MENTORSHIP AND SERVANT LEADERSHIP:

PERCEPTIONS OF FIRST-SEMESTER

COLLEGE STUDENTS

By

SHANNON L. NORRIS

Bachelor of Science

in Agricultural Extension and Education

New Mexico State University

Las Cruces, New Mexico

2013

Submitted to the Faculty of the
Graduate College of the
Oklahoma State University
in partial fulfillment of
the requirements for
the Degree of
MASTER OF SCIENCE
May, 2015

MENTORSHIP AND SERVANT LEADERSHIP:

PERCEPTIONS OF FIRST-SEMESTER

COLLEGE STUDENTS

Thesis Approved:

Dr. Shelly Peper Sitton
Thesis Adviser

Dr. D. Dwayne Cartmell, II

Dr. H. Robert Terry, Jr.

Dr. Marshall A. Baker

ACKNOWLEDGEMENTS

To my family and friends, thank you for your ongoing support and genuine interest in my goals and aspirations. I could have not asked for a better team to provide humor, support, and joy into my life. God has blessed me far beyond what I deserve, and I know this by the caliber of people in my life.

To my adviser, Dr. Shelly Sitton, and my full thesis committee, Dr. Dwayne Cartmell, Dr. Rob Terry, and Dr. Marshall Baker, thank you for your patience and for helping me understand the importance of adding another brick to the wall of research. You help students understand the value of curiosity and determination, which make your jobs go far beyond the walls of a classroom. Words will never be able to express how thankful I am for you.

To Dr. Cynda Clary and Dr. Steve Damron, thank you for your trust. When I first mentioned the topic of my research, you never doubted my ideas. You encouraged me when the most I needed was a friend. Student development is not just in your title; it is in your heart. Thank you for believing in me.

To all the other faculty and staff at Oklahoma State University, thank you for helping students believe in the power of servant leadership. On day one, OSU students are taught being a Cowboy means they are called to think bigger and serve greater than themselves. My hope is future students will find the confidence and guidance needed to pursue that calling.

Name: SHANNON L. NORRIS

Date of Degree: MAY, 2015

Title of Study: MENTORSHIP AND SERVANT LEADERSHIP: PERCEPTIONS OF FIRST-SEMESTER COLLEGE STUDENTS

Major Field: AGRICULTURAL COMMUNICATIONS

Abstract:

The millennial generation is one of the most vulnerable and disconnected generations to enter a college classroom. The use of quality mentorship, both inside and outside of academia, helps students understand the purpose of their education, which influences students' productivity, work ethic, and intrinsic motivation. Investigating mentorship through the lens of servant leadership connects service-oriented and leadership traits to qualities students desire in personal mentors.

The purpose of this study is to describe incoming first-semester students' perceptions of servant leadership in personal mentors at the beginning and end of the Fall 2014 AG 1011 – Freshmen Orientation class in the College of Agricultural Sciences and Natural Resources (CASNR) at Oklahoma State University. The study also sought to address the current mentorship needs of CASNR incoming students in the Fall 2014 semester.

The study used longitudinal, panel survey design employed with a census approach to describe perceptions of servant leadership traits and mentorship preferences of the incoming students in the CASNR AG 1011 – Freshmen Orientation course (N = 485). The study used the Servant Leadership Survey (SLS) and a researcher-designed general mentorship and demographic inventory questionnaire administered through an eight-week deferred pre- and post-questionnaire.

Based on the SLS and the researcher-designed mentorship questionnaire, students rated accountability and empowerment as the highest servant leadership traits in their personal mentors. Parents were identified as the most common mentor, and student and peer mentors showed the greatest increase between the beginning and end of the course. Nearly one-third of students changed who they identified as their personal mentors at the beginning and end of the course.

The study yielded the following recommendations for practice and research: (a) engage mentorship programs specifically targeting servant leadership; (b) connect students to their respective university mission through guided mentor opportunities; (c) implement feedback components in mentorship programs in higher education; (d) expand knowledge of how students seek and develop mentorship relationships; (e) investigate the influence of peer mentorship; (f) conduct similar studies with different populations to describe servant leadership traits in different contexts; and (g) investigate students' perceptions of servant leadership over time.

TABLE OF CONTENTS

Chapter Page

Chapter Page

LIST OF TABLES

Table Page

LIST OF FIGURES

Figure Page

CHAPTER I

INTRODUCTION

Investing in younger generations is crucial to ensuring a prosperous future for country and the world (Upcraft et al., 2005). In a 2007 report, the American College Health Association (2008) stated (a) 93% of college students reported being overwhelmed by the college lifestyle; (b) 44% claimed feeling signs of depression in college; (c) 16% struggled with relationships in college; and (d) nearly 10% of students contemplated the thought of suicide. The time to invest in tomorrow's leaders has never been more prevalent (Levine & Dean, 2012). Society cannot expect to leave a legacy in this world without investing and mentoring future leaders (Elmore & Maxwell, 2008).

Great leaders see the need to serve without expecting or wanting anything in return (Maxwell, 1999). Understanding what motivates people to lead by serving others is critical for the future of humanity (Greenleaf, 1977) and to the retention and development of first-year college students (Upcraft, Gardner, & Barefoot, 2005). At the same time, today's undergraduate students are labeled one of the most lost generations, but ironically still strongly desire mentorship and guidance (Elmore & Maxwell, 2008; Levine & Dean, 2012). Exposure to life-mentors, peer-mentors, and staff at higher education institutions likely could be responsible for developing future generations and leaders focused on serving others (Astin & Astin, 2000; Campbell, Smith, Dugan, & Komives, 2012; Parks,

2000), but understanding the causality in this phenomenon leads to a desire for additional research (Pascarella, 2006; Waddell, 2009).

Like quality mentors, servant leaders develop strong leader/follower and follower/leader relationships because of their focus on people (Van Dierendonck & Heeren, 2006). Even though servant leadership is a relatively new concept to research, as it made its debut only a few decades ago (Greenleaf, 1977; Spears, 2002), effective servant leadership gives followers a greater sense of purpose, which helps build value and competitive advantage within organizations (Murari & Gupta, 2012).

Even still, additional empirical research on servant leadership is needed (Murari & Gupta, 2012; Schneider & George, 2011) to describe the impact of servant leadership constructs after exposure to mentors in the first-year experience at higher education institutions (Ebener & O'Connell, 2010; Upcraft et al., 2005; Van Dierendonck, 2011). As research moves forward, one theme remains: We need servant leaders (Blanchard, 1995; Ebener & O'Connell, 2010; Greenleaf, 1991b; Spears, 2004) who are willing to mentor undergraduate students (Elmore & Maxwell, 2008; Levine & Dean, 2012).

Statement of the Problem

By 2030, individuals from the Millennial Generation will likely outnumber Baby Boomers by nearly 22 million people (New Media Marketing, 2015). Across the globe, less than one in six people have graduated from college (Elmore, 2015). Therefore, challenging and investing in first-year college students is critical to the success of higher education institutions and to the future of humanity (Maxwell, 1999; Upcraft et al., 2005). Yorke and Longden (2004) identified the first year as the most critical year for

ensuring student retention. One theory to motivating first-year college students to become more engaged citizens and leaders is through the use of personal mentors (Terrion & Leonard, 2007; Velez, Cano, Whittington, & Wolf, 2011). As students' needs evolve over time, high-quality mentors will distinguish themselves from mediocre mentors by how well they set an example of servant leadership for their mentees, their peers, and their communities (Liden, Wayne, Zhao, & Henderson, 2008; Upcraft et al., 2005). Understanding how students perceive and apply personal mentorship could help faculty in higher education understand the roles mentors play in improving student retention (Upcraft et al., 2005).

Academic performance and intrinsic motivation also are influenced by the individual mentors' leadership style (Campbell et al., 2012; Terrion & Leonard, 2007). Unfortunately, few studies have evaluated how servant leadership qualities vary with the different types of mentors (Terrion & Leonard, 2007). The lack of research supporting effective mentorship styles combined with the gap of understanding the perceptions of followers when evaluating servant leadership (Van Dierendonck & Nuijten, 2011) provide a significant opportunity for future research in the development of first-year students (Upcraft, et al., 2005). Van Dierendonck and Nuijten (2011) firmly state the perspective of the follower on a servant leader's behavior is missing.

Purpose

The purpose of this study was to describe incoming first-year students' perceptions of servant leadership traits, as defined by Van Dierendonck and Nuijten (2011), in personal mentors at the beginning and end of the Fall 2014 AG 1011 –

Freshmen Orientation class in the College of Agricultural Sciences and Natural Resources (CASNR) at Oklahoma State University (OSU).

Objectives

The following objectives were developed to guide this study:

1. Describe the selected characteristics (age, sex, ethnicity, major, size of hometown, and organizational background) of incoming students in the Fall 2014 OSU CASNR – Freshman Orientation class (AG 1011).
2. Describe incoming students' engagement in community service at the beginning and end of the AG 1011 course in the Fall 2014 semester.
3. Compare differences in incoming students' perceptions of servant leadership traits in personal mentors at the beginning and end of the AG 1011 course in the Fall 2014.
4. Describe incoming students' classification of most influential mentors at the beginning and end of the AG 1011 course in the Fall 2014 semester.
5. Compare students' perceptions of servant leadership traits if their most influential mentor classification changed from the beginning to the end of the AG 1011 course in the Fall 2014 semester.

Significance of the Study

The need for studying the influence of servant leadership has never been more prevalent (Barbuto & Wheeler, 2006; Blanchard, 1995; Page & Wong, 2000; Polleys, 2002; Van Dierendonck, 2011), especially in first-year college students (Upcraft et al., 2005). In a handbook for improving the experience of the first-year college student,

Upcraft et al. (2005) argued that encouraging incoming students to become more civically aware as responsible citizens who serve the community could be a missing link in setting college students up for most personal and academic success. Utilizing mentors to improve the first-year college experience (Terrion & Leonard, 2007) could work as a catalyst for the theory of servant leadership to help followers grow and succeed (Liden et al., 2008). In fact, Liden et al. (2008) suggested servant leadership functions as a framework for understanding how followers' behaviors and attitudes are modeled by the examples set by leaders.

It has never been more important to study servant leadership (Van Dierendonck, 2011). Plus, a potential result of understanding short-term, motivational benefits of mentors serving and leading students could provide insight for increasing servant leadership levels in first-year college students (Barbuto & Wheeler, 2012; Campbell et al., 2012). Understanding the relationship between mentorship and servant leadership development in higher education are critical components to demands in future research (Campbell et al., 2012).

Scope of the Study

The scope of the study was incoming first-year students enrolled in the CASNR AG 1011 – Freshmen Orientation course at OSU in the Fall 2014 semester. Students who transferred to OSU from other institutions at the start of the Fall 2014 semester are not required to take AG 1011 and were not included in this study.

Limitations

The following limitations were identified for this study:

1. The study is designed to describe incoming students' perceptions of servant leadership traits identified in students' personal mentors. Perceptions of servant leadership can be influenced by many variables, not just personal mentorship, within the students' first eight weeks of their time at Oklahoma State University.
2. The results, findings, and conclusions related to servant leadership constructs in this study cannot be generalized to other populations.
3. Each incoming student was assigned a student academic mentor (SAM) at the beginning of the course to help him or her to transition academically. All SAMs received the same training prior to the start of the course. However, each SAM has the freedom to lead his or her student group with his or her own leadership and mentorship styles, which could result in exposure to different servant leadership experiences for incoming students within the class.

Assumptions

The following assumptions were used to guide this study:

1. Participants answered all questions honestly.
2. Within the first eight weeks of their college experience at OSU, participants could identify at least one personal mentor from whom they actively seek advice or counsel.
3. Perceptions of servant leadership traits can be reflected accurately by construct measurements within the Servant Leadership Survey (SLS) instrument.

Definitions

For the purpose of this study, the following terms are defined operationally:

AG 1011 Student Academic Mentor (SAM) – CASNR student leaders, sophomores and above, who volunteered to attend AG 1011 with incoming students and serve as an academic mentor during the class and the first eight weeks of the incoming students' time at OSU (S. Damron, personal communication, August 15, 2014).

CASNR Incoming First-year Students – students who were enrolled during their first regular semester (Fall semester) after high school at OSU (S. Damron, personal communication, January 6, 2015).

CASNR Transfer Students – students who have spent at least one semester at another institution after their high school graduation and who have transferred to OSU; transfer students are not required to take the CASNR AG 1011 – Freshmen Orientation course (S. Damron, personal communication, January 6, 2015).

Mentorship – a relationship where one person challenges and empowers the other person to share their stories, wisdom, and resources (Elmore & Maxwell, 2008).

Millennial Generation – people born in or after the 1980s to the early 2000s (Ng, Schweitzer, & Lyons, 2010).

Servant Leadership – servant leaders place the needs of the follower over the needs of the leader (Greenleaf, 1977).

CHAPTER II

REVIEW OF LITERATURE

The purpose of this chapter is to explore and review literature influencing the framework of this study. Topics reviewed are the Millennial Generation, mentorship in higher education, influence of mentorship on student intrinsic motivation, causal effects of attribution and mentorship, history of servant leadership, comparison to other leadership theories, and an overview of the conceptual framework for the servant leadership theory, which was used to guide this study.

Millennial Generation

Generations are defined by shared experiences within specific time periods and are often influenced by people, places, events, and social references (Elam, Stratton, & Gibson, 2007). Howe and Strass (2000) stated the majority of the current U.S. population is made up of five generations: the G.I. Generation (born between 1901 to 1924), the Silent Generation (1925–1942), the Boom Generation (1943– 1960), Generation X (1961–1981), and the Millennial Generation (1982–2002). According to Elmore and Maxwell (2008), the next generation beyond the millennials will be known as Generation iY (born after 2003). However, the majority of students who are enrolled in higher education institutions today are members of the millennial generational cohort (Elam et al., 2007).

Undergraduate students from the Millennial Generation face many struggles during this vulnerable time of their lives, and they long for guidance more than previous generations (Levine & Dean, 2012). In fact, Yorke and Longden (2004) identified four general reasons students leave their programs in higher education: (a) a misunderstanding of the program when they enrolled; (b) students' experiences within the program; (c) struggle with adjusting to the demands of the program; and (d) situations in students' lives outside of the program. In addition to the stress of choosing the right program, millennials also face many societal issues unique to their generation (Levine & Dean, 2012):

- current undergraduates are the first generation of digital natives;
- millennials are the most demographically diverse generation in the history of higher education;
- they are the most connected and the most isolated generation where students have unlimited access to being connected with other people, but lack interpersonal and communication skills, which make them feel isolated;
- current undergraduates believe the economy is the most critical issue facing the country's future and nearly two-thirds of undergraduates leave college with substantial student loan debt;
- millennials are described as a more entitled, immature, dependent, and overprotected generation than previous generations; and
- the third great revolution in human history is approaching so graduates must be ready to engage in a fast-paced, ever-changing environment.

Mentorship in Higher Education

Today's undergraduate students desperately need people who are willing to invest in their leadership potential (Elmore & Maxwell, 2008; Levine & Dean, 2012). Understanding how students are motivated is a key to developing leaders in higher education (Upcraft et al., 2005). Elmore and Maxwell (2008) suggested the best way to mentor the Millennial Generation is to start one life at a time. Campbell et al. (2012) also proposed the use of mentors to help develop socially responsible leaders by building relationships with students and making them feel like they belong within a program or institution (Liden et al., 2008). Instilling a service-oriented environment in higher education and the influence of servant leadership (Hunter et al., 2013) demonstrate a positive influence for followers' personal growth and could help lead to better retention rates in higher education institutions (Upcraft et al., 2005). Leading to involvement in higher education, according to the Association for Career and Technical Education (ACTE, 2015), 81% of high school dropouts say relevant, real-world learning opportunities would have kept them in high school. Van Dierendonck (2011) stated the stronger the relationship between servant leadership behavior and audience culture, the more influence servant leadership can have on followers in real-world settings.

The value of mentoring has long been recognized and accepted in practice as well as in research (Cohen, 1993) and is now emerging as a tool in education (Upcraft et al., 2005). Previous studies suggest a positive relationship between faculty mentors and leadership development (Campbell et al., 2012; Komives, Owen, Longerbeam, Mainella, & Osteen, 2005). At higher education institutions, faculty mentors are more prevalent because students are more apt to seek accessible counsel from professionals with whom

they feel comfortable (Campbell et al., 2012). In turn, establishing effective mentorship efforts has become a national priority (Girves, Zepeda, & Gwathmey, 2005).

Hundreds of formalized programs and institutional practices now include a mentoring component and are being implemented at the national, state, and local levels (Crisp & Cruz, 2009). In fact, the National Agricultural Education Research Agenda's key outcome for "Priority Four: Meaningful, Engaged Learning in All Environments" is, "Learners in all agricultural education learning environments will be actively and emotionally engaged in learning, leading to high levels of achievement, life and career readiness, and professional success" (Doerfert, 2011, p. 21). Elmore and Maxwell (2008) claim people who are actively and emotionally engaged with mentors who build meaningful relationships could be the missing springboard for personal growth and leadership. Continuing research investigating the influence of mentorship on students' acquisition of knowledge and leadership capacity at the undergraduate level is recommended (Campbell, et al., 2012; Snowden & Hardy, 2012).

