$ ) reported having participated in one to two short-term experiences. An additional 22.4% ( $f = 24$ ) participated in three to four short-term experiences, 13.1% ( $f = 14$ ) participated in more than five short-term experiences and 15.0% ( $f = 16$ ) reported no experience with short-term leadership experiences. In reference to moderate-term leadership experiences, 39.3% of respondents ( $f = 42$ ) reported having participated in one to two experiences, 12.1% of respondents ( $f = 13$ ) participated in three to four experiences, 6.5% ( $f = 7$ ) participated in more than five experiences, and 42.1% of respondents ( $f = 45$ ) reported no experience with moderate-term leadership experiences. Finally, regarding long-term leadership experiences, 25.2% of respondents ( $f = 27$ ) reported participating in one to two experiences, 3.7% of respondents ( $f = 4$ ) participated in three to four experiences, 1.9% of respondents ( $f = 2$ ) participated in more than five experiences, and 69.2% of respondents ( $f = 74$ ) reported no experience with long-term leadership

experiences. Students were then asked to report their involvement with specific leadership programs. The leadership program with the highest frequency of participants was the College of Agriculture, Food and Natural Resources Student Organization Leadership Academy (SOLA) with 11.2% of respondents ( $f = 12$ ) having participated in the program. An additional 3.7% of respondents ( $f = 4$ ) indicated participation in the Agricultural Leadership minor and 1.9% of respondents ( $f = 2$ ) indicated pursuing an Agricultural Education major with an emphasis in leadership. When asked to describe their overall level of involvement in leadership education during their college career (1 = not involved, 4 = very involved), the calculated mean was 2.23 ( $SD = 0.94$ ).

In order to determine the impact of student organizational involvement, community service participation and leadership education on the development of socially responsible leadership, eight separate linear regression models were analyzed. The variable of gender was considered a confounding variable. Regarding the model for the outcome variable, common purpose (CP), explained 15.0% of the variance in common purpose and was significant at  $p = .003$  (Table 2).

Table 2

*Regression to Explain Variance in Common Purpose (n = 107)*

	<i>R</i>	<i>R</i> <sup>2</sup>	<i>b</i>	$\beta$	<i>t-value</i>	<i>p</i>
Model 1	.26	.07				.01*
Model 2	.39	.15				.003*
Organizational Involvement			.09	.17	1.51	.14
Community Service			.08	.13	1.17	.25
Leadership Education			.02	.05	0.49	.63
Gender			-.22	-.25	-2.65	.01*

Note: Adjusted  $R^2 = .16$ ;  $F_{4, 100} = 4.382$ ;  $p \leq .05$ .

In addition the outcome variable, citizenship (CZ), explained 13.0% of the variance in citizenship and was significant at  $p = .007$  (Table 3).

Table 3

*Regression to Explain Variance in Citizenship (n = 107)*

	<i>R</i>	<i>R</i> <sup>2</sup>	<i>b</i>	$\beta$	<i>t-value</i>	<i>p</i>
Model 1	.17	.03				.08
Model 2	.36	.13				.01*
Organizational Involvement			.08	.13	1.15	.25
Community Service			.12	.15	1.34	.18
Leadership Education			.07	.13	1.18	.24
Gender			-.18	-.16	-1.69	.09

Note: Adjusted  $R^2 = .10$ ;  $F_{4, 100} = 3.729$ ;  $p \leq .05$ .

Finally, Group Values were examined and it was determined that the model explained 9.0% of the variance in the group values and was significant at  $p = .05$  (Table 4).

Table 4

*Regression to Explain Variance in Group Values (n = 107)*

	<i>R</i>	<i>R</i> <sup>2</sup>	<i>b</i>	$\beta$	<i>t-value</i>	<i>p</i>
Model 1	.15	.02				.12
Model 2	.29	.09				.05*
Organizational Involvement			.07	.18	1.60	.11
Community Service			.01	.02	.19	.85
Leadership Education			.04	.10	.88	.38
Gender			-.10	-.14	-1.42	.16

*Note: Adjusted R<sup>2</sup> = .05; F<sub>4, 100</sub> = 2.369; p ≤ 0.05.*

### Conclusions/Implications/Recommendations

Based on the findings of the development of socially responsible leadership in college students, it can be concluded that the University of Missouri's College of Agriculture, Food and Natural Resources juniors and seniors' socially responsible leadership self-perceptions vary only slightly among the eight socially responsible constructs. When examined in real limits, the students rate themselves within the Agree limit for all eight constructs. In addition, when the overarching constructs are examined, it can be concluded that again, the results vary only slightly within the real limits of the scale. All results fell within the Agree limit across all four overarching constructs. Even though the findings may be sparse, valuable information can be gleaned. If students perceive themselves high in socially responsible leadership, does this imply that the students are receiving non-hierarchical leadership development in the college setting? The conclusions of objective one could imply that junior and senior students at the University of Missouri in the College of Agriculture, Food and Natural Resources have a high self-efficacy in their own perceptions of their leadership development. Finally, beyond the fact that the students perceptions of their leadership across the four overarching constructs, the students had a slightly stronger connection to individual values rather than group, society, or change. Therefore, it can be implied that the students have a high sense of consciousness of self, congruence and commitment as seen within the Individual Values perspective.

