

An Examination of Organizational Citizenship Behavior Characteristics Amongst Undergraduate Students

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Abstract

In addition to creating engaging learning environments agricultural educators must also focus on preparing the next generation to enter the workforce. The purpose of this study was to examine a potential entry point for both responsibilities. Specifically, this study focused on the organizational citizenship behavior (OCB) characteristics of undergraduate students enrolled in an agricultural education leadership or communication course. Within the literature it is well established that OCBs are related to positive organizational outcomes such as: higher levels of performance and reduced turnover intention. However, there is little research establishing the general OCB characteristics of undergraduate students enrolled in agricultural education leadership or communication courses. Of the five OCB factors examined, students exhibited the highest levels of courtesy followed by altruism; students reported the lowest levels of conscientiousness. The results indicate that agricultural educators in leadership or communication courses may find courtesy as an effective entry point for engaging learners. Additionally, the use of OCBs as a content area may help to provide workforce development opportunities. Preparing individuals with both the technical knowledge required for a career and the skills required for success should be a priority of agricultural educators. The current study provides recommendations and proposes OCBs as a potential candidate for success skill education.

Introduction

For better or worse, companies are corporate machines which exist to make a profit (Hagel et al., 2009). Individuals are the input into these machines, and often, this workforce is sustained by the influx of university-educated post-graduates (Grubb & Lazerson, 2005). In today's global economy, employees are often required to work in groups comprised of colleagues from different professional, ethnic, socio-economic, and personal backgrounds. Thus, the ability to be a good team player and work effectively with a variety of peers is a highly coveted skill (Clark, 2012). Managers are looking for high-capacity employees who can successfully collaborate with diverse personalities and maintain a network of connections (The Economist, 2018). The National Institute of Food and Agriculture (2015) reported a shortage of 22,500 college-educated employees for open positions within the agricultural industry. Therefore, the responsibility of adequately preparing all graduates entering the agricultural field becomes more critical such that new employees continue to be successful in the changing work environment.

Education and human resource development typically occur in three locations within the agricultural sector: (1) formalized education (public schools and higher education), (2) workforce education through public and private organizations, and (3) nonformal education programs (Rivera & Alex, 2008). For academia specifically, how can higher education professionals ensure their students are equipped with skills necessary to be marketable in the current job market? One method is developing emotionally intelligent individuals who cultivate an atmosphere of psychological safety. A social confidence characterized by interpersonal trust and

mutual respect between team members (Schneider, 2017; Duhigg, 2016), psychological safety is built by behaviors necessary to establish interpersonal bonds, e.g. conversational turn-taking and emotional conversations (Duhigg, 2016). Podsakoff et al. (1990) found the effects of transformational leadership behaviors were mediated by the follower's trust, implying that even leader behaviors are filtered through follower perceptions. Individuals who feel valued and secure when participating in team discussions are more likely to embrace their full potential and provide the team with innovative ideas and creative solutions (Henderson, 2017). Encouraging students to appreciate the strengths of their peers creates pathways for open communication and may result in the development of individuals who become highly-effective members of high-performing corporate teams (Steenbarger, 2018).

Much research has been conducted regarding the desired traits of students entering careers. To be successful in new agricultural careers, students must obtain skill development in leadership, teamwork, critical thinking, creative problem solving, and adaptability (e.g. Casner-Lotto & Barrington, 2006; Landrum et al., 2010; Paranto & Kelkar, 2000; Rateau et al., 2015). Over time these habits will holistically improve performance and may lead to increased productivity and member satisfaction in the workplace (Steenbarger, 2018). Organ (1988) defined these behaviors as organizational citizenship behaviors (OCBs), i.e. discretionary behaviors "not part of the employee's formal role requirements, [but which] promote the effective functioning of the organization," (p. 4). Example behaviors include cooperating with coworkers, taking preventative actions against workplace issues, offering suggestions to improve the organization, and making intentional investments in one's professional development skillset (Brief & Motowidlo, 1986). Therefore, it may be appropriate for agricultural educators to consider the role of these OCBs as both an effective classroom engagement technique and a toolset to prepare learners for the workforce.

A comprehensive review of existing citizenship behavior literature found strong evidence indicating OCBs are related to performance (Podsakoff et al., 2000). This belief is well-founded since OCBs may help to increase employee and managerial productivity, expand resource availability, improve coordination within and across work groups, improve an organization's retention rate, and boost an organization's overall adaptability (Podsakoff et al., 2000). In addition, OCBs have been found to relate to quantity and quality of work performance (Podsakoff et al., 1997; Podsakoff & MacKenzie, 1994; Walz & Niehoff, 1996). However, not all characteristics of OCBs impact performance in the same way; some dimensions display stronger evidence for these relationships than others (Podsakoff et al., 2000).