Understanding the influence of servant leadership on students starts by understanding higher education development and the impact of relational leadership between mentors and leaders (Ebener & O'Connell, 2010; Komives, Longerbeam, Owen, Mainella, & Osteen, 2006). Campbell et al. (2012) researched the impact of servant leadership capacity and the mentoring process on college students and discovered college students with mentors who engaged them and challenged their personal development demonstrated a higher capacity for socially responsible leadership. Campbell et al. (2012) concluded further research should investigate specific strategies mentors can use to

develop their mentees. In addition, further research is needed to evaluate the perceptions of the followers of servant leaders (Ebener & O'Connell, 2010; Van Dierendonck, 2011).

Mentorship in OSU's CASNR AG 1011 – Freshmen Orientation Course

One requirement of the CASNR AG 1011 – Freshmen Orientation course at Oklahoma State University is all incoming students are assigned an upper-class peer academic mentor called a SAM (S. Damron, personal communication, August 15, 2014). The reason for engaging SAMs with incoming students is to make a connection for incoming students to the institution and other peers attending OSU (S. Damron, personal communication, August 15, 2014).

Peer teaching helps increase student motivation and challenges current students to become more proactive with their education (Velez et al., 2011). According to Terrion and Leonard (2007), "Peer mentoring in higher education is regarded as an effective intervention to ensure the success and retention of vulnerable students" (p. 149). Unlike traditional mentoring, peer mentorship places mentors with mentees who are roughly equal in age, experience, and power to provide task and psychosocial support (Angelique, Kyle, & Taylor, 2002). Peer mentorship can even be a valuable alternative to the traditional idea of mentorship (Angelique et al., 2002; Terrion & Leonard, 2007) where institutions can rely on mentors to help students develop personal and career-related skills to help achieve critical college outcomes (Campbell et al., 2012).

Influence of Mentorship on Student Intrinsic Motivation

Professional literature, popular press, and students agree mentorship is a critical component of an effective undergraduate education and development of internal motivation (Jacobi, 1991). Intrinsic motivation fuels innovation in the classroom, inspires students to meet challenges, and stimulates learning and development (Ryan & Deci, 2000; Van Dierendonck & Heeren, 2006). Relationships foster this motivation and increase desire to serve others (Buber, 1958). Therefore, the intersection of mentorship and motivation for leadership development suggests significant, positive relationships (Campbell et al., 2012). Effective mentors develop trust with students by engaging in one-on-one communication to learn their abilities, needs, desires, goals, and potential (Liden et al., 2008). Once a relationship and rapport is built, positive mentorship builds undergraduate motivation for success by adding learning value to the experience, contributing to academic attainment, and enhancing engagement within the higher education institution (Snowden & Hardy, 2012).

Ridgeway (1982) said researchers face the challenge of developing a thorough understanding of how student interests motivate them in the classroom. As such, the 2011-2015 Agricultural Education Research Agenda highlighted the need for future research on the importance of measuring effective learning environments on active and emotional engagement, personal levels of achievement, life and career readiness, and professional success (Doerfert, 2011).

Influence of Mentorship on Active and Emotional Engagement

Mentors have a challenge of meeting students where they are mentally and physically to make a personal connection for future relations (Campbell et al., 2012). A person's thoughts are generally formed by his or her background, attributions, and uncontrollable consequences (Kelley & Michela, 1980). Past experiences guide personal beliefs and intrinsic motivation, which can lead to perceived causes of attribution (Kelley & Michela, 1980). Campbell and Campbell (2007) explored the long-term academic effects of mentorship on students threatened by low university-wide retention rates. Upon making the initial connection with the mentee, mentored students earned a higher grade point average and completed more units of learning than those students who did not have a mentor (Campbell & Campbell, 2007).

Doerfert (2011) states effective teachers are more than just providers of knowledge; they are life-changers who build engaged, holistic learning environments in their classrooms. The mentorship process is driven by a sincere desire to serve students (Greenleaf, 1977; Jacobi, 1991; Spears, 2009). The servant leader mentality develops and invests in followers through teaching and coaching individuals to grow in professional and personal settings (Bandura, 1986; Blanchard, 1995; Seitz & Pepitone, 1996). And although Jacobi (1991) discovered a link between mentorship and motivation for personal and academic success, the use of mentors who demonstrate servant leadership to increase student engagement remains a relatively new research strategy to enhancing undergraduate success (Tebeian, 2012; Van Dierendonck, 2011).

Intrinsic Motivation Leading to High Levels of Achievement

The intangible rewards of mentorship can be defined as generativity, where a person reaches beyond immediate, personal thoughts or concerns to embrace the welfare of others for the betterment of society and future generations (Erikson, 1963; Jacobi, 1991; Zanden, 1978). Generativity and mentorship revolve around selflessness (Zanden, 1978). Similarly, selflessness is an important element of servant leadership (Blanchard, 1995; Maxwell, 1999), and understanding selflessness changes attitudes, opinions, skill development, and knowledge (Greenleaf, 1977). Selfless teachers are more effective at engaging meaningful learning for students beyond memorizing facts to helping students interpret interconnectedness of facts and creative thinking (Doerfert, 2011). Reviewing the need to maintain and develop self-esteem in the classroom directly influences student outcome (Zuckerman, 1979). Students who are intrinsically motivated are moved to do something about their goals (Ryan & Deci, 2000), which may lead to high levels of achievement in the future (Abuhamdeh & Csikszentmihalyi, 2011).

Internal Habits Motivating Students for Life and Career Readiness

Building self-esteem and personal achievement links motivation to determination for career readiness (Doerfert, 2011). During this process, students' personal goals can be influenced by feeling and action, which spark determination for life goals related toward career paths (Weiner, 1985). Mentors influence how students feel about the value of their work and how they feel about themselves as individuals (Wrzesniewski, Dutton, &

Debebe, 2003). Ryan and Deci (2000) defended people have different levels of and reasons for motivation. Finding what motivates each individual student to pursue his or her life and career goals strengthens the efficiency of teachers and institutions (Hays, 2008; Upcraft et al., 2005). Katzenbach (2006) and Bowman (2011) acknowledge pride as the most influential component for performance in a classroom and the workplace. Leaders and mentors motivate followers by instilling pride within each student and building each student's confidence for success in the classroom (Katzenbach, 2006).

Student Perceptions of Preparedness for Professional Success

Student perceptions of preparedness for professional success are centered on positive emotional wellbeing and confidence in their skills (Upcraft et al., 2005). The call for creative and innovative leaders is more compelling (Ingleton, 2013) as society desires individuals who strive for leadership and professional success beyond college (Van Dierendonck & Kool, 2012). Increased preparedness and performance is critical to moving society forward and improving performance in business and education (Sullivan & Nomura, 2006).

Causal Effects of Attribution and Mentorship

From 1930 to 1950, the field of motivation and understanding cause-and-effect relationships were key focuses in psychology (Zuckerman, 1979). Today, understanding what motivates individuals on an intrinsic level is more important than ever (Baumeister & Vohs, 2002; Bowman, 2011; Snowden & Hardy, 2012). Since its establishment as a

formal discipline in human behavior, the field of psychology has intensified the attempt to understand human attribution through cause-and-effect relationships, especially in the realm of intrinsic motivation (Frasher & Frasher, 1981; Pascarella, 2006).

Discovering why people become motivated drives research in human behavior (Zuckerman, 1979). Kelley (1971), one of the founding fathers of the theory of attribution, stated, "The attributor is not simply an attributor, a seeker after knowledge; his latent goal in attaining knowledge is that of effective management of himself and his environment" (p. 22). The theory of attribution is centered on the study of perceived causation of certain events (Kelley & Michela, 1980) and links meaning with personal motivation (University of Twente, 2014). Causal judgment also plays a critical role in predicting events, controlling future outcomes, and explaining reasons why certain situations occur (Perales & Shanks, 2007). According to Frasher and Frasher (1981), "In the simplest context, attribution theory and research are concerned with the pursuit of the solution to the question 'why?' as it relates to one's attempt to describe causality for their own and for others' behavior, beliefs, and attitudes" (p. 153).

Historically, understanding cause-and-effect relationships through the theory of attribution was labeled arrogant, defensive, and self-serving (Bradley, 1978; Hastorf, Schneider, & Polefka, 1970; Snyder, Stephan, & Rosenfield, 1978; Zuckerman, 1979). As time moved on, the theory of attribution began to expand and link causal effects with the way people become inspired and interact with each other on a one-on-one basis (Frasher & Frasher, 1981). Understanding the value of attribution helps students manage themselves and their environments to achieve their personal and academic goals (Frasher & Frasher, 1981). Bowman (2007) suggested when students are inspired, their emotions

and behaviors develop from within. Therefore, understanding how individuals interpret cause-and-effect relationships provides a link for the influence of mentors and servant leaders in first-year student research (Pascarella, 2006; Upcraft et al., 2005).

Morrison and Morrison (1991) stated interdependence is the theme of future generations. As the world becomes more interconnected, the need for effective communication across multiple cultures becomes extremely relevant as nations depend on each other (Dodd, 1987). Students not only are citizens of their own communities, states, and nations, but also citizens of the world (Morrison & Morrison, 1991). Today, educators are challenged to inspire students to become leaders outside of the classroom and build relationships with multiple types of people in the world (Komives et al., 2006).

History of Servant Leadership

Although the idea of servant leadership can be traced to biblical and spiritual references (Briner & Pritchard, 1997; Dorfman & Mittal, 2012; Greenleaf, Fraker, & Spears, 1996), in the business and education realms the term *servant leadership* can be accredited to Robert K. Greenleaf (Spears, 2000). In the late 1960s and 1970s, Greenleaf, retired AT&T director of management research, began researching the idea of a new kind of leadership where leaders hold the mentality of servant first and leader second (Greenleaf, 1977). In general, servant-minded leaders believe humanity is called to serve a higher purpose than itself (Boone & Makhani, 2012; Jones-Burbridge, 2012). Servant leaders are morally responsible leaders and help followers grow and develop (Daft & Lane, 2011). Arguably, the first definition of servant leadership in academia was

originally published in Greenleaf's 1970 pioneer essay, *The Servant as a Leaders* (as cited in Greenleaf, 1977):

> The servant leader is servant first … It begins with the natural feeling that one wants to serve, to serve first. Then conscious choice brings one to aspire to lead. That person is sharply different from one who is leader first ... The best test, and difficult to administer, is: Do those served grow as persons? Do they, while being served, become healthier, wiser, freer, more autonomous, more likely themselves to become servants? And, what is the effect on the least privileged in society; will benefit, or at least, not be further deprived? (pp. 13-14)

Comparison to Other Leadership Theories

As the world continues to need more leaders, the ongoing question of what kind of leadership best serves society remains prevalent (Smith, Montagno, Kuzmenko, 2004; Stone, Russell, & Patterson, 2003). Servant leaders embody the innate feeling of wanting to serve (Greenleaf, 1991b) and strive to help others aspire to lead by making sure high priority needs are met (Murari & Gupta, 2012). This servant-oriented mindset helps leaders empower followers to believe they are capable of advancing themselves, the team, and the institution (Briner & Prichard, 1997; Russell & Stone, 2002). Through establishing trust, empathy, and collaboration as well as engaging the ethical use of power, servant leaders empower others to think, take action, and control decision-making processes autonomously (Liden et al., 2008; Murari & Gupta, 2012; Spears, 2002).

Positive character and commitment to serve are two themes separating servant leadership from other leadership styles (Parris & Peachey, 2013). Plus, in his initial

model, Greenleaf identified four concepts distinguishing servant leadership from other theories: (a) service before self-interest; (b) listen before speaking; (c) be trustworthy to establish trust within followers; and (d) invest in others to make them feel complete (Daft & Lane, 2011).

Because leadership can be defined within many different contexts, grouping leadership theories into categories can be slightly challenging (Daft & Lane, 2011). However, as leadership has evolved over time, six main categories of leadership theories have formed: great man theories, trait theories, behavior theories, contingency theories, influence theories, and relational theories (Daft & Lane, 2011). Servant leadership is labeled as a relational leadership theory as it focuses on the relationship between the leader and the follower (Daft & Lane, 2011; Liden et al., 2008).

Relational Leadership

Relationship-oriented studies have been integrated in various components of research since early formal leadership studies (Stogdill & Coons, 1957; Uhl-Bien, 2006). Relational theories flourished in the 1970s with the interest of studying how relationships influence leadership abilities (Daft & Lane, 2011; Greenleaf, 1977; Hays, 2008). Rather than recognizing leadership as a one-way interaction with leaders and followers, relational leaders focus on the relationship with participants to evaluate how interactions influence the group vision (Daft & Lane, 2011).

Relational leaders also understand they are morally accountable to others and express concern for the people with whom they interact (Cunliffe & Eriksen, 2011). By investing in followers' emotional intelligence, integrity, moral standards, and courage,

relational leaders strive to build relationships through motivation, empowerment, communication, team building, and diversity (Daft & Lane, 2011). Van Dierendonck (2011) identified seven relational leadership theories that are the most closely related to servant leadership: transformational leadership, authentic leadership, ethical leadership, Level 5 leadership, empowering leadership, spiritual leadership, and self-sacrificing leadership. Transformational leadership is likely the closest relative to servant leadership (Tebeian, 2012; Daft & Lane, 2011).

Transformational Leadership

Transformational leadership can be defined as a "leadership approach that causes a change in individuals and social systems" potentially leading to the development of followers into leaders (Kendrick, 2011). Bass and Riggio (2006) also emphasized the importance of intrinsic motivation on the intellectual and individual development of followers. Transformational leadership has similar characteristics to charismatic, behavioral, and transactional leadership (Tebeian, 2012). However, transformational leadership's unique characteristics (a) help build leaders from followers; (b) elevate concerns for followers to higher psychological needs of self-esteem and courage; (c) create vision for members of the organization; and (d) inspire direction for the future (Daft & Lane, 2011).

The main difference between transformational and servant leadership is transformational leaders tend to focus on the relationships within organizations and servant leaders focus on serving followers (Stone et al., 2003). Servant leadership encourages follower development by promoting self-confidence and the desire to serve

others by focusing on developing relationships (Liden et al., 2008). Another main difference between transformational and servant leadership is the element of service in servant leadership (Van Dierendonck, 2011). Servant leadership is an upside-down approach to traditional leadership (Daft & Lane, 2011), which stresses the importance of humility, authenticity, and interpersonal acceptance shown to each follower (Van Dierendonck, 2011). Rather than focus on the follower development through service, transformational leadership uses the ideals of organizational objectives (Van Dierendonck, 2011) and perceived leadership effectiveness (Van Dierendonck, Stam, Boersma, Windt, & Alkema, 2014).

Conceptual Framework: Servant Leadership Theory

The main purpose of servant leadership is to serve followers and empower them to become everything they are capable of becoming and to challenge them to become leaders, as well (Daft & Lane, 2011). Greenleaf's discovery of servant leadership sparked a growing field of research interest (Barbuto & Wheeler, 2006; Farling, Stone, & Winston, 1999; Page & Wong, 2000; Spears, 2002) and laid the groundwork for developing measurements attempting to define servant leadership (Van Dierendonck & Nuijten, 2011). Unfortunately, the majority of attempts to define servant leadership have been inconsistent and without a universal standard of underlining constructs (Liden et al., 2008). Russell and Stone (2002) declared, "The literature regarding servant leadership is rather indeterminate, somewhat ambiguous, and mostly anecdotal" (p. 145). As a result, building an all-encompassing, conceptual model for servant leadership becomes difficult

when nearly 40 different attributes have been used to describe constructs relating to this theory (Barbuto & Wheeler, 2006; Van Dierendonck, 2011).

Parris and Peachey (2013) identify three main focuses in servant leadership research: (a) a conceptual focus (Laub, 1999; Patterson, 2003; Spears, 1998); (b) an empirical measurement focus (Barbuto & Wheeler, 2006; Dennis & Bocarnea, 2005; Laub, 1999; Liden et al., 2008; Sendjaya, Sarros, & Santora, 2008; Van Dierendonck & Nuijten, 2011; Wong, Davey, & Church, 2007); and (c) a model development focus (Russell & Stone, 2002; Van Dierendonck, 2011). To further conceptualize the theory of servant leadership, Parris and Peachey (2013) examined servant leadership within an organizational context.

Key Characteristics Conceptualizing Servant Leadership

As research on servant leadership continues to expand, the concepts used to define servant leaders will evolve, as well (Van Dierendonck & Nuijten, 2011). Parolini (2004) stated, "Servant leaders are defined by their ability to bring integrity, humility, and servanthood into caring for, empowering, and developing others in carrying out the tasks and processes of visioning, goal setting, leading, modeling, team building, and shared decision-making" (p. 9). Most constructs defining the theory of servant leadership revolve around the concern for addressing the needs of the follower (Mayer, Bardes, & Piccolo, 2008).