Participants in this study were involved with multiple organizations during their college career as compared to those that did not participate in organizations or those that participated in an excess of organizations during their college careers. The culture of the University of Missouri is one that values involvement and organizational participation. The conclusions of objective two imply that the junior and senior students within the college dedicate their time and energy to organizations both within the college and outside the college. Is the level of participation a direct outcome of the culture of the university or the dedication of agricultural students in general?

Based on the findings regarding participation in leadership roles we concluded that students most frequently served in positions with the least amount of responsibility, such as a committee chair of an organization, but to a lesser degree served in positions that require more responsibility, such as secretary, vice president and president of an organization. Are students simply looking to participate in a variety of organizations instead of fully dedicating themselves to one worthy cause? It is important to note that the number of students dedicating themselves to leadership positions may be due to the selected population. Juniors and seniors have been in college longer and therefore have more years to dedicate themselves to organizations and choose to pursue leadership roles.

Students within the college are participating in community service, typically as one-time events, not on a regular basis. Students may not have an excess of time to devote to community service

as this competes with a myriad of other activities and obligations. When compared to the percentage of students per year that engage in community service based on a study by the Cooperation for National and Community Service, a substantial difference is noted (CNCS, 2012). The students at the University of Missouri responded with a much higher percentage of participation than the national average. It could be that the selected population has a propensity for community service or there may be a difference of definition of community service between the two groups.

It can be further concluded that the students are typically completing the community service with an organization and in the area of fundraising. It is unknown whether the fundraising is specifically for the organization or as a donation for a specific need. It was interesting that the students stated they were involved with community service and a percentage indicated their community service was in conjunction with a class, but then denied participation in service learning courses. We acknowledge the differences between community service and service learning, but understand the propensity of service learning in conjunction with classes unlike the implementation of community service due to lack of stated learning objectives. This discrepancy may be due to a misunderstanding of what a service learning component of a course entails.

The conclusions of objective four imply that the students within the college choose to participate in short-term leadership experiences rather than moderate to long-term leadership experiences. This may be due to students starting leadership education on a trial basis or a lack of time available to devote to the longer programs. Even attending one short-term leadership program is shown to result in significantly higher leadership outcomes than those who had no training (Dugan & Komives, 2007; 2010). In addition, from the results it can be implied that students are not taking advantage of the leadership programs available to them. Whether they are aware of the leadership programs available through the College of Agriculture, Food and Natural Resources is unknown.

Based on the findings of the impact of gender, organizational involvement, community service participation and leadership education of junior and senior students at the University of Missouri within the College of Agriculture, Food and Natural Resources on the eight outcomes of the socially responsible leadership scale, it can be concluded that the only variables impacted were common purpose, citizenship, and the overarching construct of group values. In addition, it can be concluded that common purpose was most influenced by the independent variables, followed closely by citizenship and finally the group values.

Based on the conclusions it can be implied that students participating in organizations, community service, and leadership education have an increased leadership score in the common purpose construct. Therefore, students are learning skills necessary for building a group's vision and purpose through shared aims and values (HERI, 1996). In addition, the conclusions imply that students participating in organizations, community service, and leadership education have an increased leadership score in the citizenship construct. It can be further implied that participating in leadership activities has led to the ability of the individual to become responsibly connected to the community and the society through the leadership activity, fostering interdependence and a responsibility for the welfare of others (HERI, 1996). It is an interesting finding that the students ranked themselves lowest on the outcome change, but an impact was seen on citizenship. Both outcomes describe the importance of community and society impact. It may be that the students that participated in the different leadership experiences were better at seeing themselves as agents of change, as well as the importance of responsibility to their community.

Recommendations from this study include urging educators and organizational sponsors to aim to influence the culture by rewarding involvement and leadership within organizations more so than rewarding the number of organizations a student pledges membership. If more students are able to see

the benefit of true dedication to a cause, the culture may shift from the number of organizations in an email's tag line to an organization being a vehicle for making a difference on and off of campus. In addition, recommendations also include increasing the students' exposure and experience in leadership roles, incorporating service projects within a course, increasing student access and experience with leadership programs, and to teach for socially responsible leaders. Promoting leadership experience could empower students to see themselves as a vehicle for change. Students should be presented with real world problems and controversial issues to gain experience in making socially responsible decisions. Providing significant problems without simple solutions can challenge students to consider options available to the leader and determine how to make decisions accordingly.