The current study is intended to contribute to meaningful and engaged learning within agricultural education contexts as well as adequately preparing students to engage in the scientific and professional workforce. By examining undergraduate student levels of the five OCB dimensions the study intends to address specific questions such as "what methods, models, and programs are effective in preparing people to work in a global agriculture and natural resource workforce?" (Roberts et al., 2016, p. 31) and "how can delivery of educational programs in agriculture continually evolve to meet the needs and interests of students?" (p. 39). Agricultural educators are at the nexus between engaged learning and workforce preparation. Awareness of learner tendencies may help to inform teaching strategies and learner outcomes (McKeachie & Svinicki, 2013).

Conceptual Framework

Although there are numerous conceptualizations of OCB (e.g. Smith et al., 1983; Moorman & Blakely, 1995; Podsakoff, et al., 2000), the conceptual framework for this research is based on the model proposed by Podsakoff et al. (1990), who identified five dimensions of OCB: altruism, conscientiousness, sportsmanship, courtesy, and civic virtue.

OCB Dimensions

Altruism

Although altruism is a facet of agreeableness in the five-factor personality model (Costa & McCrae, 1992), altruism – as a dimension of OCB – is defined as discretionary behaviors which help a specific individual with an organizationally relevant task or problem, (Podsakoff, et al., 1990). This behavior should not be perceived as mere charity nor precipitated by personality-based dispositions that predispose individuals towards helping others (Khalil, 2004). In this context, altruism is a voluntary willingness to assist a colleague with a work-related task (Podsakoff & MacKenzie, 1994).

Conscientiousness

It is important to note that while conscientiousness is one of the factors in the widely-accepted five-factor personality model (Costa & McCrae, 1992), this is not the context meant when referring to conscientiousness relative to OCB. As a dimension of OCB, conscientiousness characterizes the practice of voluntarily completing task-related behaviors at a level “well beyond the minimum role requirements,” (Podsakoff et al., 1990, p.115). This dimension is difficult to distinguish from in-role behavior because the distinction lies primarily in the degree to which the task is performed, not necessarily the nature of the task itself (Organ, 1988).

Sportsmanship

Sportsmanship consists of an individual’s willingness to assist others or tolerate less than ideal circumstances without complaint or perceived offense (Podsakoff et al., 1997; Podsakoff et al., 1990; Podsakoff & MacKenzie, 1994). This behavior involves the ability to maintain a positive demeanor, a state of general agreeableness, and a willingness to sacrifice personal interests for the good of the group (Podsakoff et al., 2000).

Courtesy

Courtesy is defined as a voluntary action that seeks to prevent the occurrence of work-related problems with other peers (Podsakoff et al., 1990; Podsakoff & MacKenzie, 1994). Examples of these behaviors include notifying superior of an absence or holding a meeting with team members to assign task-related responsibilities. Within the workplace, courtesy had a significant positive relationship with the quality of supervisory/subordinate relationships (Tanksy, 1993).

Civic Virtue

Civic virtue describes behaviors that exhibit concern for the organization and includes the individual’s responsibility to participate in the larger group (Podsakoff et al., 1990; Podsakoff &

MacKenzie, 1994; Podsakoff et al., 1997). For example, these actions may involve offering constructive criticism to elevate work-group effectiveness, which may result in increased resource availability or enhanced efficacy (Podsakoff, et al., 1997).

OCBs in Education

Within the existing literature base, there is a noticeable dearth of studies examining OCB levels among undergraduate students in higher education. Many of the studies concerning OCBs in education examine antecedents of instructor-level OCBs (e.g. Somech & Ron, 2007; Kagaari & Munene, 2007) or the influence of instructor-level OCBs on various outcomes, (e.g. Khalid et al., 2010; Allison et al., 2001; Rose, 2012; Jimmieson et al., 2010).

As it relates to antecedents of instructor-level OCBs, previous research has found enabling school structures and academic optimism both had a positive relationship with instructor OCB levels (Messick, 2012). Kagaari and Munene (2007) found that lecturer overall OCB level was statistically significantly related to individual's ability to plan, organize, and supervise others. Additionally, perceived superior support and collectivism both had positive relationships with altruism, conscientiousness, sportsmanship, civic virtue, and overall instructor-OCB levels, while negative affectivity had a negative relationship with these same instructor OCB dimensions (Somech & Ron, 2007).