The modern servant leadership theoretical framework began to develop as Spears (1998) identified 10 key components representing the theory (as cited in Russell & Stone,

2002). Jones-Burbridge (2012) stated, "Servant-leadership is an ethical perspective on leadership that identifies key moral behaviors leaders must continually demonstrate in order to make progress on Greenleaf's best test of leadership theory" (p. 46). Building on Greenleaf's "best test" mentality of combining action with ethical social advancement, Spears (1998) developed 10 major characteristics of servant leadership:

1. **Listening**. A servant leader understands the difference of speaking less and listening more (Jones-Burbridge, 2012). Servant leaders strive to empower their followers by listening to each individual's goals and by building purpose (Spears, 2009).
2. **Empathy.** Leaders who exhibit empathy relate to their followers on a deeper level (Spears, 1999). Patterson's (2003) theoretical model for servant leadership argued servant leaders embody humility and altruism by *agapao* – which is Greek for moral love. Leaders high in humility and empathy develop a broader understanding of their individual role on a team and how they can contribute to the group's success (Spears, 1999).
3. **Healing.** One conceptual difference in servant leadership versus other general leadership styles is the leaders' focus on compassion for their followers (Waite, 2011). Servant leaders pay attention to those who are broken and take time to mentor the healing process (Spears, 1998).
4. **Awareness.** Servant leaders are sensitive to needs around them and are conscious of their personal ethics and values (Waite, 2011). Leaders who are aware of their followers' goals and aspirations generally develop this passion by listening and relating to those around them (Crippen, 2005).

5. **Persuasion.** Ferch and Spears (2001) suggest servant leaders strive to build consensus within groups by gaining trust and rapport with followers. When a group believes in the cause of the team, persuading others to do their part becomes an easy task (Spears, 1998).
6. **Conceptualization.** Servant leaders see the big picture and persuade followers to do the same (Spears, 1998). Servant leaders lead with the heart as a persuader and relationship builder to guide followers to a bigger vision (Page & Wong, 2000; Waide, 2011).
7. **Foresight.** Servant leaders are intuitively minded, which helps broaden perspectives for likely outcomes (Spears, 1998). Forward thinking strengthens the power of leadership, which increases motivation from followers (Van Dierendonck, 2011).
8. **Stewardship.** Servant leaders believe life is bigger than themselves so they seek to improve the livelihood of others around them (Waite, 2011). By building and fostering trust within followers (Reinke, 2004), servant leaders promote the greater good of the society (Patterson, 2003).
9. **Commitment.** Spears (1998) suggested, "Servant leaders believe people have an intrinsic value beyond their tangible contributions" (p. 20). Commitment is a key concept of servant leadership because seeing value in others promotes personal growth and commitment to serving beyond oneself (Greenleaf, 1977; Stone, Russell, & Patterson, 2004; Waite, 2011).
10. **Building community.** Servant leaders live as servants first and leaders second (Greenleaf, 1977). Encouraging the development and unity of individuals within

groups are key to promoting growth in the community (Waite, 2011). Because servant leadership is relationship-focused, building a community environment is a key concept to the theory of servant leadership (Daft & Lane, 2011).

Following the identification of Spears' (1998) 10 major characteristics of servant leadership, Laub (1999) developed a conceptual, six-cluster model of the Servant Organizational Leadership Assessment (SOLA) instrument characterizing servant leadership as valuing people, developing people, building community, displaying authenticity, providing leadership, and sharing leadership. Russell and Stone (2002) identified nine other reoccurring attributes of servant leadership identified in the workplace: vision, honesty, integrity, trust, service, modeling, pioneering, appreciation of others, and empowerment. In addition to functional attributes, Russell and Stone (2002) also highlight communication, credibility, competence, stewardship, visibility, influence, persuasion, listening, encouragement, teaching, and delegation as accompanying attributors also prevalent in servant leadership literature.

Within the next decade, the idea of servant-first and leader-second grew and research began to focus on clearing the conceptual definition of servant leadership (Barbuto & Wheeler, 2006; Liden et al., 2008; Page & Wong, 2000; Patterson, 2003; Sendjaya et al., 2008; Wong, Davey, & Church, 2007). Finally, in a full review and synthesis of servant leadership, Van Dierendonck (2011) acknowledged building blocks of the theory of servant leadership and combined constructs from influential studies to make one centralized framework for servant leadership. Previous studies either evaluated the servant-aspect or the leader-aspect of servant leadership, but few studies combined the two themes of leader and servant into one measure (Van Dierendonck & Nuijten,

2011). Therefore, while many models conceptualizing servant leadership exist, this study will use Van Dierendonck and Nuijten's (2011) approach to servant leadership to guide the conceptual framework.

Van Dierendonck and Nuijten's (2011) Approach to Servant Leadership

To more clearly define and operationalize characteristics of servant leadership, Van Dierendonck and Nuijten (2011) developed the Servant Leadership Survey (SLS; see Appendix A). To establish a more consistent framework for studying servant leadership, Van Dierendonck and Nuijten (2011) focused on transparent servant leadership behavior related to the well-being and performance of followers. The initial development and validation of the SLS involved three-phases: (a) exploring and analyzing factors defining servant leadership; (b) comparing the content validity of the SLS to other servant leadership measures; and (c) correlating the criterion-related validity of how leaders behave toward followers in the workplace (Van Dierendonck & Nuijten, 2011).

After differentiating antecedents, behavior, and outcomes, six preliminary themes emerged to form an operationalized definition for servant leadership, including empowering and developing people, humility, authenticity, intrapersonal acceptance, providing direction, and stewardship (Parris & Peachey, 2013; Van Dierendonck, 2011). Selected managers who were labeled as servant leaders by experts from the European Greenleaf Centre for Servant Leadership were interviewed to seek clarity in the SLS construct development (Van Dierendonck & Nuijten, 2011). Subsequently, Van Dierendonck and Nuijten's (2011) six original themes evolved into eight characteristics

defining servant leadership, including empowerment, accountability, standing back, humility, authenticity, courage, interpersonal acceptance, and stewardship. Each of the eight constructs helps build consistency within the theory of servant leadership. Figure 1 highlights a visual representation of how each of the eight SLS constructs, adapted from Van Dierendonck and Nuijten's (2011) SLS instrument, work together to help define servant leadership.

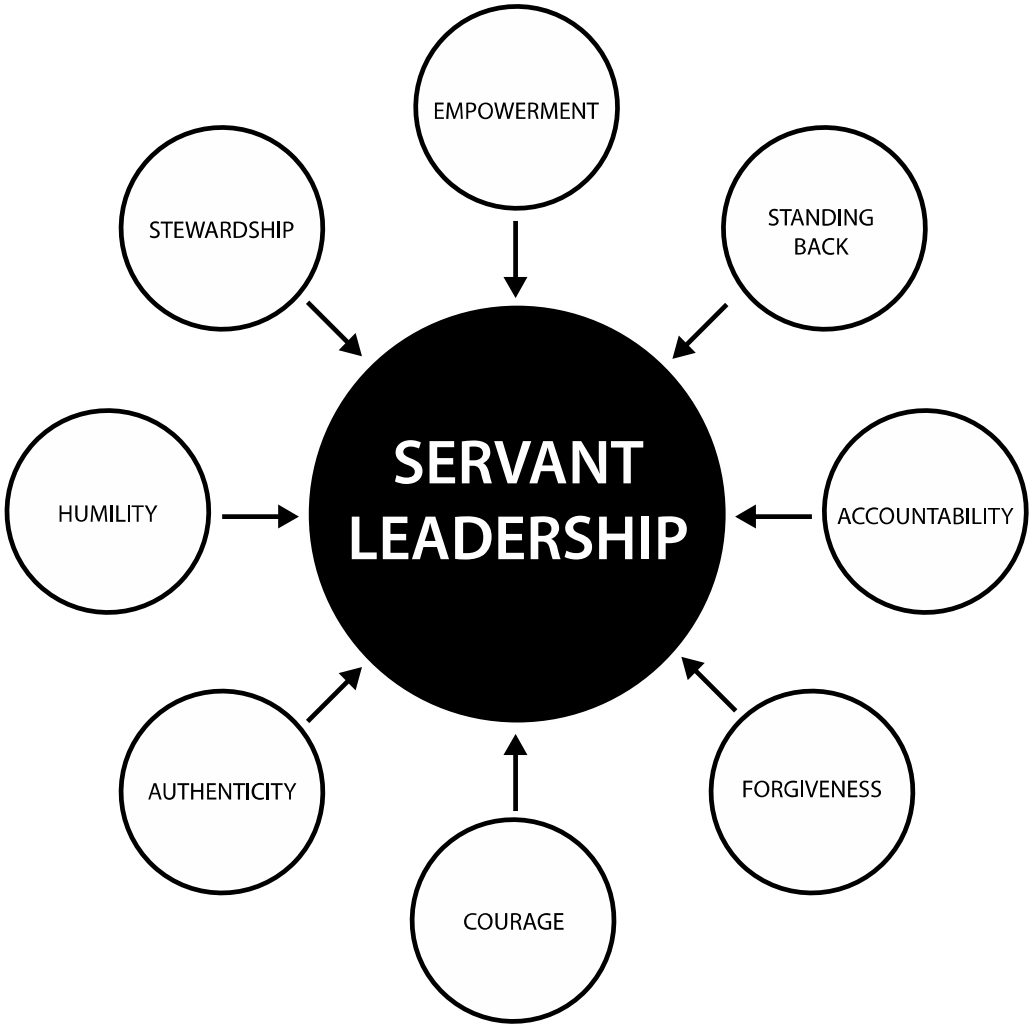


Figure 1. Visual Representation of Van Dierendonck and Nuijten's (2011) Units of Measure in the SLS Instrument and the Role They Play in the Theory of Servant Leadership.

CHAPTER III

METHODOLOGY

The purpose of this chapter is to explain the methods used to conduct this study, including approval by the Oklahoma State University Institutional Review Board, research design, instrumentation, validity, reliability, population, data collection, data analysis, and potential threats to validity.

Institutional Review Board

The Oklahoma State University Institutional Review Board policy and federal regulations require approval of all research related to human subjects before researchers can begin investigation. The Oklahoma State University Office of University Research Services and the Institutional Review Board (IRB) review research methods to protect the welfare of human subjects involved in biomedical and behavioral research. This study was reviewed by the OSU IRB and was approved August 8, 2014 (see Appendix B). The original IRB application was modified for the post-questionnaire and was approved September 24, 2014 (see Appendix C). The application number assigned to this study was AG-14-36.

Research Design

This study was conducted as a longitudinal, panel survey design employed with a census approach (Creswell, 2012) to describe incoming students' perceptions of servant leadership traits in personal mentors at the beginning and end of the Fall 2014 CASNR AG 1011 – Freshmen Orientation class. A census approach allows all subjects in a population to be studied (Creswell, 2012).

Creswell (2012) stated descriptive statistics help summarize trends or tendencies in data and provide a foundation for understanding how scores compare with each other. Longitudinal survey designs evaluate trends within the same population, and panel studies differ from other longitudinal survey designs as researchers observe the same people over time (Creswell, 2012). One advantage to using a panel study within a longitudinal survey design is the individuals within the population remain the same so researchers can determine if any actual changes occurred within the group of individuals over time (Creswell, 2012). At the same time, Creswell (2012) also states measuring the same people over time can become difficult in panel studies when the respondents might not be willing or available to participate in the research during each data collection.

Descriptive research helps provide a foundation for solid theory (De Vaus, 2002). As the need for mentorship and servant leaders increases, so will the need for describing current trends and tendencies in servant leadership theory and how it relates to the development of college-aged students (Van Dierendonck, 2011). As a result, a panel study within a longitudinal survey design best fits the needs of the research objectives (Creswell, 2012) for describing the perceptions of servant leadership traits in incoming

students' personal mentors at the beginning and end of the CASNR AG 1011 – Freshmen Orientation course.

Instrumentation

The instrumentation used in this study included the Servant Leadership Survey (SLS) instrument (Van Dierendonck & Nuijten, 2011) and a researcher-designed general mentorship and demographic inventory questionnaire (Kimmelshue, 2012; Cramer, 2013; see Appendix D & Appendix E). The demographic inventory was only included in the pre-questionnaire.

Part 1: Servant Leadership Survey (SLS) Instrument

Several multi-dimensional instruments have been developed to measure servant leadership (Barbuto & Wheeler, 2006; Dennis & Bocarnea, 2005; Laub, 1999; Liden et al., 2008; Sendjaya et al., 2008; Van Dierendonck & Nuijten, 2011; Wong et al., 2007). Each study offers a different approach to how to define servant leadership through various people-related servant leadership themes, such as helping, serving, being honorable, empathic, authentic, ethical, accepting, and healing (Van Dierendonck, 2011). Through these constructs, servant qualities emerge; however, the leadership aspect is often overlooked (Van Dierendonck, 2011). Van Dierendonck and Nuijten's (2011) SLS evaluates constructs related to both the leader and the follower aspects while focusing on the leader-follower relationship from the perspective of the follower. Understanding how followers perceive leaders could help researchers understand how students perceive and apply personal mentorship within the first few years in higher education institutions (Upcraft et al., 2005).

The original SLS was developed and validated by a combination of two qualitative and eight quantitative studies with nearly 1,600 participants in the Netherlands and United Kingdom (Dutch composite sample, N = 1,167; UK sample, N = 384), and the initial stages included evaluating four different populations (Van Dierendonck & Nuijten, 2011). The SLS instrument was validated in three phases, which demonstrated factorial validity, internal consistency, content validity, incremental activity, and criterion-related validity (Van Dierendonck, 2011).

Following an exploratory factor analysis in the first Dutch and United Kingdom studies, Van Dierendonck and Nuijten (2011) narrowed the SLS selection of 99 items to 39 items and changed the initial interpersonal acceptance measure to forgiveness. To ensure the SLS was psychometrically sound, three additional populations were measured with confirmatory factor analyses to eventually decrease the instrument to 30 items, yielding an eight-dimensional factorial structure measuring empowerment, standing back, accountability, forgiveness, courage, authenticity, humility, and stewardship (Van Dierendonck & Nuijten, 2011). The fourth study was conducted in the United Kingdom to test the cross-cultural validity of the original Dutch study to build greater trust in the stability of the SLS (Van Dierendonck & Nuijten, 2011). Finally, a test of content and criterion-related validity showed good internal consistency across all samples and evidence of relations to organizational commitment, performance, and leadership clarity (Van Dierendonck & Nuijten, 2011). Figure 2 lists the SLS questions used in the pre- and post-questionnaires from this study relating back to each of the eight constructs defined by Van Dierendonck and Nuijten (2011).

Servant Leadership Survey (SLS) Questions by Construct

Empowerment

1. My mentor gives me the information I need to do my work well.
2. My mentor encourages me to use my talents.
3. My mentor helps me to further develop myself.
4. My mentor encourages others to come up with new ideas.
12. My mentor gives me the authority to make decisions which make work easier for me.
20. My mentor enables me to solve problems myself instead of just telling me what to do.
27. My mentor offers me abundant opportunities to learn new skills.

Standing Back

5. My mentor keeps himself/herself in the background and gives credits to others.
13. My mentor is not chasing recognition or rewards for the things he/she does for others.
21. My mentor appears to enjoy his/her colleagues' success more than his/her own.

Accountability

6. My mentor holds me responsible for the work I carry out.
14. I am held accountable for my performance by my mentor.
22. My mentor holds me and my colleagues responsible for the way we handle a job.

Forgiveness

7. My mentor keeps criticizing people for the mistakes they have made in their work.
15. My mentor maintains a hard attitude towards people who have offended him/her.
23. My mentor finds it difficult to forget things that went wrong in the past.

Courage

8. My mentor takes risks even when he/she is not certain of the support from others.
16. My mentor takes risks and does what needs to be done in his/her view.

Authenticity

9. My mentor is open about his/her limitations and weaknesses.
17. My mentor is often touched by the things he/she sees happening around him/her.
24. My mentor is prepared to express his/her feelings even if this might have undesirable consequences.
28. My mentor shows his/her true feelings to others.

Humility

10. My mentor learns from criticism.
18. My mentor tries to learn from the criticism he/she gets from his/her superior(s).
25. My mentor admits his/her mistakes to his/her superior(s).
29. My mentor learns from the different views and opinions of others.
30. If people express criticism, my mentor tries to learn from it.

Stewardship

11. My mentor emphasizes the importance of focusing on the good of the whole.
19. My mentor has a long-term vision.
26. My mentor emphasizes the societal responsibility of our work.

Figure 2. Adapted SLS Questions Organized by Construct.

Prior to taking each questionnaire, students were asked to consider their most influential mentor. Responses for the SLS instrument used a six-point Likert-type scale for each item: StD = Strongly Disagree; D = Disagree, SwD = Somewhat Disagree; SwA = Somewhat Agree; A = Agree; and StA = Strongly Agree (Van Dierendonck, 2011). Forgiveness was the only reverse-coded construct in the SLS instrument, as such, respondents who strongly agreed their mentor embodied forgiveness within the item ranked answers closer to StD = Strongly Disagree versus StA = Strongly Agree (Van Dierendonck & Nuijten, 2011). The three negatively keyed items measuring forgiveness in the SLS were recoded in SPSS to reflect the positively keyed scales of the other SLS questions (Field, 2009).