Recommendations for further research include replicating the study with programs that offer an Agricultural Leadership emphasis or major within their college or university in order to determine whether socially responsible leadership is present within a varying student population. Further research is warranted due to the discrepancies in the findings. First, looking into why students might have said they have not participated in a service learning class, but then completing community service as part of a class. More information is needed to assess students' understanding of service learning and aspects of community service. In addition, qualitative research is recommended to identify specific aspects of organizational involvement, community service and leadership education participation and the resulting views on socially responsible leadership development. Specifically, an examination into student efficacy in making positive societal changes within their communities or the approach programs utilize in teaching leadership. Are hierarchical practices more prevalent than non-hierarchical approaches in teaching leadership to college students? Finally, further research is necessary in the area of the development of socially responsible leaders, specifically within the context of agricultural education and leadership. The research base in agricultural education and leadership is sparse. A better understanding of preparing socially responsible leaders is needed for the agricultural leaders of tomorrow.

### References

- Ary, D., Jacobs, L.C., Razavieh, A., & Sorensen, C. (2006). *Introduction to research in education* (7<sup>th</sup> ed.). Toronto, Canada: Thomas Wadsworth.
- Bischetti, D. (2001). Service, spirituality, and social change. In C. L. Outcalt, S. K. Faris & K. N. McMahon (Eds.), *Developing non-hierarchical leadership on campus* (pp.129-138). Westport, CT: Greenwood Press.
- Cooperation for National and Community Service. (2012). Retrieved from: <https://www.nationalservice.gov/newsroom/press-releases/2012>
- Connors, J. J., & Swan, B. G. (2006). A synthesis of leadership development research in agricultural education: 1988-2003. *Journal of Agricultural Education*, 47(2), 1-13.
- Crawford, P., Lang, S., Fink, W., Dalton, R., & Fielitz, L. (2011). *Comparative analysis of soft skills: Perceptions of employers, alum, faculty, and students*. Washington, DC: Association of Public and Land-grant Universities.
- Dugan, J. P. (2006). Explorations using the social change model: Leadership development among college men and women. *Journal of College Student Development*, 47(2), 217-225. doi: 10.1353/csd.2006.0015
- 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.
- Dugan, J. P. & Komives, S. R. (2010). Influences on college students' capacity for socially responsible leadership. *Journal of College Student Development, 51*(5), 525-549. doi: 10.1353/csd.2010.0009
- Eagly, A. H., & Carli, L. L. (2003). The female leadership advantage: An evolution of the evidence. *The Leadership Quarterly, 14*, 807-834. doi:10.1016/j.leaqua.2003.09.004
- Eagly, A. H., Johannesen-Schmidt, M. C., & van Engen, M. L. (2003). Transformational, transactional, and laissez-faire leadership styles: A meta-analysis comparing women and men. *Psychological Bulletin, 129*, 569-591. doi: 10.1037/0033-2909.129.4.569
- Fischer, D. V., Overland, M., & Adams, L. (2010). Leadership attitudes and beliefs of incoming first-year college students. *Journal of Leadership Education, 9*(1), 1 – 35.
- Grant, H. (2012). Farmers, food, and the future: Take action now to attract the next generation of agricultural leaders. *International Food and Agribusiness Management Association, (15)*, 5-7.
- Higher Education Research Institute. (1996). *A social change model of leadership development: Guidebook version III*. College Park, MD: National Clearinghouse for Leadership Programs.
- Kezar, J., & Holcombe, E. M. (2017). *Shared leadership in higher education: Important lessons from research and practice*. Washington, DC: American Council on Education.
- Kezar, A. J., & Moriarty, D. (2000). Expanding our understanding of student leadership development: A study exploring gender and ethnic identity. *Journal of College Student Development, 41*, 55-68.
- Komives, S. R., Lucas, N., & McMahon, T. R. (2007). *Exploring leadership: For college students who want to make a difference* (2<sup>nd</sup> ed.). San Francisco, CA: Jossey-Bass.
- Komives, S. R., Wagner, W., & Associates. (2009). *Leadership for a better world: Understanding the social change model of leadership development*. San Francisco: Jossey-Bass.
- Paxson, M. C., Howell, R. E., Michael, J. A., & Wong, S. K. (1993). Leadership development in Extension. *Journal of Extension, 31*(1).
- Perkin, H. (1997). An overview of the history of higher education. In L. F. Goodchild & H. S. Wechsler (Eds), *The History of higher education*, ASHE reader series (2<sup>nd</sup> ed.). Boston, MA: Pearson Custom Publishing.
- Roberts, D. C. (2007). *Deeper learning in leadership: Helping college students find the potential within*. San Francisco, CA: Jossey-Bass.
- Roberts, T. G., Harder, A., & Brashears, M. T. (Eds). (2016). *American Association for*

*Agricultural Education national research agenda: 2016-2020*. Gainesville, FL: Department of Agricultural Education and Communication.

Rost, J. C., & Barker, R. A. (2000). Leadership education in colleges: Toward a 21<sup>st</sup> century paradigm. *Journal of Leadership Studies*, 7(1), 3-13. doi: 10.1177/107179190000700102

Wagner, W. (2006). The social change model of leadership: A brief overview. *Concepts & Connections*, 15(1), 9. doi: 10.1.1.460.7478