Examining the effects of professor OCB levels on their undergraduate students' success, Khalid et al. (2010) found both instructor-level altruism and courtesy positively predicted student academic performance. Jimmieson et al. (2010) found that teacher levels of civic virtue were positively related to job efficacy which in turn had a positive effect on student quality of school life. Additionally, Rose (2012) found that faculty reporting higher OCB-I levels (i.e. altruism or interpersonal helping behaviors) reported higher student contact hours and those reporting higher levels of OCB-O (i.e. helping behaviors directed toward overall organization) reported a greater number of presentations and increased service on institutional committees.

At the student level, Allison et al. (2001) examined student academic performance based on: student productivity, as measured by student's semester course load and associated semester GPA, and overall GPA. Results indicated that student sportsmanship and conscientiousness were positively related with student GPA. Additionally, sportsmanship, conscientiousness, civic virtue as well as overall OCB levels were positively related to student productivity (Allison et al., 2001). At the more general level, LeBlanc (2014) examined possible antecedents of OCBs in college students. Results indicated gender was positively related to a willingness to engage in or actual engagement in OCBs, and female students were more likely to report higher OCB levels. Additionally, religious affiliation had a positive relationship with student OCB levels, as students who identified as devout members of religious faiths reported higher levels of OCBs. Undergraduate major also had a statistically significant relationship with engagement in, or willingness to engage in OCBs, with students who majored in social sciences (i.e. helping professions) reporting higher levels of OCBs than students majoring in business or STEM related fields (LeBlanc, 2014). However, LeBlanc (2014) clarifies that this association may not be due to the specific major of students but rather the characteristics inherent in students who choose those particular majors. The present study extends upon the results of LeBlanc (2014) with a

particular focus on level of OCB amongst undergraduate students enrolled in agricultural education leadership or communication courses.

Purpose and Research Objectives

The purpose of this study is to examine the five dimensions of OCB amongst undergraduate students enrolled in agricultural education leadership or communication courses. As such, this study is driven by the following research objectives:

1. Describe individual levels of altruism amongst undergraduate students enrolled in agricultural education leadership or communication courses.
2. Describe individual levels of conscientiousness amongst undergraduate students enrolled in agricultural education leadership or communication courses.
3. Describe individual levels of sportsmanship amongst undergraduate students enrolled in agricultural education leadership or communication courses.
4. Describe individual levels of courtesy amongst undergraduate students enrolled in agricultural education leadership or communication courses.
5. Describe individual levels of civic virtue amongst undergraduate students enrolled in agricultural education leadership or communication courses.
6. Examine whether OCB levels were statistically significantly different between classes.

Methods

A descriptive study was employed to meet these research objectives. Undergraduate students enrolled in agricultural education leadership or communication courses was the population of interest for the study. A purposive sample of five courses were selected across two universities, and included both agricultural leadership and agricultural communication courses. Specifically, four courses were from an agricultural leadership course taught over four semesters at the University of Florida from 2013 ($n = 32$), 2014 ($n = 44$), spring 2015 ($n = 40$), and fall 2015 ($n = 39$). The other class was from an agricultural communications course taught over one semester at University of Georgia in 2018 ($n = 81$). The agricultural leadership course was taught by the same instructor all four times and was focused on leadership in groups and teams. The course included lecture, service learning, and team projects. Enrollment was open to students across the university and included both agricultural majors, as well as individuals from other colleges across the university. The agricultural communication course was taught by a different instructor and included lecture and project-based learning. Again, enrollment was open to students across the university and included both agricultural majors, as well as individuals from other colleges at the university. It is important to note that the data analyzed within this study capitalizes on data previously collected within the Lamm et al. (2017) sample. The current study broadens the results of the previous one in several notable ways. While the previous study centered on personality analysis, this study concentrates on examining organizational citizenship behavior trends across undergraduate students enrolled in agricultural education leadership and communication courses. These disclosures are made based on existing recommendations for clarity (Kirkman & Chen, 2011).

Data were collected using a paper-based questionnaire, which was distributed, completed,

and recollected for analysis during a single class period. A total of 236 responses were obtained for an effective response rate of 100%; however, incomplete responses contributed to lower response rates reported at the individual scale level.

Demographics were self-reported by each respondent. Of the respondents, 68.2% ($n = 161$) were female, and 30.1% ($n = 71$) were male. Regarding university classification, 13.1% ($n = 31$) of respondents were freshmen, 14.4% ($n = 34$) were sophomores, 30.1% ($n = 71$) were juniors, and 41.9% ($n = 99$) were seniors. As for racial demographics, 84.3% ($n = 199$) of respondents indicated they were white, 8.1% ($n = 19$) indicated they were Black or African American, 7.2% ($n = 17$) indicated they were Asian or Pacific Islander, 0.4% ($n = 1$) indicated they were American Indian or Alaska Native. Individuals were able to select as many race categories as they felt applied, therefore total counts may not match overall response rate. Respondents indicated an age range between 18 and 48 ($M = 21.34$, $SD = 3.03$). Respondent major information was not collected as part of the research study; however, respondents represented agricultural undergraduate majors including agricultural education, animal sciences, and horticulture, as well as other majors within the university including, business, journalism, engineering, family and consumer sciences, and so forth.