Finally, personal communication was established with the author of the SLS (Van Dierendonck, personal communication, June 19, 2014) to confirm the content of the SLS in a mentorship context. Because the original SLS was written for a managing context, with permission from Van Dierendonck, the researcher made slight modifications to the SLS by replacing occurrences of *my manager* in the original SLS instrument with *my mentor* and by replacing *staff* in the original SLS with *others* to refocus questions to target mentorship (personal communication, June 19, 2014). Because the minor changes did not influence what the items were measuring, the slight revisions did not pose a threat to the reliability of the SLS (Van Dierendonck, personal communication, June 19, 2014).

Part 2: General Mentorship and Demographic Inventory Questionnaire

Snowden and Hardy (2012) and Campbell et al. (2012) identified a need for further research on the influence of mentorship in students at the undergraduate level. Therefore, with help from a panel of experts, the researchers refined nine closed-ended and semi-closed questions (Creswell, 2012) regarding perceptions of general mentorship to address general mentorships preferences in incoming students in AG 1011 (see Appendix D). Questions included labeling the category of students' most influential mentors, identifying students' most important quality found in a mentor, identifying how often students seek mentorship, listing the general types of community service in which students are involved, and estimating how many hours of community service students have logged within the last month of completing the questionnaire.

To collect self-reported participant demographics, researchers modified nine closed-ended and semi-closed questions adapted from Kimmelshue (2012) and Cramer (2013) to add to the end of the pre-questionnaires (see Appendix D). Based on Creswell's (2012) recommendation to place sensitive questions after neutral questions in questionnaires, the demographic inventory was included at the end of the pre-questionnaire.

Validity

Creswell (2012) defined validity as the level to which a response reveals the indented interpretation of the question's purpose. To provide evidence of validity within the instrument, Creswell (2012) also describes five classifications of evidence: test

content, response processes, internal structure, relations to other variables, and the consequences of testing. Both intended and unintended consequences can influence the instrument's validity (Creswell, 2012).

A panel of experts was used to assess face and content validity of the instrument within the study (Leeuw, Hox, & Dillman, 2008). The panel consisted of 15 individuals hand-selected for their knowledge of mentorship, AG 1011, and involvement with incoming students within CASNR. The panel included four OSU faculty members, three OSU staff members, two previous student academic mentors for the AG 1011 course, four current graduate students, and two sophomore students who were enrolled in AG 1011 in the Fall 2013 semester. According to Leeuw et al. (2008), using a panel of experts to evaluate face and content validity helps "uncover a wide range of potential problems from typos and skip pattern logic errors to problems with how concepts have been operationalized" (p. 199). In addition, a panel of experts can help discover cognitive aspects for the respondents and identify possible analysis problems (Leeuw et al., 2008).

Each expert on the panel critiqued and reviewed a hard copy of the instrument and discussed recommended edits with the researcher. Preliminary changes were made, and the questionnaire was returned to the panel for a second review. Primary edits included making grammatical changes, selecting different word choices to improve clarity within the questions and answers, and modifying the order of questions to strengthen the flow of the instrument.

Reliability

Stable and consistent scores from an instrument generally suggest a high reliability (Creswell, 2012). Leeuw et al. (2008) also recognized the standards for how

well questions perform is a result of the instrument's reliability. Field (2009) stated Cronbach's alpha scores measure the consistency of an instrument through scale reliability. A Cronbach's alpha range between .70 and .80 is considered reliable, and all scores above .80 suggest good reliability within the instrument (Field, 2009). However, when dealing with psychological constructs, values slightly below .70 can still be expected because of the diversity in the construct measures (Field, 2009).

Reliability of the SLS Instrument

The SLS instrument (Van Dierendonck & Nuijten, 2011) was developed by an exploratory factor analysis and was further validated by multiple confirmatory factor analyses. The SLS instrument (Van Dierendonck & Nuijten, 2011) reported the following internal reliability scores during the factor development stage in the first study conducted in the Netherlands (N = 1,167): Cronbach's alphas of .89 were reported for empowerment (7 items), .81 for accountability (3 items), .76 for standing back (3 items), .91 for humility (5 items), .82 for authenticity (4 items), .69 for courage (2 items), .72 for forgiveness (3 items), and .74 for stewardship (3 items).

Following Van Dierendonck and Nuijten's (2011) initial exploratory study in the Netherlands, the SLS instrument was administered in the United Kingdom (N = 384) for cross-cultural validity and confirmatory factor analysis, and it yielded suitable to good internal consistency with Cronbach's alphas of .94 for empowerment (7 items), .93 for accountability (3 items), .92 for standing back (3 items), .95 for humility (5 items), .76 for authenticity (4 items), .91 for courage (2 items), .90 for forgiveness (3 items), and .87 for stewardship (3 items). Of the eight constructs, empowerment, standing back, humility,

and stewardship had strong factor loadings of .80 and higher (Van Dierendonck & Nuijten, 2011).

Forgiveness and accountability deviated the most from the correlations within the different studies, most likely because people experience forgiveness in different ways and accountability focuses on the leader versus the servant element of servant leadership (Van Dierendonck & Nuijten, 2011). Additionally, the lowest Cronbach's alpha score in the SLS was a .69 for courage, which raised concern; however, the authors decided because the three measures were unique elements in the conceptual theory of servant leadership, they would be kept as constructs within the instrument (Van Dierendonck & Nuijten, 2011).

Kline (1999) stated internal consistencies below .7 could be expected in psychometric constructs because of diversity in the measures. Even still, internal consistency measures for construct reliability ranging from .69 to .95 between the two original SLS studies raised caution for the current study. As such, post-hoc reliability scores were run within each subscale construct for the pre- and post-questionnaires. The pre-questionnaire yielded the following Cronbach's alphas: .77 for empowerment (7 items), .72 for accountability (3 items), .53 for standing back (3 items), .83 for humility (5 items), .49 for authenticity (4 items), .53 for courage (2 items), .68 for forgiveness (3 items), and .52 for stewardship (3 items). The post-questionnaire yielded the following Cronbach's alphas: .78 for empowerment (7 items), .72 for accountability (3 items), .60 for standing back (3 items), .83 for humility (5 items), .61 for authenticity (4 items), .64 for courage (2 items), .74 for forgiveness (3 items), and .57 for stewardship (3 items).

Caution was warranted as a result of the lower sub-construct reliability scores. As such, a follow-up exploratory factor analysis was conducted on the data and revealed a one-factor solution responsible for 24% of the variance. Three factors also were cumulatively responsible for 38% of the variance. The exploratory factor analysis of the current data confirmed Van Dierendonck's and Nuijten's (2011) factor analysis of the SLS in a Dutch composite sample where three factors also emerged from their data. From their study, factor one was interpreted as the "leader"-side of servant leadership, which was expressed through high loading of empowerment, accountability, vision, and intellectual stimulation (Van Dierendonck & Nuijten, 2011). The leader component of servant leadership is identified as enabling followers to set clear goals, provide meaningful work situations, and express personal talents (Van Dierendonck & Nuijten, 2011). Van Dierendonck and Nuijten (2011) labeled factor two as the "servant"-side of servant leadership, where standing back, humility, authenticity, supportive leadership, and ethical leadership support the willingness to serve other through support and listening. Finally, Van Dierendonck and Nuijten (2011) third factor was identified as the forgiveness factor, where mistakes are recognized as growth opportunities and looking forward is better than looking back.

Nevertheless, recognizing Van Dierendonck and Nuijten (2011) also identified three primary factors in the SLS from an exploratory factor analysis in the Dutch study, and following the low sub-construct reliability scores and exploratory factor analysis for this study, internal consistency measures for the SLS instrument as a whole was measured. Post hoc Cronbach's alphas of .87 and .88 were yielded for the pre- and post-questionnaires, respectively.

Population

The population of this study included incoming first-year students enrolled in the Fall 2014 CASNR AG 1011 – Freshmen Orientation course at Oklahoma State University ($N = 485$). Students who transferred to OSU at the start of the Fall 2014 semester from other institutions are not required to take AG 1011 and were not included in the population.

Of this population, 436 students ($n = 436$) completed the pre-questionnaire, which gave the instrumentation an 89.9% response rate for the first administration. Four hundred four students ($n = 404$) completed the post-questionnaire, yielding an 83.3% response rate for the post-administration.

Data Collection

Dillman, Smyth, and Christian (2009) recommend questionnaires should be conducted in a manner to produce accurate information, which reflects the views and experiences of the given population. To minimize error, the survey mode should be selected to match the population (Dillman et al., 2009). Plus, the most effective way to decrease the cost of respondent participation is to make completing the questionnaire convenient for the intended population to respond (Dillman et al., 2014). Therefore, to minimize error and increase convenience, paper questionnaires were administered to the incoming students during the first 10 to 15 minutes of each of the AG 1011 class sections.

The CASNR AG 1011 – Freshmen Orientation course spanned seven sections during the Fall 2014 semester. On the first day of the CASNR AG 1011 – Freshmen

Orientation course (August 18 and August 19, 2015, depending on the section), each incoming student was given a pre-questionnaire (see Appendix D) to measure students' perceptions of servant leadership traits in personal mentors prior to the beginning of the Fall 2014 semester and prior to exposure to the first eight weeks at OSU and the CASNR AG 1011 – Freshmen Orientation course with student academic mentors (SAMs).

Incoming students then were administered a post-questionnaire (see Appendix E) at the end of the AG 1011 course (October 8 and October 9, 2015, depending on the course section). To avoid participant fatigue (Creswell, 2012), the only difference between the pre- and post-questionnaires was the post-questionnaire did not include the demographic inventory requesting students' age, sex, ethnicity, major, size of hometown, and organizational background. All other questions regarding Van Dierendonck and Nuijten's (2011) SLS instrument and the general mentorship questions remained the same to compare students' responses (Creswell, 2012) at the beginning of the AG 1011 course to students' responses after the first eight weeks of enrollment at OSU.

Participant Confidentiality

Participants' names were kept anonymous to protect the identities of participants in the study, and researchers used a unique coding system (see Appendix F) to match responses from the pre-questionnaire to the post-questionnaire (Creswell, 2012). All research records were stored on a password-protected computer, and completed student questionnaires were kept in a locked desk in 103 Agricultural Hall. Only the researchers and individuals responsible for research oversight had access to student records. To minimize requesting sensitive information and increase trust for respondent participation

(Dillman, Smyth, & Christian, 2014), data from this study was only reported as group findings (Creswell, 2012).

Questionnaire Administration

At the beginning of each CASNR AG 1011 – Freshmen Orientation course section, the lead instructor for the course, Dr. Steve Damron, introduced the researcher and highlighted the opportunity for students to participate in research. Next, the researcher read a script explaining the purpose of the study and participant consent information describing rights as research volunteers (see Appendix B & Appendix C).

After reading the script, approximately 10 to 15 minutes were given for completing the questionnaires. Prior to starting the pre- and post-questionnaires, the researcher asked for questions to help minimize misunderstanding of instructions (Dillman et al., 2014). Only students present during the days the pre- and post-questionnaires were administered were included. The researcher did not complete follow-up data collections for absent students. Participation in the study was completely voluntary, and only students who were 18 years old or older were measured. Once students completed the questionnaires during the day of administration, the researcher gathered all the questionnaires and thanked the respondents for their time.

Dillman et al. (2014) stated one of the most effective ways of increasing the response rate of voluntary questionnaires is to offer cash or material incentives in exchange for participation. Questionnaires that combine social and self-interest incentives with social exchange concepts where respondents feel a sense of reward for helping people generally yield a higher response rate (Dillman et al., 2014). Therefore,

participants who volunteered during the pre-questionnaire also had the option of writing their email address on their pre-questionnaire to be placed in a drawing for four $50 book scholarships payable through the students' university accounts. Winning students were notified of the drawing results through a congratulatory email requesting their acceptance of the award, their OSU email address, student ID number, and confirmation of their enrollment in OSU for the Spring 2015 semester (see Appendix G). Students who missed the pre-questionnaire or who did not wish to participate were not included in the optional $50 book scholarship drawing.

Participants who volunteered during the post-questionnaire were given the opportunity to complete a removable insert (see Appendix H) with their name and email address for 10 points extra credit in the CASNR AG 1011 – Freshmen Orientation class. Only the chief researcher, who was a teaching assistant for the AG 1011 course, had access to the extra credit points for the class. Once the scores were added to students' course grades, the inserts were discarded. To avoid placing pressure on students to complete the voluntary questionnaire (Creswell, 2012), students who did not wish to participate in the study or who were absent during the day of post-questionnaire administration were given the option to complete a different extra credit assignment for the course (see Appendix I).

Data Analysis

The data for this study was analyzed using IBM Statistical Package for the Social Sciences (SPSS) Statistics 21.0 for Macintosh™. To reduce human error, SPSS was used to analyze data and report descriptive statistics (Field, 2009). Descriptive statistics were used to analyze central tendencies within the data (Creswell, 2012). Research objectives

one, two, and four used a descriptive analysis. Frequencies and percentages were used to describe nominal data within categories (Creswell, 2012). Ordinal, or ranked data (Creswell, 2012), was analyzed using means and standard deviations. The demographic question asking respondents for their age was categorized as interval data, reflecting numeric scales with continuous data (Creswell, 2012). The interval data was analyzed by calculating the mean and range (Creswell, 2012).

Research objectives three and five also used descriptive statistics to report the mean and standard deviations of student scores within the SLS instrument. Inferential analysis then was used to compare variables from the pre-data to the post-data (Creswell, 2012). Because the same population is measured twice, a repeated-measures test was used through a paired-samples *t*-test (Field, 2009). Repeated-measures tests are used to describe statistical variance between dependent variables within a study (Cohen & Lea, 2004).

Methods for Determining Effect Size

To measure the strength of relationships between variables, effect sizes should be calculated to standardize the influence of the observed effect (Field, 2009). Two common methods, standardized mean difference (*d*) and a correlation coefficient (*r*), can be used to report effect size (Prentice & Miller, 1992). Cohen (1992) and Field (2009) suggested effect sizes can be measured by (a) a small effect, $r = .10$, which helps explain 1% of total variance; (b) a medium effect, $r = .30$, which helps explain 9% of total variance; and (c) a large effect, $r = .50$, which represents 25% of total variance. Although reporting a

measure's effect size can explain the strength between variables, Prentice and Miller (1992) stated:

> Small effects can, in fact, be important. Three major defenses of their potential importance have been offered previously: (a) Small effects may have enormous implications in a practical context, (b) small effects in ongoing processes may accumulate over time to become large effects, and (c) small effects may be quite important theoretically. (p. 163)

Potential Threats to Validity

Kirk (2013) explained two main goals of research are to render valid conclusions about a study's variables and to draw valid generalizations influencing populations and settings of interest. Shadish, Cook, and Campbell (2002) acknowledged four main types of threats to drawing valid conclusions: (a) statistical conclusion validity; (b) internal validity; (c) construct validity; and (d) external validity. Efforts to alleviate each threat relevant to this study will be discussed.

Statistical Conclusion Validity

Research findings are expressed by effect sizes (Field, 2009). Three elements can influence the power of a statistical test: (a) the sample's or population's size; (b) the alpha level of the test; and (c) the effect size or statistical power (Field, 2009). An alpha level of .05 was determined *a priori*, and post-hoc analysis also assisted in measuring the effect of the study (Field, 2009).

Normality within the distribution builds confidence for inference making (Creswell, 2012). Field (2009) stated parametric tests based on normal distributions require four basic statistical assumptions to be met for tests to be accurate: (a) normally distributed data; (b) homogeneity of variance; (c) interval data; and (d) independence. To test the assumptions for dependent, paired-samples *t*-tests, the sampling distribution of the differences between scores should be tested (Field, 2009). According to the central limit theorem, Field (2009) stated large samples generally ensure normal distribution, especially in populations of 30 or more subjects. Although the study had a large population size, histograms, P – P plots, Q – Q plots, boxplots, and the Shapiro-Wilk test were also used to help ensure normality in the data distribution (Field, 2009).

The Shapiro-Wilk test showed deviation from normal distribution, as all eight constructs were significantly non-normal. Accountability, authenticity, and humility showed a slight negative-skew, and seven of the eight constructs (excluding forgiveness) also tested significant for kurtosis. Nevertheless, the threats to skewedness and kurtosis are deemed tenable, as large sample sizes are likely to show significance even when the skew and kurtosis are not far from normal (Field, 2009). Boxplot analysis also was used to evaluate outliers within the data (Field, 2009). Eleven extreme outliers were individually evaluated. Because the outlying scores for each outlier still fell within the possible scoring range, the measures were justified as the study assumes each participant answered each question honestly and without bias.

Internal, External, and Construct Validity

Possible threats to a study's external and internal validity were originally conceptualized by Campbell, Stanley, and Gage (1963) and have been more recently explained by Shadish, Cook, and Campbell (2002). Creswell (2012) affirms eliminating threats to internal and external validity help confirm drawing valid conclusions from a study. Different types of threats to internal validity relating to participants include history, maturation, regression, selection, mortality, and interactions with selection (Creswell, 2012). Four possible threats to internal validity in regards to treatments are diffusion of treatments, compensatory equalization, compensatory rivalry, and resentful demoralization (Creswell, 2012). Finally, testing and instrumentation pose as possible internal threats to a study's procedures (Creswell, 2012).

Two threats to internal validity related to participants in this study are history and mortality (Creswell, 2012). The threat of history influences pre-test and post-test studies as time passes from the beginning of the study to the end (Creswell, 2012). Perceptions of servant leadership traits in personal mentors can be influenced by many different factors (Creswell, 2012; Kirk, 2013). Tightly controlling environments in educational experiments is extremely difficult to near impossible to accomplish (Creswell, 2012). Therefore, the threat of history is eased as this study seeks to measure a student's perceptions of servant leadership at two distinct points in time, at the beginning of AG 1011 and at the end (Creswell, 2012).

The second threat to validity is the mortality rate of respondents not completing the eight-week deferred post-test (Creswell, 2012). Researchers addressed this threat by offering course credit as an incentive to students to complete the post-questionnaire

(Creswell, 2012). Thirty-two students who took the pre-questionnaire did not take the post-questionnaire, yielding a 7.3% mortality rate between the pre- and post-questionnaires. The mortality rate was calculated by dividing the number of students who did not complete the post-questionnaire by the number of students who completed the pre-questionnaire (Creswell, 2012). Creswell (2012) identified mortality as subjects who did not complete a full experiment for reasons such as dropping out, loss of interest, or being absent during questionnaire administration.

Another threat relating to the procedures used to administer the study was the threat to test-retest reliability (Creswell, 2012). Test-retest reliability evaluates the degree to which responses are stable over time from one test administration to the next, as respondents are already familiar with questions and responses from previous administrations (Creswell, 2012). Researchers addressed this threat by administering a shorter post-questionnaire that did not include demographic questions asked in the pre-questionnaire (Creswell, 2012). Instructions also were given for students to assess how they viewed servant leadership traits in mentors at the time of the administration of the questionnaire, which gives a snapshot of their perceptions at different points of time (Creswell, 2012). Therefore, although the questions were the same, the view of the questions could have changed during the different timeframes, helping set the context of the questionnaire and establish purpose for the respondents (Creswell, 2012).

CHAPTER IV

FINDINGS

Chapter IV describes the findings of this study as directed by the purpose and objectives. Findings are listed in order of the research objectives.

Correlations of SLS Measures

Prior to analyzing the findings in the study with descriptive and inferential statistics, the correlations of the dependent variables in the SLS were analyzed (Creswell, 2012). Table 1 shows a summary of the correlations between the SLS measures. Most variables had statistically significant correlations ($p < .01$). The empowerment and stewardship measures ($r = .65$) showed the largest correlation between measures. Other statistically significant correlations ($p < .01$) with correlations above $r = .50$ were empowerment and standing back ($r = .55$); empowerment and accountability ($r = .55$); empowerment and humility ($r = .53$); humility and standing back ($r = .55$); humility and authenticity ($r = .53$); and humility and stewardship ($r = .57$). The courage and forgiveness measures ($r = -.16$) were negatively correlated and statistically significant ($p < .01$). Van Dierendonck and Nuijten (2011) discussed SLS measures being statistically correlated as constructs closely define servant leadership.

Table 1

Summary of Correlations Between SLS Measures

	1	2	3	4	5	6	7	8
1. Empowerment	---							
2. Standing Back	.55**	---						
3. Accountability	.55**	.41**	---					
4. Forgiveness	.20**	.20**	.02	---				
5. Courage	.27**	.19**	.25**	-.16**	---			
6. Authenticity	.39**	.42**	.25**	.09	.27**	---		
7. Humility	.53**	.55**	.31**	.28**	.18**	.53**	---	
8. Stewardship	.65**	.48**	.41**	.19**	.18**	.42**	.57**	---

Note. $^{**}p < 0.01$, two-tailed.

Findings Related to Objective One

Objective one sought to describe selected demographic characteristics of incoming students in the Fall 2014 CASNR AG 1011 – Freshmen Orientation course, including age, sex, ethnicity, major, size of hometown, and organizational background.

Demographic Characteristics

The mean age of respondents was 18.2 (*SD* = .76). The youngest respondents were 18, and the oldest respondent was 30. Four students (0.9%) chose not to respond to

the age question, and 369 students (84.6%) were 18 years old at the point of completing the pre-questionnaire. Fourteen students were pulled from the population and the study for being under 18 years old at the time of the pre-questionnaire. These students were not included in the post-questionnaire. In regards to reporting biological sex, 29.3% (*f* = 127) were male and 70.7% (*f* = 306) were female. Three students did not respond.

Table 2 highlights personal racial or ethnic group(s) by which respondents identify themselves. Three hundred sixty-one students (83.6%) identified most closely to the Caucasian (non-Hispanic) race. Seventeen respondents (3.9%) identified as multi-racial. Four students did not respond.

Table 2

Racial or Ethnic Groups (n = 436)

Group	*f*	%
Caucasian (Non-Hispanic)	361	83.6
Native American or Native Alaskan	27	6.3
Multi-Racial	17	3.9
Latino or Hispanic	15	3.5
African-American (Non-Hispanic)	7	1.6
Asian or Pacific Islanders	5	1.2
Total	436	100.0

Note. Percentages do not reflect non-respondents.

Respondents also were asked to classify their primary major from a list of 22 CASNR major options; majors with a pre-vet option were listed as separate categories. Five CASNR majors include a pre-vet option: Agribusiness; Animal Science; Biochemistry and Molecular Biology; Entomology; and Natural Resource Ecology and Management. Collectively, 39.2% (f = 171) of respondents selected a pre-vet option from at least one of the five major options. Thirty-three percent (f = 143) of students selected Animal Science, Pre-Vet (see Table 3 and Figure 3).

Table 3

Primary Major Classification (n = 430)

Major	*f*	%
Agribusiness	49	11.4
Agribusiness (Pre-Vet)	5	1.2
Agricultural Communications	27	6.3
Agricultural Economics	10	2.3
Agricultural Education	6	1.4
Agricultural Leadership	1	0.2
Animal Science	44	10.2
Animal Science (Pre-Vet)	143	33.3
Biochemistry & Molecular Biology	56	13.0
Biochemistry & Molecular Biology (Pre-Vet)	8	1.9
Biosystems & Agricultural Engineering	3	0.7
Entomology	3	0.7
Entomology (Pre-Vet)	2	0.5
Environmental Sciences	14	3.3
Food Science	6	1.4
Landscape Architecture	2	0.5
Landscape Management	1	0.2
Natural Resource Ecology & Management	24	5.6
Natural Resource Ecology & Management (Pre-Vet)	13	3.0
Plant & Soil Sciences	9	2.1
Undecided	4	0.9
Total	430	100.0

Note. Some respondents are pursuing double majors, but students were asked to select only their primary major.

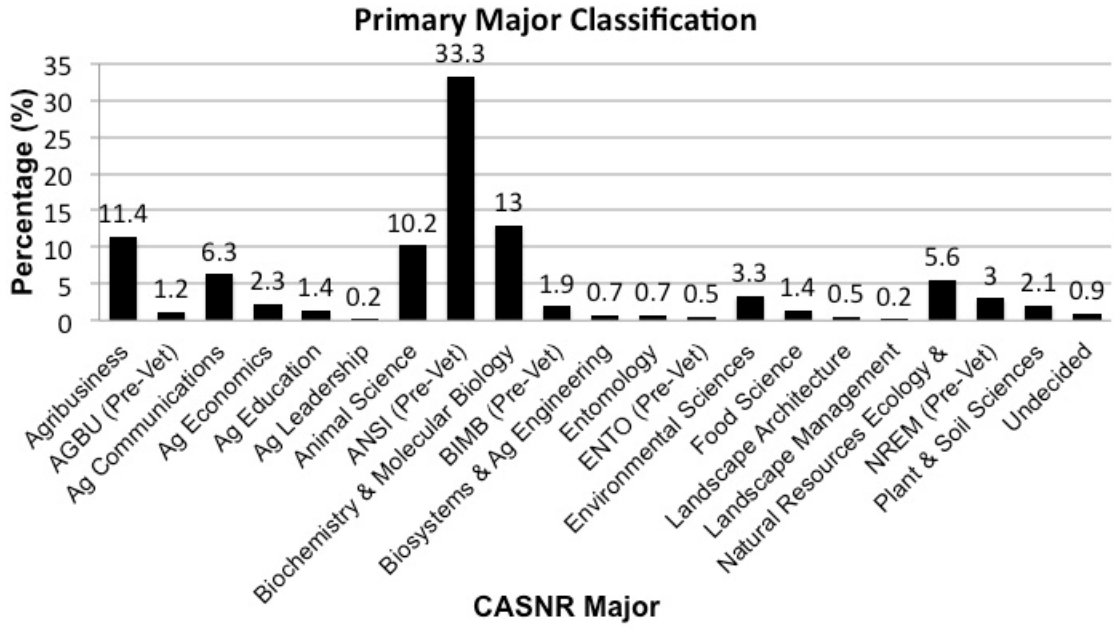


Figure 3. Primary Major Classification for Students.

Ninety-five respondents' (21.8%) advisers were housed in OSU's Learning and Student Success Opportunity (LASSO) Center. Sixteen students (3.7%) did not respond to where their adviser was housed.

Prior to attending OSU, 23.6% (*f* = 102) of respondents lived on a farm or ranch; 29.6% (*f* = 128) lived in a rural area or a small town of 10,000 people or less; 25.2% (*f* = 109) lived in a large town with a population ranging from 10,000-50,000 people; and 21.5% (*f* = 93) lived in a large city with a population of more than 50,000. Four students did not respond.

Table 4 and Figure 4 highlight the quantity of high school organizations, clubs, or teams in which students were involved prior to attending OSU. More than half (55%; *f* = 218) of respondents indicated they were involved in five or more student organizations in

high school. Ninety-five students (21.8%) participated in at least four organizations, clubs, or teams during their high school career. Six students (1.4%) were not involved in any club, organization, or team in high school.

Table 4

Quantity of High School Organizations/Clubs/Teams Students Participated In (n = 436)

Number of Organizations	*f*	%
Four	95	21.8
Five	78	17.9
Six	78	17.9
Three	54	12.4
Seven	43	9.9
Two	36	8.3
Eight	11	6.2
One	6	1.4
No Involvement	6	1.4
Nine	4	2.5
Ten	4	0.9
Total	436	100.0

Note. Students were asked to record any involvement throughout high school.

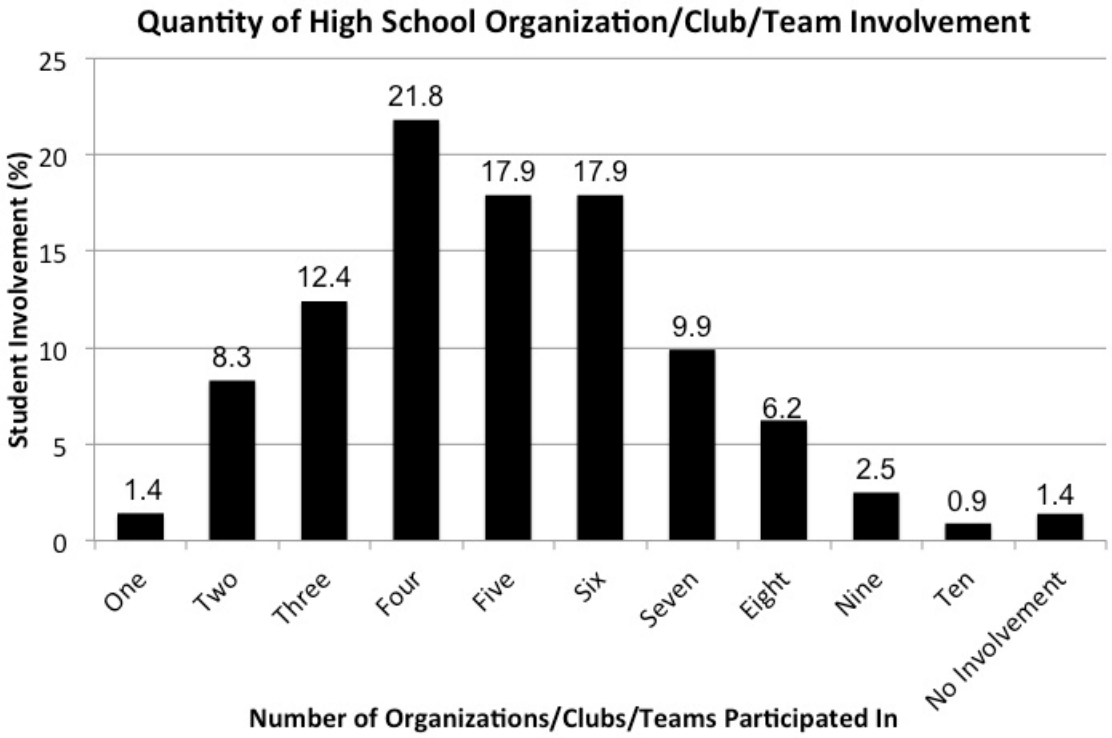


Figure 4. Quantity of High School Organizations/Clubs/Teams Students Participated in Prior to Attending OSU.

Table 5 and Figure 5 displays student involvement in specific high school clubs, organizations, and teams prior to attending OSU. Students were asked to circle any group with which they were involved throughout their high school careers. More than half of respondents were involved in the National Honor Society (57.6%; $f = 251$); team sports (53.7%; $f = 234$); and faith-based organizations (51.4%; $f = 224$). One hundred ninety-four (44.5%) students were involved in other organizations not listed on the questionnaire. Blank spaces were provided for students to list other organizations not listed on the questionnaire (see Appendix J for the full list of other high school organizational involvement). Top responses for other types of involvement were Key

Club (*f* = 13); Beta Club (*f* = 8); Theater or Drama (*f* = 8); Business Professionals of America (*f* = 7); Academic Team (*f* = 6); Spanish Club (*f* = 6); and Science Club (*f* = 5).

Table 5

High School Organizational Background (n = 436)

Organization	*f*	%
National Honor Society (NHS)	251	57.6
Team Sports (Basketball, Football, Softball, Volleyball, etc.)	234	53.7
Faith-based (Church Youth Group, FCA, etc.)	224	51.4
Future Farmers of America (FFA)	198	45.4
Student Council	150	34.4
Individual Sports (Equestrian, Golf, Tennis, Wrestling, etc.)	142	32.6
Music (Band, Choir, Orchestra, etc.)	129	29.6
4-H	89	20.4
Boy Scouts / Girl Scouts	24	5.5
Family, Career and Community Leaders of America (FCCLA)	23	5.3
Other	194	44.5

Note. Students were asked to record any involvement throughout high school.

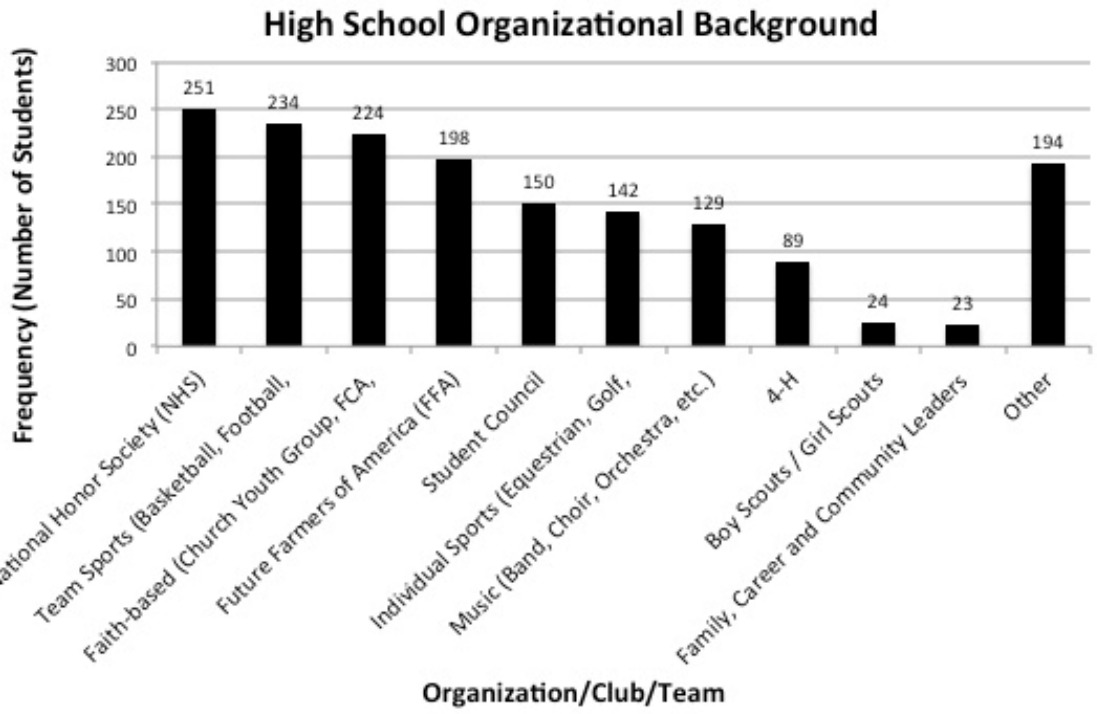


Figure 5. High School Organizational Background.