Individual-level OCB scores for each dimension were collected using the 24-point scale developed by Podsakoff et al. (1990). Responses were rated on a five-point, Likert-type scale, with possible response ranging from 1 = strongly disagree to 5 = strongly agree. Five scale items measured conscientiousness, including “I obey company rules and regulations even when no one is watching.” Sportsmanship was measured with five scale items, for example, “I consume a lot of time complaining about trivial matters.” Four scale items measured civic virtue and included “I attend meetings that are not mandatory but are considered important.” Courtesy was measured by five scale items, for example, “I am mindful of how my behavior affects other people’s jobs.” Altruism was measured by five scale items, including “I willingly help others who have work-related problems.”

As a measure of internal consistency and reliability, Cronbach’s α coefficient was calculated for each of the five dimension indices, as well as the overall OCB index. In particular, the altruism index was found to have a Cronbach’s α coefficient of 0.84, the conscientiousness index was found to have an α coefficient of 0.65, the sportsmanship index was found to have an α coefficient of 0.76, the courtesy index was found to have an α coefficient of 0.77, and the civic virtue index was found to have an α coefficient of 0.70. The overall instrument had an α coefficient of 0.85.

The data were analyzed using the Statistical Package for the Social Sciences (SPSS) version 25. Descriptive statistics were calculated to quantify levels of OCBs amongst undergraduate students enrolled in agricultural education leadership or communication courses. A one-way ANOVA was used to determine whether OCB observations were statistically significantly different between classes, or whether OCB values were not statistically significantly different. A significance level of .05 was determined *a priori*.

Results

Descriptive statistics, including mean scores, were calculated for the five individual OCB dimensions as well as an overall OCB index score. Results are presented in Table 1.

Table 1

OCB Scale Scores of Undergraduate Students Enrolled in Agricultural Education Leadership or Communication Courses

OCB Scale Scores	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Courtesy	235	4.23	0.46	2.80	5.00
Altruism	234	4.01	0.54	2.00	5.00
Overall	226	4.01	0.36	3.00	4.96
Sportsmanship	231	3.99	0.64	1.80	5.00
Civic Virtue	230	3.93	0.51	2.50	5.00
Conscientiousness	235	3.86	0.53	2.20	5.00

Undergraduate students enrolled in agricultural education leadership or communication courses reported the highest mean score in the courtesy dimension ($M = 4.23$, $SD = 0.46$) and the lowest mean score for the conscientiousness dimension ($M = 3.86$, $SD = 0.53$). The results of the one-way ANOVA tests found no significant effect of class on any of the five OCB dimensions nor overall OCB for undergraduate students completing agricultural education leadership or communication related courses. The results from the ANOVA analyses are displayed in Table 2.

Table 2

Summary of One-Way ANOVA Tests

		<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Altruism	Between Groups	0.362	4	0.090	0.304	0.875
	Within Groups	68.253	229	0.298		
	Total	68.615	233			
Conscientiousness	Between Groups	1.997	4	0.499	1.809	0.128
	Within Groups	63.472	230	0.276		
	Total	65.470	234			
Sportsmanship	Between Groups	3.597	4	0.899	2.240	0.066
	Within Groups	90.698	226	0.401		
	Total	94.295	230			
Courtesy	Between Groups	0.854	4	0.213	0.981	0.418
	Within Groups	50.018	230	0.217		
	Total	50.871	234			
Civic Virtue	Between Groups	0.646	4	0.162	0.627	0.644
	Within Groups	57.991	225	0.258		
	Total	58.637	229			
Overall OCB	Between Groups	0.851	4	0.213	1.666	0.159
	Within Groups	28.210	221	0.128		
	Total	29.061	225			

Conclusions, Recommendations, and Implications

The first five research objectives concerned describing the individual levels of each OCB dimension in undergraduate students enrolled in agricultural education leadership or communication courses. We found that within this sample, all of the OCB dimensions were rated relatively high. From their perspective, students primarily agreed that they displayed these OCB dimensions within their class.