Findings Related to Objective Two

Objective two sought to describe incoming students' engagement in community service at the beginning and end of the CASNR AG 1011 – Freshmen Orientation course in the Fall 2014 semester.

Community Service Engagement

At the beginning of CASNR AG 1011 – Freshmen Orientation, 72.5% (f = 316) of students completed at least one act of community service within the month prior to the start of AG 1011. Service categories included youth development, need-based, faith-

based, elderly or retired, veteran's affairs, and community development. Students who did not complete any community service within the previous month prior to the beginning of AG 1011 was 27.5% (*f* = 120). At the beginning of CASNR AG 1011, 45.9% (*f* = 200) of students participated in some form of youth development service within one month of taking the questionnaire (see Table 6). The lowest percentage of service participation at the start of the course was 3.4% (*f* = 15) of students serving within the last month in veteran's affairs.

Table 6

Student Community Service Engagement One Month Prior to Taking Pre- and Post-Questionnaire (Before: n = 436; *After: n* = 404)

	Before AG 1011		After AG 1011	
Service	*f*	%	*f*	%
Youth Development	200	45.9	132	32.7
Faith-based	161	36.9	107	26.5
Need-based	132	30.3	129	31.9
Community Development	96	22.0	138	34.2
Elderly or Retired	71	16.3	45	11.4
Veteran Affairs	15	3.4	18	4.5
No Service Engagement	120	27.5	131	32.4

Note. Students were asked to circle all types of service that applied to them. Thirty-two students who completed the pre-questionnaire did not complete the post-questionnaire. Therefore, non-respondents were not included in the final percentages.

After AG 1011, 32 students did not complete the post-questionnaire who completed the pre-questionnaire (n = 404). As such, non-respondents were not included in the calculation of the post-questionnaire percentages. One hundred thirty-one students (32.4%) engaged in no act of service within the previous month to the post-questionnaire. The highest percentage of service engagement at the end of AG 1011 was community development with 34.2% (f = 138) of students participating within the previous month of taking the post-questionnaire (see Table 6 and Figure 6).

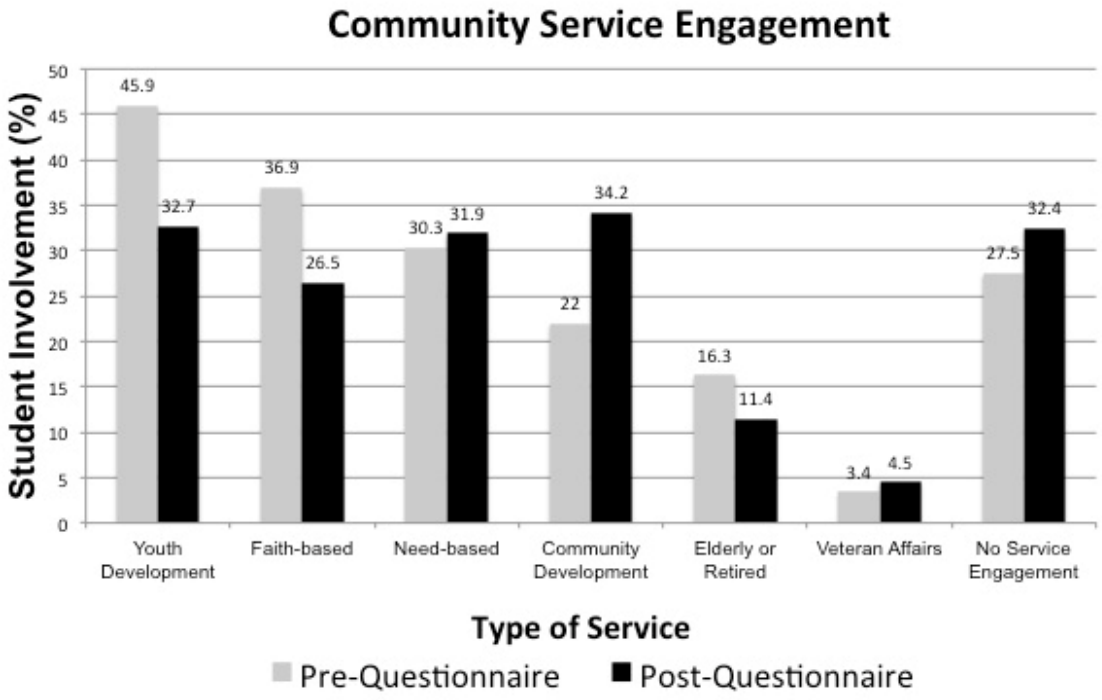


Figure 6. Community Service Engagement One Month Prior to Taking the Pre-Questionnaire and One Month Prior to the Time of the Post-Questionnaire.

Findings Related to Objective Three

Objective three sought to compare differences in incoming students' perceptions of servant leadership traits in personal mentors at the beginning and end of the CASNR AG 1011 – Freshmen Orientation course in the Fall 2014 semester.

Perceptions of Servant Leadership Traits in Personal Mentors

A paired-samples t-test was conducted to compare students' perceptions of servant leadership traits in personal mentors at the beginning and end of the CASNR AG 1011 – Freshmen Orientation class. Table 7 shows the students' perceptions of servant leadership traits in personal mentors at the beginning and end of AG 1011. Three measures showed statistical significance: authenticity at $t(398) = -4.218$, $p < .001$, $r = .21$; humility at $t(397) = -3.434$, $p = .001$, $r = .17$; and stewardship at $t(402) = -2.114$, $p = .035$, $r = .21$. Although the *p*-values showed statistical significance for authenticity, humility, and stewardship, because of the large population size yielding high degrees of freedom for each pair, the effect sizes were between small and medium effects ($r = .1$ and $r = .3$, respectively; Cohen, 1992). The other five constructs did not show statistical significance within their *p*-values.

Accountability scored the highest servant leadership construct mean in the pre-questionnaire ($M = 5.39$, $SD = 0.60$) and in the post-questionnaire ($M = 5.42$, $SD = 0.57$). Forgiveness scored the lowest servant leadership construct mean in the pre-questionnaire ($M = 4.04$, $SD = 1.092$) and in the post-questionnaire ($M = 3.95$, $SD = 1.19$).

Table 7

Incoming Students' Perceptions of Servant Leadership Traits in Personal Mentors at the Beginning and End of AG 1011

		Pre-Questionnaire		Post-Questionnaire					
Construct	*f*	*M*	*SD*	*M*	*SD*	*t*	*df*	*p*-value	*r*
Authenticity	399	4.55	.734	4.71	.741	-4.218	398	.000	.21
Humility	398	4.76	.795	4.87	.748	-3.434	397	.001	.17
Stewardship	403	5.10	.624	5.17	.644	-2.114	402	.035	.21
Forgiveness	398	4.04	1.092	3.95	1.190	1.750	397	.081	.09
Accountability	392	5.39	.603	5.42	.566	-1.008	391	.314	.05
Standing Back	402	4.81	.773	4.84	.784	-.888	401	.375	.04
Courage	391	4.56	.899	4.58	.965	-.422	390	.673	.02
Empowerment	391	5.29	.525	5.30	.536	-.409	390	.683	.02

Note. $p < .05$. Students were asked to answer questions based on their most influential mentor at the time of taking each questionnaire.

Findings Related to Objective Four

Objective four sought to describe incoming students' classification of influential mentors at the beginning and end of the CASNR AG 1011 – Freshmen Orientation course in the Fall 2014 semester.

Influential Mentor Classification

At the beginning of the Fall 2014 CASNR AG 1011 – Freshmen Orientation, 51.3% (f = 222) of students chose a parent as their most influential mentor and at the end of the course, 48.5% (f = 193) chose a parent as their most influential mentor (see Table 8 and Figure 7). Teachers (11.8%; f = 51) and club or organizational advisers (10.9%; f = 47) were the next most common mentors selected. Depending on the schools, a teacher could also be a club adviser and vice versa; however, students had the freedom to select how they most primarily saw their teacher or adviser in their roles. Twenty students (4.6%) during the pre-questionnaire and 18 students (4.3%) in the post-questionnaire selected "Other" as their most influential mentor. A blank space was provided for students to label their mentor's role if their selection was not listed on the questionnaire. Appendix K provides a list of mentor classifications who students labeled as their most influential mentors in the pre- and post-questionnaires. Top responses for other mentors in the pre-questionnaire were grandparents (f = 4), aunts or uncles (f = 4), and other non-identified family members (f = 3). Top responses for other mentors in the post-questionnaire were grandparents (f = 5) and aunts or uncles (f = 5). Three students did not respond to the pre-questionnaire mentorship classification question and 38 students did not respond to the post-questionnaire.

Table 8

Classification of Influential Mentors (Before: n = 433; *After: n* = 398)

	Before AG 1011		After AG 1011	
Mentor	*f*	%	*f*	%
Parent	222	51.3	193	48.5
Teacher	51	11.8	39	9.8
Club / Organization Adviser	47	10.9	42	10.6
Athletic Coach	28	6.5	17	4.3
Student / Peer	19	4.4	42	10.6
Religious / Church Leader	17	3.9	20	5.0
Sibling	17	3.9	17	4.3
Boss / Manager	11	2.5	9	2.3
Other Mentor	20	4.6	18	4.3
No Mentor	1	0.2	1	0.3

Note. Students were asked to select their most influential mentor at the time of the pre- and post-questionnaire administrations.

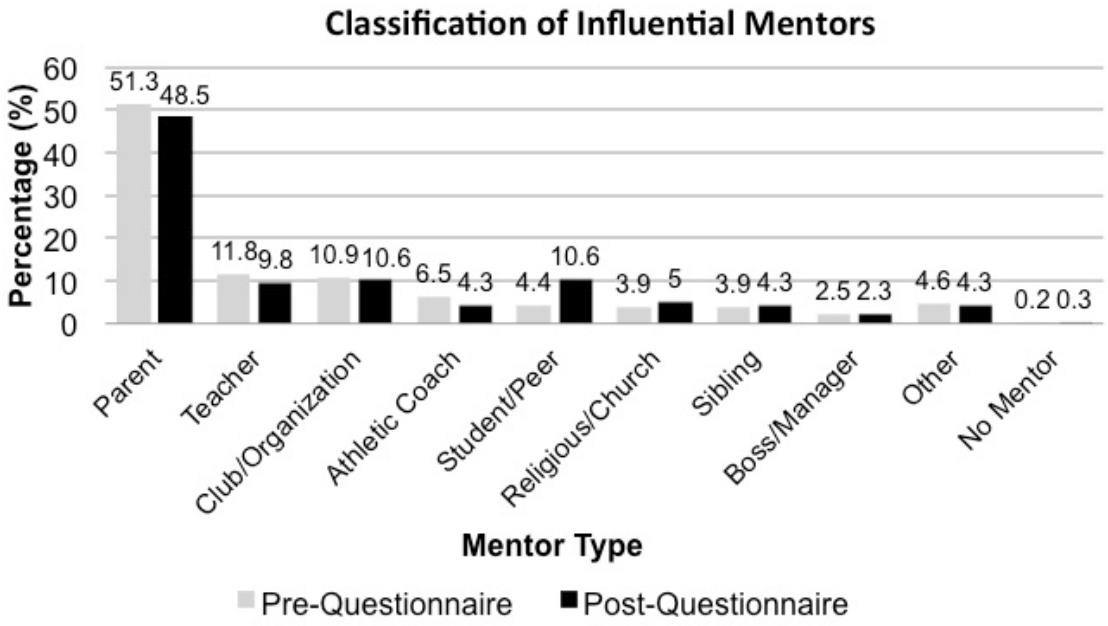


Figure 7. Classification of Influential Mentor Type in the Pre- and the Post-Questionnaires.

Between the pre-questionnaire at the beginning of AG 1011 and the post-questionnaire at the end of AG 1011, 132 students (30.3%) changed their mentor classification (see Table 9 and Figure 8). Forty-one students were missing data from either the pre- or post-mentorship classification and were labeled as "No Response."

Table 9

Change in Influential Mentor Classification (n = 436)

Mentor	*f*	%
Changed Mentor Classification	132	30.3
Did Not Change Mentor Classification	263	60.3
No Response	41	9.4
Total	436	100.0

Note. Students were asked to consider their most influential mentor at the time of the pre- and post-questionnaire administrations.

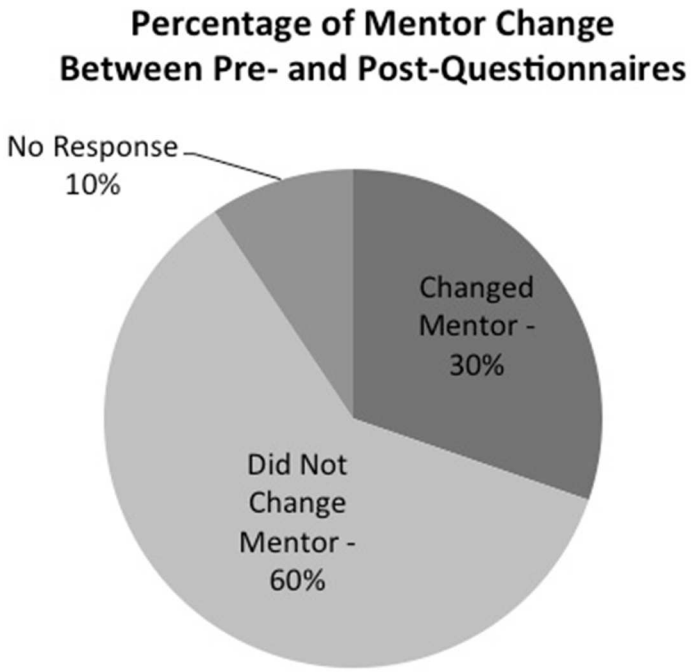


Figure 8. Change in Classification of Influential Mentor Type.

Findings Related to Objective Five

Objective five sought to compare students' perceptions of servant leadership traits if their most influential mentor classification changed from the beginning to the end of the AG 1011 course in the Fall 2014 semester.

Perceptions of Servant Leadership Traits in Personal Mentors Who Did Not Change

The data was split into students who changed mentors and those who did not. A paired-samples t-test was conducted to compare perceptions of servant leadership traits in students' who did not change their personal mentors at the beginning and end of the CASNR AG 1011 – Freshmen Orientation class. Table 10 shows perceptions of servant leadership traits in students who did not change their classification of personal mentors at the beginning and end of the AG 1011 course. Two measures showed statistical significance: authenticity at $t(260) = -3.038$, $p = .003$, $r = .19$; and humility at $t(260) = -3.230$, $p = .001$, $r = .20$. The other six constructs did not show statistical significance when students did not change their mentor between the beginning and end of AG 1011.

Accountability had the highest servant leadership mean score among students who did not change their mentor classification during the AG 1011 course in the pre-questionnaire ($M = 5.37$, $SD = 0.65$) and in the post-questionnaire ($M = 5.43$, $SD = 0.58$). Forgiveness scored the lowest servant leadership mean and the highest standard deviation in the pre-questionnaire ($M = 4.07$, $SD = 1.08$) and in the post-questionnaire ($M = 3.98$, $SD = 1.15$).

Table 10

Perceptions of Servant Leadership Traits in Personal Mentors at the Beginning and End of AG 1011: Incoming Students Who Did Not Change Mentorship Classification

		Pre-Questionnaire		Post-Questionnaire					
Construct	*f*	*M*	*SD*	*M*	*SD*	*t*	*df*	*p*-value	*r*
Humility	261	4.78	.795	4.90	.703	-3.230	260	.001	.20
Authenticity	261	4.55	.729	4.68	.715	-3.038	260	.003	.19
Forgiveness	259	4.07	1.076	3.98	1.145	-1.488	258	.138	.09
Accountability	257	5.37	.651	5.43	.582	-1.457	256	.146	.09
Stewardship	263	5.10	.618	5.15	.632	-1.202	262	.230	.07
Courage	257	4.57	.880	4.54	.985	.469	256	.639	.03
Empowerment	257	5.28	.535	5.27	.527	.160	256	.873	.01
Standing Back	262	4.82	.807	4.82	.798	.000	261	1.000	.00

Note. $p < .05$. Students were asked to answer questions based on their most influential mentor at the time of taking each questionnaire.

Perceptions of Servant Leadership Traits in

Personal Mentors Who Changed

A paired-samples t-test was conducted to compare perceptions of servant leadership traits in students' who changed their personal mentors at the beginning and end of the CASNR AG 1011 – Freshmen Orientation class. Table 11 shows perceptions of servant leadership traits in students who changed their classification of personal mentors at the beginning and end of the AG 1011. Authenticity is the only measure reporting statistical significance at $t(128) = -2.503$, $p = .014$, $r = .22$. The other seven constructs did not show statistical significance when students changed their mentor between the beginning of AG 1011 and at the end of AG 1011.