The last research objective concerned examining potential OCB differences between classes. The lack of a statistically significant difference observed between classes was somewhat unexpected. For example, LeBlanc (2014) found that undergraduate student OCB levels were likely to be influenced by factors including gender, religious affiliation/devoutness, and most relevantly university major. Within the present study no statistically differences were observed between classes. Therefore, the result of the current study may indicate undergraduate OCB levels of students enrolled in agricultural education leadership or communication courses may be more consistent across course type and university than originally expected. This conclusion is more consistent with previous research amongst university instructors where a range of instructor competencies were not found to be statistically significantly related to OCBs (Kagaari & Munene, 2007).

A primary contribution of the present study is to establish a foundational set of data upon which to expand future agricultural education related research. However, as a main limitation, the scope of the study is limited and thus the generalizability is also limited. To mitigate the limitation, purposive selection of five courses across both agricultural education leadership and communication, from multiple years, with two different instructors, and in two different universities was conducted. Therefore, although the results indicate that there were not any statistically significant differences observed between classes, it is not possible to conclude that the primary observations (e.g. courtesy is highest and conscientiousness is lowest) will remain consistent across all agricultural education leadership and communication courses. An associated recommendation would be for educators to consider administering an instrument like the one from the present study at the beginning of a course to get a general sense for the composition of learners and what teaching strategies might appeal to learners within a specific classroom environment. An additional recommendation would be to replicate the findings of the present study and determine whether there are trends that agricultural educators can use to inform their teaching practice. For example, replicating data collection in agricultural education courses across leadership, communication, teacher preparation, extension, and so forth may help to validate the present findings, or provide a more comprehensive perspective of learner tendencies, doing so would help educators continue to create learning environments that “continually evolve to meet the needs and interests of students” (Roberts et al., 2016, p. 39).

A recommendation for future research would be to examine OCBs as a set of predictor variables for student performance. Specifically, are students going to be more successful in the classroom and in their careers because they display higher OCB levels? Or do students who display higher OCB levels do so because of their success? This distinction has not yet been explored within the literature so it would be interesting to examine the influence of mediating variable, such as conditions which predispose OCBs, on external outcomes. Another

recommendation for future research would be to examine whether instructor-level OCBs influence student-level OCBs at the undergraduate level. For instance, if a professor displays high levels of courtesy, or any other OCB dimension, would students be more inclined to reciprocate these behaviors? Support for this line of research doesn't necessarily result from the conclusions of this study, but the concepts are related and are important to consider within the context of agricultural education more broadly. For example, Khalid et al. (2010) found that instructor-level OCBs positively influence student performance, while Allison et al. (2001) found that student-level OCBs positively influence student performance in terms of productivity and overall GPA. We wonder, is there an interaction between these two relationships? Is it because instructor displays of OCBs appeal to, and catalyze the reciprocal display of, student OCBs, which in turn contribute to increased performance? The literature appears to be inconclusive so it is important to continue to examine the nature of the phenomenon.

In addition to the above recommendations for research, recommendations are also posited for application. Specifically, a recommendation would be for agricultural leadership and communication educators to consider integrating OCB education curriculum into existing course content. The National Council for Agricultural Education (2015) outlined career ready practices amenable to OCB education as part of their Agriculture, Food, and Natural Resources foundational content standards. Specifically, CRP.09.03 states educators should “demonstrate behaviors that contribute to a positive morale and culture in the workplace and community (e.g., positively influencing others, effectively communicating, etc.” (National Council for Agricultural Education, 2015, p. 22). Sub-sections of this section instruct agricultural educators to identify and summarize respectful and purposeful behaviors, to examine personal levels of these behaviors, and to devise, implement, and evaluate strategies for continuation and improvement of these behaviors (National Council for Agricultural Education, 2015). These standards represent clear opportunities for integration of OCB education into the existing AFNR content. We recommend that teachers capitalize on these opportunities by introducing OCB education to students and discussing the characteristics and implications of OCBs in community and career settings.

Beyond the use of OCBs to connect with learners as an engagement strategy, the literature is clear that OCBs can have a positive effect once an individual enters the workforce (e.g., Alkahtani, 2015; Chen et al., 1998; Podsakoff et al., 1997). Taking the time to inform learners about the fundamental characteristics of OCBs and the relationship with many positive workforce outcomes may help individuals to be aware of how their actions and specifically their embodiment of OCB characteristics may help “to prepar[e] people to work in a global agriculture and natural resource workforce” (Roberts et al., 2016, p. 31). The use of OCBs as a content area within educational settings may help to provide workforce development opportunities. Preparing individuals with not only the technical knowledge required for a career, but also for the skills required for success in the workforce should be a priority of agricultural educators. The current study provides recommendations and proposes OCBs as a potential candidate for *success skill* education.

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