Accountability scored the highest servant leadership mean between students who changed their mentor classification in the pre-questionnaire ($M = 5.42$, $SD = 0.50$) and in the post-questionnaire ($M = 5.39$, $SD = 0.54$). Forgiveness scored the lowest servant leadership mean and the highest standard deviation in the pre-questionnaire ($M = 3.98$, $SD = 1.11$) and in the post-questionnaire ($M = 3.91$, $SD = 1.24$).

Table 11

Perceptions of Servant Leadership Traits in Personal Mentors at the Beginning and End of AG 1011: Incoming Students Who Did Change Mentorship Classification

		Pre-Questionnaire		Post-Questionnaire					
Construct	*f*	*M*	*SD*	*M*	*SD*	*t*	*df*	*p*-value	*r*
Authenticity	129	4.60	.725	4.78	.739	-2.503	128	.014	.22
Stewardship	131	5.08	.642	5.18	.673	-1.534	130	.127	.13
Standing Back	131	4.79	.703	4.88	.760	-1.318	130	.190	.11
Empowerment	126	5.29	.512	5.35	.555	-1.314	125	.191	.12
Humility	128	4.73	.788	4.81	.816	-1.247	127	.215	.11
Courage	125	4.56	.927	4.65	.932	-1.055	124	.293	.09
Forgiveness	130	3.98	1.114	3.91	1.242	-.758	129	.450	.07
Accountability	126	5.42	.500	5.39	.542	.416	125	.678	.04

Note. $p < .05$. Students were asked to answer questions based on their most influential mentor at the time of taking each questionnaire.

CHAPTER V

CONCLUSIONS, DISCUSSION, AND RECOMMENDATIONS

Chapter V describes the researcher's conclusions and implications from the study as well as recommendations for practice, recommendations for future research, and a final discussion section. Conclusions are listed in order of the research objectives.

Conclusions and Implications Related to Objective One

Objective one sought to describe selected demographic characteristics of incoming students in the Fall 2014 CASNR AG 1011 – Freshmen Orientation course, including age, sex, ethnicity, major, size of hometown, and organizational background.

The typical respondent is an 18-year-old, Caucasian (non-Hispanic) female. The percentage of females has increased by 4% since the Fall of 2012 (Cramer, 2013). This shows consistency with the National Center for Educational Statistics (NCES, 2014), which reports higher female enrollment than males in the Undergraduate Enrollment Report. According to NCES (2014), nearly 10 million female undergraduate students made up approximately 56% of the total undergraduate enrollment in four-year institutions in the United States in 2012. CASNR's enrollment shows a higher female enrollment in the Fall 2014 semester with females accounting for 57% of the college student population (IRIM, 2014). On the other hand, the Institutional Research and

Information Management (IRIM, 2014) reports females make up slightly less than half (49%) of the OSU student population. Additionally, the typical respondent is more likely to be an Animal Science major than any other single major. In the Fall 2014 semester, CASNR enrolled 2,013 students, of which 41% were Animal Science majors (IRIM, 2014).

A compelling finding emerging from this data is how much of an overwhelming majority Caucasian females account for the population. How can CASNR appeal to a more racially diverse background? What are additional ways colleges can appeal to additional ethnical demographics and a male population that struggles enrolling in higher education? For the male population specifically, Irvine (2011) stated as today's average male reaches college-age, most struggle with a "failure to launch." One idea why males might not enroll in college as much as females is young males often do not see immediate value in attending higher education institutions (Irvine, 2011). One recommendation for encouraging males to enroll in higher education is to ensure the value of their potential education is clear in conversations preceding enrollment and to encourage the use of mentors to guide the process (College Stats, 2015). Mentorship clearly provides value in engaging students on campus. When students feel connected to the mission of the college, they recognize the need for their education, which in turn, could boost enrollment numbers and maintain retention.

This research yields powerful implications for implementing strong mentorship components in higher education. Quality mentors not only improve the experience of education while students already are enrolled, but also it can be a key factor in recruiting. Further research is recommended for evaluating successful recruitment efforts,

specifically in target demographics, including diverse ethnic groups and male populations.

The typical incoming student was involved in five or more high school organizations, clubs, or teams, including the National Honor Society, team sports, and faith-based organizations. The typical respondent is more involved than the average high school senior; NCES (2011) suggested lower figures in 2009 as only 38% of high school seniors reported being involved with athletic teams; 32% of students were involved in other student clubs and activities; 24% in music and performing arts; 14% in academic clubs; 10% in student council/government; and 9% in newspaper relations or yearbook.

An additional conclusion emerging from this research is students who enrolled in CASNR's Freshmen Orientation courses are more involved than typical incoming students, which means they likely will become more engaged in CASNR activities and leadership opportunities. This conclusion is supported by Eccles and Barber (1999), who stated students who are highly involved in activities in high school helps them avoid risky behavior, promotes personal development through developing strong networks, and strong social skills. Connecting active students with quality mentors improves the college experience and grows potential within the university (Upcraft et al., 2005). One implication emerging from this data is academic programs targeted toward keeping students involved in clubs, organizations, and service components in college also could boost student retention. Additional research monitoring students' longitudinal involvement with extracurricular activities is warranted to see if involvement in clubs and organizations increases students' ability to recognize the value in their education both inside and outside of a classroom. Additionally, what role do mentors play in this

process? If students who are more involved are more successful in college, should advisors implement a component focused on involvement in extracurricular activities in students' degree plans? Does involvement in these areas improve soft skills that later will prove to be useful for employment opportunities and make students more career-ready after graduating for college? Quality mentors play a critical role in encouraging student involvement to occur.

Conclusions and Implications Related to Objective Two

Objective two sought to describe incoming students' engagement in community service at the beginning and end of the CASNR AG 1011 – Freshmen Orientation course in the Fall 2014 semester.

Prior to attending Oklahoma State University in the Fall of 2014, nearly three fourths of students completed at least one act of community service within one month of their first day on campus. Additionally, nearly half of those students were involved with some type of youth development service.

From this finding, one can conclude a typical incoming student in CASNR has not only been involved in numerous clubs and organizations prior to attending OSU, but also they are committed to serving other people. Could the increasing focus to serving other people also influence the way students approach their personal education? Al-Alwan (2014) stated student learning and academic success are greatly influenced by students who become engaged in school and community efforts. The Millennial Generation is often deemed as emotionally unresponsive, disengaged and vulnerable (Elmore, 2012).

Interestingly, millennials also are more sensitive to recognizing the needs in the world, where service to others is not only needed, but also is expected as worldly citizens (Elmore & Maxwell, 2008). Servant leaders recognize the need to place others' desires above their own (Greenleaf, 1991a).

One implication emerging from this finding is the Millennial Generation is highly motivated to serve other people because they feel connected to the need associated with service. Could an additional way to increase students' understanding in the value of a college degree be to implement additional service components in coursework? One strategy to improving retention and the college experience is addressing the needs of the current student (Upcraft et al., 2005). As such, additional service elements and opportunities should be implemented in higher education. Mentors who embody servant leadership traits directly appeal to this generation through similar visions and goals. Therefore, to effectively and efficiently invest in the needs of young collegiate leaders, educators must link mentors and service to focuses in the classroom, especially as incoming students strive to find their role in higher education institutions.

At the end of the first eight weeks of the Fall 2014 semester and end of the AG 1011 course, students were slightly less engaged in community service. However, an interesting conclusion emerging from this finding was nearly one third of the service contributed within one month of the post-questionnaire in October was some type of service to community development. Could the increase in service to community development be a result of initiatives implemented from CASNR?

One of the major components of the CASNR AG 1011 Freshmen Orientation course is to help students understand the role service to the community plays in the land-

grant mission. As a result, several clubs and organizations within CASNR focus on serving others and giving back to the community. The influence of community engagement and service outside of academia increased in the late 1990s (Raskoff & Sundeen, 1999). As a result, community service efforts have increasingly been implemented in high school programs as a major focus for secondary education initiatives (NCES, 1995). Now, educators recognize the need for service components in college. This conclusion is supported by the National Survey of Student Engagement (NSSE, 2014), which states community engagement increases the feeling of belonging in students who are new to the college environment. As the Millennial Generation desires feeling a sense of belonging, students could potentially find their places in college by giving back and serving the community. If students' connection to service builds sense of personal belong in higher education, what additional implications could it have on the workplace after students graduate from college?

Conclusions and Implications Related to Objective Three

Objective three sought to compare differences in incoming students' perceptions of servant leadership traits in personal mentors at the beginning and end of the CASNR AG 1011 – Freshmen Orientation course in the Fall 2014 semester.

Many of the eight constructs defining servant leadership were highly correlated in this study (see Table 1). Van Dierendonck and Nuijten (2011) acknowledged the SLS instrument is expected to show high correlations between certain constructs because of the conceptual overlap within the theory of servant leadership. Findings support this

expectation as three primary factors loaded from this study's usage of the SLS, which aligns with the three factors Van Dierendonck and Nuijten (2011) identified in their foundation of servant leadership: the servant, the leader, and the forgiveness factors. Many measures have been used to describe servant leadership (Barbuto & Wheeler, 2006; Liden et al., 2008; Page & Wong, 2000; Patterson, 2003; Sendjaya et al., 2008; Wong, Davey, & Church, 2007; Van Dierendonck & Nuijten, 2011). However, these findings imply three main factors emerge to describe servant leadership. Findings also suggest the main themes conceptualizing servant leadership is closely related to the concept of mentorship. Most students have a positive perception of their personal mentors, which also indicates students desire mentors who emulate traits reflecting servant leadership. In turn, educators should further strengthen student development opportunities specially targeting the Millennial Generation by implementing mentorship programs focused on the three main factors of servant leadership: service, leadership, and forgiveness.

Additional findings for objective three show students rated accountability and empowerment as the most prevalent servant leadership traits found in personal mentors in both the pre- and the post-questionnaires. Van Dierendonck and Nuijten (2011) support this finding as empowerment has consistently ranked high in previous SLS studies. Also noteworthy, empowerment serves as an important, connecting-element linking servant leadership traits to other leadership styles (Schneider & George, 2011). Based on these findings, one can conclude students desire mentors who trust them to do what they say they will do by being held accountable and mentors who inspire them to find their own goals and visions through empowering them. Millennials desire guidance and coaching

from mentors and leaders (Willyerd, 2015). At the same time, this conclusion is further supported from Meister and Willyerd (2010), who stated millennials feel the most successful in the work environment when coaches and mentors help, or empower, them to take ownership for responsibilities. Millennials desire empowerment and accountability.

One powerful implication of this conclusion is the Millennial Generation feels the most successful when they are held accountable and empowered to do quality work. Therefore, higher education institutions should develop mentorship components that include a feedback component useful for providing constructive and positive feedback to help students grow. If students feel more empowered and responsible in college, could their confidence and empower translate to the work environment, as well? Providing a feedback element to student programs might help the current generation receive the development they desire at an earlier age so they could emerge more emotionally ready for feedback in their future careers.

Another interesting finding from objective three is authenticity, humility, and stewardship expressed statistical significance between the pre- and post-questionnaires. Although the study's large population size influenced smaller to medium effect sizes, one conclusion emerging from this finding is something is occurring between the first eight weeks of college that influences students to see their mentor differently or seek different traits in a new mentor. Because the average means for authenticity, humility, and stewardship increased between the pre- and the post-questionnaire, one can infer students desire real, genuine mentors who empower students. Elmore and Maxwell (2008) support this conclusion by deducing the most effective millennial mentors are real and authentic

with students. As the Millennial Generation is one of the most social-conscious generations to enter a college classroom (Meister & Willyerd, 2010), mentors who address real issues with students and empower them to make a change are more effective. Colleges and educators can further appeal to authenticity, humility, and stewardship traits by linking the value of a degree to issues greater than just another element of education. As these desired traits' averages increased between the first eight weeks of enrollment in CASNR, students imply they desire mentorship focused on the servant element of leadership.

Conclusions and Implications Related to Objective Four

Objective four sought to describe incoming students' classification of influential mentors at the beginning and end of the CASNR AG 1011 – Freshmen Orientation course in the Fall 2014 semester.

Nearly half of students listed a parent as their most influential mentor in both the pre-and post-questionnaires. Elmore and Maxwell (2008) support this claim as students enter higher education institutions with closer parent-to-student relationships than previous generations. The increase in parent-to-child mentor relationships can likely be a result of many elements, but one theory is more millennial students are raised in single-parent homes, which yield different parent-to-child relationships than seen in previous contexts (Elmore, 2012; Single Mother Guide, 2014). Further, the 2013 U.S. Census Bureau reported nearly 12 million single-parent families in 2013, and of those

households, single mothers were the head of more than 80% (as cited in Single Mother Guide, 2014).

One conclusion surfacing from this finding is millennial students are more dependent on parent relationships than previous generations. How do stronger parent-to-child relationships influence performance from millennial students? If millennials desire empowerment and accountability in mentors, to what level are parents holding their children accountable for positive decisions during college? If additional student mentorship components emerge in colleges, educators also might consider implementing new ways to communicate mentoring efforts with parents.

Previous generations have entered the college classroom less dependent on parent relationships (Elmore & Maxwell, 2008). However, millennials are different. Such a high percentage of students who identify parents as their personal mentors speaks volumes to how connected this generation is to what is comfortable and familiar. As such, once students are enrolled in an institution, it may prove valuable to implement efforts to help parents understand their roles in empowering students to become more independent, young adults. Parents clearly play a vital role in the success of their college students; one additional implication is the need to discover supplemental ways to help students step outside of their comfort zones and find their roles in college.

Another attention-grabbing finding from this objective is nearly one third of students changed who they classified as their personal mentors between the pre- and the post-questionnaires. The greatest increase shown in mentor classification was students or peers. Peer mentorship is emerging as a tool for connecting incoming students to the mission of higher education (Upcraft et al., 2005). As millennial students desire

connection to purpose and educational efforts (Meister & Willyerd, 2010), one conclusion appears to showcase incoming students seek guidance from current students because they desire feeling a part of something bigger than themselves. Additionally, students who seek active mentorship from individuals within their support groups help establish connections build interpersonal and communication skills (Ensher & Murphy, 2005). Therefore, higher education institutions should strategically implement programs linking incoming students to peer mentors. Could a reason the increase in student and peer mentors be related to the CASNR AG 1011 Student Academic Mentor component of the course? Additional research is suggested to discover the influence student mentors have on empowering incoming students.

Conclusions and Implications Related to Objective Five

Objective five sought to compare students' perceptions of servant leadership traits if their most influential mentor classification changed from the beginning to the end of the AG 1011 course in the Fall 2014 semester.

Once the data was grouped by students who changed or did not change their mentor between the pre- and post-questionnaires, student perceptions of servant leadership traits were evaluated for each group. Of the students who did not change their mentor classification, authenticity and humility were significant, and of the students who did change their mentor classification, only authenticity reported statistical significance. One thought-provoking conclusion raised from these findings is while a student might select a different individual person to serve as his or her mentor, the qualities students

desire in mentors will likely stay the same. Also, students' perceptions of qualities they desire in a mentor likely do not change over a short time period.

Mitchell (1998) supports "mentorship is mentorship" where students seek counsel from individuals who meet the students' personal needs and goals. Students desired empowerment and accountability in mentors for both the pre- and the post-questionnaires. This conclusion raises an important implication for higher education. If the quality of mentorship is not dependent on who mentors the student, desirable traits can be taught to multiple people targeting specific mentorship needs for the current generation. As a result, when developing mentorship teams, such as CASNR's AG 1011 SAMs, a training component should be included to target ways to implement desired mentorship traits, such as empowerment and accountability.

Recommendations for Practice

The purpose of this study was to describe incoming first-year students' perceptions of servant leadership traits in personal mentors at the beginning and end of the Fall 2014 CASNR AG 1011 – Freshmen Orientation class. The following recommendations for practice were pulled from the study's practical findings to help advance the application of servant leadership and personal mentorship in higher education:

1. Engage mentorship programs specifically targeting servant leadership and service in higher education.
2. Connect students to their respective university mission through guided mentor opportunities.

3. Implement a feedback component to mentorship programs in higher education.

Engage Mentorship Programs Specifically Targeting Servant Leadership

The findings discussed from this study represent a snapshot of a first-year student's perception of servant leadership traits within personal mentors at both the beginning and end of AG 1011. Student responses generally showed high-to-moderately high perceptions of servant leadership in regards to their personal mentors. Traditionally, teachers and academic mentors who embody servant-leader mindsets are not only more effective in the classroom, but also they have been able to teach students to see the greater good beyond classroom instruction (Nichols, 2011). Purposefully providing mentorship programs in higher education to target servant leadership could help students understand their leadership capability beyond an academic focus.

Students enter college with more experience and connectedness to the idea of serving other people. The Millennial Generation specifically desires feeling connected to things of higher value and meaning (Elmore, 2012). Relevant, real-world learning opportunities increase the value of education for students (ACTE, 2015). Teachers who embody servant leadership characteristics build a classroom environment where students learn by example (Nichols, 2011). As a result, the stronger the environment for servant leadership is within a classroom setting, the more students will make the link of mentorship and leadership in practical applications outside the classroom (Mitchell, 1998). As students begin to recognize a higher value in their education beyond the walls

of a classroom, higher education might be able to focus on recruiting additional demographics.

Connect Students to the University Mission through Guided Mentor Opportunities

Maintaining and increasing student retention and persistence in higher education has become a driving-factor for academic research and application (Komives & Woodard, 2003). Upcraft et al. (2005) stated the majority of students who drop out of higher education institutions leave within the first and second year of college enrollment. Therefore, to ensure student retention and engagement at the post-secondary level, any step taken to connect students to the importance and mission of the campus should be taken (Upcraft et al., 2005). In many cases, students who proactively seek mentorship and guidance become more established with the university and other students and also grow their personal leadership skills (Mitchell, 1998).

Implement a Feedback Component to Mentorship Programs in Higher Education

Millennial students desire to be coached and mentored (Willyerd, 2015). Often, student mentorship programs focus on the execution of tasks at hand, but they miss the importance of growth through quality feedback. In this study, students consistently rated empowerment and accountability as the most recognized trait found in their mentors. Addressing the need for millennials to want to grow and step outside of their comfort

zones might be as simple as implementing elements in mentorship programs focusing on helping students recognize potential areas for growth.

Recommendations for Future Research

Due to the descriptive nature of the study, most recommendations for future research involve delving further into how mentorship relationships and servant leadership traits influence specific demographics. Based on the study's findings, the following recommendations for future research are suggested.

1. Expand knowledge of how students seek and develop mentorship relationships.
2. Investigate the influence of peer mentorship in higher education.
3. Conduct similar studies with different populations to describe servant leadership traits in different contexts.
4. Investigate how students' perceptions of servant leadership evolve during their college careers and the first years of employment.

Expand Knowledge of How Students Seek and Develop Mentorship Relationships

Helping first-year students feel connected to a university leads to a desire for further research investigation of how students seek and develop mentorship relationships in higher education (Upcraft et al., 2005). Plus, evaluating the current status of the undergraduate mentorship experience starts by furthering knowledge associated with how students seek mentors and how they develop and foster relationships. In the current study,

one third of respondents changed their mentor classification between the pre- and post-questionnaire administrations. Therefore, one can infer something is happening during the first eight weeks of the college experience that motivates students to change from whom they seek mentorship and how they seek mentorship guidance.

Ensuring growth in students in higher education begins by encouraging mentor and mentee engagement (Snowden & Hardy, 2012). Mitchell (1998) expressed a concern for students mistaking meaningful, mentorship relationships with simple networking where participants only seek one-way, surface-level advice. Effective and powerful mentor relationships are cohesive, where both the mentor and the mentee grow through the mentorship process (Ensher & Murphy, 2005). Understanding how students seek and develop their personal mentorship relationships could help researchers and educational leaders create programs tailored for the specific needs of the current student body. Additionally, understanding the mentors' needs in developing meaningful mentorship relationships can lead to more knowledge and practical application for improving the mentoring experience (Rekha & Ganesh, 2012). As a result, being purposeful with the type of mentoring programs provided could lead to more desirable results in student outcomes.

Investigate the Influence of Peer Mentorship in Higher Education

The current study led to a better understanding of incoming students' perceptions of all types of personal mentors in relation to servant leadership. At the beginning of the CASNR AG 1011 – Freshmen Orientation course, 19 students selected a student or a peer

as their personal mentors. At the end of the AG 1011 course, 42 students selected a student or a peer. The student or peer mentor classification increased from 4.4% to 10.6% within the first eight-weeks of college. Understanding the effectiveness of peer and student mentorship in higher education could help lead to a better understanding of what student development programs are most effective in higher education institutions. Conclusions from this study encourage researching why this phenomenon occurs.

One unique component of the CASNR AG 1011 – Freshmen Orientation course is each incoming student is assigned a student academic mentor (SAM) to help him or her transition during the first eight weeks of college. Effective peer mentorship has been known to build the success of undergraduate students (Snowden & Hardy, 2012). Further research specifically on the influence of peer mentorship could help expand knowledge of the effectiveness of peer academic mentors in helping students transition into higher education. Peer collaboration while solving problems or understanding difficult material broadens students' perspectives and helps prepare them to handle issues independently after college (NSSE, 2014).

Conduct Similar Studies with Different Populations

Because the study measured CASNR incoming students, one limitation of the study is it was designed to fit the needs of the selected population. As a result, findings and conclusions cannot be generalized to other groups in different contexts. Further research should be conducted on populations from other contexts to describe the influence of servant leadership in personal mentors in multiple settings. Do servant leadership traits desired in mentors vary depending on the population?

Investigate How Students' Perceptions of Servant Leadership Evolve

The current study showed the majority of incoming students ranked personal mentors as high or moderately high in terms of the eight SLS servant leadership constructs: empowerment, standing back, accountability, forgiveness, courage, authenticity, humility, and stewardship (Van Dierendonck & Nuijten, 2011). As such, this study concludes students' perceptions of qualities they desire in a mentor likely do not change over a short time period. Though individual mentors may change during this time, students likely still will seek mentorship from individuals who possess similar goals and aspirations as the student. Similarly, for students' perceptions of mentorship to change, the students' goals and aspirations will have to evolve, which requires time. As such, further research within a longitudinal design should be conducted to monitor how servant leadership traits evolve through the course of an undergraduate career and beyond into the first couple of years of employment.

Discussion

Where mentorship exists, leadership exists (Mitchell, 1998). Understanding the connection between mentorship and leadership guides the need for further research within higher education. If leadership and mentorship simultaneously direct relationships, how do students react to different types of leaders and mentors? Mitchell (1998) states mentorship is about teaching, advocating for a common vision, personal development, and growth. Servant leadership also promotes education and development, but through

the development of the follower (Van Dierendonck, 2011). When mentorship and servant leadership are combined, what results can occur within education?

The time to invest in incoming students and the future of the world is never greater than now (Upcraft et al., 2005). This study revealed a meaningful similarity between servant leadership traits and qualities found in mentors in higher education context. Iyer (2013) claims servant leadership and mentorship work together for the benefit of the follower. The two combined greatly impact education, and education serves as the backbone for humanity. Not only does the world need more servant leaders and mentors, but also the world needs more difference makers now. Higher education not only should focus on building leaders in the classroom, but building leaders in life.

REFERENCES

Abuhamdeh, S. & Csikszentmihalyi, M. (2012). Attentional involvement and intrinsic motivation. *Motivation and Emotion, 36*(3), 257-267.

Al-Alwan, A. F. (2014). Modeling the relations among parental involvement, school engagement and academic performance of high school students. *International Education Studies, 7*(4), 47. doi:10.5539/ies.v7n4p47

American College Health Association. (2008). American college health association-national college health assessment spring 2007 reference group data report (abridged). *Journal of American College Health, 56*(5), 469-480. doi:10.3200/JACH.56.5.469-480

Angelique, H., Kyle, K. & Taylor, E. (2002). Mentors and muses: New strategies for academic success. *Innovative Higher Education*, *26,* 195-209.

Association for Career and Technical Education (ACTE). (2015). *CTE today.* Retrieved from http://www.acteonline.org/factsheets/#.VOGlVVq4nR0

Astin, A. W. & Astin, H. S. (Eds.) (2000). *Leadership reconsidered: Engaging higher education in social change.* Battle Creek, MI: W. K. Kellogg Foundation.

Bandura, A. (1986). *Social foundations of thought and action: A social-cognitive view*. Upper Saddle River, NJ: Prentice Hall.

Barbuto, J. E. & Wheeler, D. W. (2006). Scale development and construct clarification of servant leadership. Group & Organization Management, 31(3), 300-326.

Bass, B. M. & Riggio, R. E. (2006). *Transformational leadership*. Mahwah, NJ: L. Erlbaum Associates.

Baumeister, R. F. & Vohs, K. D. (2002). The pursuit of meaningfulness in life. *Handbook of Positive Psychology,* 608-618.

Blanchard, K. (1995). Servant leadership. *Executive Excellence, 12*(10), 12.

Boone, L. W. & Makhani, S. (2012). Five necessary attitudes of a servant leader. *Review of Business, 33*(1), 83-96.

Bowman, R. (2007). How can students be motivated: A misplaced question? *The Clearing House, A Journal of Educational Strategies, 81*(2), 81-86.

Bowman, R. (2011). Rethinking what motivates and inspires students. *Clearing House: A Journal of Educational Strategies, Issues and Ideas, 84*(6), 264.

Bradley, G. W. (1978). Self-serving biases in the attribution process: A reexamination of the fact or fiction question. *Journal of Personality and Social Psychology, 36,* 56-71.

Briner, B. & Pritchard, R. (1997). *The leadership lessons of Jesus: A timeless model for today's leaders*. Nashville, TN: Broadman & Holman Publishers.

Buber, M. (1958). *I and thou*. New York, NY: Scribner and Sons.

Campbell, T. A. & Campbell, D. E. (2007). Outcomes of mentoring at-risk college students: Gender and ethnic matching effects. *Mentoring and Tutoring, 15*(2), 135-148.

Campbell, C. M., Smith, M., Dugan, J. P. & Komives, S. R. (2012). Mentors and college student leadership outcomes: The importance of position and process. *The Review of Higher Education, (35)*4, 595-625.

Campbell, D. T., Stanley, J. C. & Gage, N. L. (1963). *Experimental and quasi-experimental designs for research*. Boston, MA: Houghton Mifflin.

Cohen, J. (1992). A power primer. *Psychological Bulletin, 112*(1), 155-159. doi:10.1037/0033-2909.112.1.155

Cohen, N. H. (1993). *Development and validation of the principles of adult mentoring for faculty mentors in higher education*. (Doctoral dissertation, Temple University). Retrieved from Dissertation Abstracts International, 54/02, 400. (UMI No. AAT9316268)

Cohen, B. H. & Lea, R. B. (2004). *Essentials of statistics for the social and behavioral sciences*. Hoboken, NJ: Wiley.

College Stats. (2015). *Why men are falling behind in higher ed.* Retrieved from http://collegestats.org/2013/05/why-men-are-falling-behind-in-higher-ed/

Cramer, C. (2013). *Social media uses by students in an agricultural student orientation course* (Order No. 1542088). Available from Dissertations & Theses @ Oklahoma State University - Stillwater; ProQuest Dissertations & Theses Full Text. (1419485373). Retrieved from http://search.proquest.com/docview/1419485373?accountid=4117

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Boston, MA: Pearson.

Crippen, C. (2005). Servant-leadership as an effective model for educational leadership and management: First to serve, then to lead. *Management in Education, 18*(5), 11-16. doi:10.1177/089202060501800503

Crisp, G. & Cruz, I. (2009). Mentoring college students: A critical review of the literature between 1990 and 2007. *Research in Higher Education, 50*(6), 525-545.

Cunliffe, A. L., & Eriksen, M. (2011). Relational leadership. *Human Relations, 64*(11), 1425-1449.

Daft, R. L. & Lane, P. G. (2011). *The leadership experience*. Mason, OH; Australia: South-Western Cengage Learning.

De Vaus, D. A. (2002). *Surveys in social research*. London: Routledge.

Dennis, R. S. & Bocarnea, M. (2005). Development of the servant leadership assessment instrument. *Leadership & Organization Development Journal, 26*(8), 600-615.

Dillman, D. A., Smyth, J. D. & Christian, L. M. (2009). *Internet, mail, and mixed-mode surveys: The tailored design method* (3rd ed.). Hoboken, NJ: Wiley & Sons.

Dillman, D. A., Smyth, J. D. & Christian, L. M. (2014). *Internet, phone, mail, and mixed-mode surveys: The tailored design method* (4th ed.). Hoboken, NJ: Wiley.

Dodd, C. (1987). *Dynamics of intercultural communication*. Dubuque, IA: William C. Brown.

Doerfert, D. L. (Ed.) (2011). *National research agenda: American Association for Agricultural Education's research priority areas for 2011-2015*. Lubbock, TX: Texas Tech University, Department of Agricultural Education and Communications.

Dorfman, P. W., & Mittal, R. (2012). Servant leadership across cultures. *Journal of World Business, 47*(4), 555-570. doi:10.1016/j.jwb.2012.01.009

Dugan, J. P. & Komives, S. R. (2010). Influences on college students' capacities for socially responsible leadership. *Journal of College Student Development, 51*(5), 525-549.

Ebener, D. R. & O'Connell, D. J. (2010). How might servant leadership work? *Nonprofit Management & Leadership, 20*(3), 315-335. doi:10.1002/nml.256

Eccles, J. S. & Barber, B. L. (1999). Student council, volunteering, basketball, or marching band: What kind of extracurricular involvement matters? *Journal of Adolescent Research, 14*(1), 10-43. doi:10.1177/0743558499141003

Elam, C., Stratton, T. & Gibson, D. D. (2007). Welcoming a New Generation to College: The Millennial Students. *Journal of College Admission, 195,* 20-25.

Elmore, T. (2012). *Artificial maturity: Helping kids meet the challenge of becoming authentic adults*. San Francisco, CA: Jossey-Bass.

Elmore, T. (2015). *Two Paths to Preparing for a Career.* Retrieved from http://growingleaders.com/blog/category/generation-iy/

Elmore, T. & Maxwell, J. C. (2008). LifeGiving mentors: A guide for investing your life *in others*. Duluth, GA: Growing Leaders.

Ensher, E. A. & Murphy, S. E. (2005). *Power mentoring: How successful mentors and protégés get the most out of their relationships*. San Francisco, CA: Jossey-Bass.

Erikson, E. H. (1963). *Childhood and society*. New York, NY: Norton.

Farling, M. L., Stone, A. G. & Winston, B. E. (1999). Servant leadership: Setting the stage for empirical research. *Journal of Leadership & Organizational Studies, 6*(1-2), 49-72.

Ferch, S. R. & Spears, L. C. (2011). *The spirit of servant-leadership*. New York, NY: Paulist Press.

Field, A. P. (2009). *Discovering statistics using SPSS*. London; Los Angeles [i.e. Thousand Oaks, CA: SAGE Publications.

Frasher, J. M. & Frasher, R. S. (1981). Administrative attribution. *Journal of Educational Administration, 19*(2), 153-176. doi: 10.1108/eb009845

Girves, J. E., Zepeda, Y. & Gwathmey, J. K. (2005). Mentoring in a post-affirmative action world. *Journal of Social Issues, 61*(3), 449–479.

Greenleaf, R. K. (1977). *Servant leadership: A journey into the nature of legitimate power and greatness* (25th Anniversary Ed.). Mahwah, NJ: Paulist Press.

Greenleaf, R. K. (1991a). *On becoming a servant leader: The private writings of Robert K. Greenleaf*. D. M. Frick & L. C. Spears, Eds. San Francisco, CA: Jossey-Bass.

Greenleaf, R. K. (1991b). *The servant as a leader*. Westfield, IN: The Robert K. Greenleaf Center.

Greenleaf, R. K., Fraker, A. T. & Spears, L. C. (1996). *Seeker and servant: Reflections on religious leadership*. San Francisco, CA: Jossey-Bass.

Hastorf, A., Sclineider, D. & Polefka, F. (1970). *Person perception*. Boston, MA: Addison-Wesley.

Hays, J. M. (2008). Teacher as servant applications of Greenleaf's servant leadership in higher education. *Journal of Global Business Issues, 2*(1). 113-134.

Heider, F. (1944). Social perception and phenomenal causality. *Psychological Review, LI,* 358-374.

Howe, N. & Strauss, W. (2000). *Millennials Rising: The Next Great Generation*. New York, NY: Vintage Books.

Hunter, E. M., Neubert, M. J., Perry, S. J., Witt, L. A., Penney, L. M. & Weinberger, E. (2013). Servant leaders inspire servant followers: Antecedents and outcomes for employees and the organization. *The Leadership Quarterly, 24*(2), 316-331. doi:10.1016/j.leaqua.2012.12.001

Ingleton, T. (2013). College student leadership development: Transformational leadership as a theoretical foundation. *International Journal of Academic Research in Business and Social Sciences, 3*(7), 219-229.

Institutional Research and Information Management (IRIM). (2014). *OSU student profile*. Stillwater, OK: Oklahoma State University.

Irvine, M. (2011, November 12). Motivating teens: Do young men have a 'failure to launch' problem? *The Huffington Post*. Retrieved from http://www.huffingtonpost.com/2011/11/12/retreat-aims-at-young-men_n_1090061.html

Iyer, R. D. (2013). Servant leadership in teaching. *International Journal of Human Resource Studies, 3*(1), 100.

Jacobi, M. (1991). Mentoring and undergraduate success: A literature review. *Review of Educational Research, 61*(4), 505-532.

Jones-Burbridge, J. (2012). SERVANT leadership. *Corrections Today, 73*(6), 45-47. Retrieved from http://search.proquest.com/docview/928050352?accountid=4117

Katzenbach, J. R. (2006). Motivation beyond money: Learning from peak performers. *Leader to Leader, 2006*(41), 59-62. doi:10.1002/ltl.194

Kelley, H. H. (1971). *Attributions in social interactions*. Morristown, NJ: General Learning Press.

Kelley, H. H. & Michela, J. L. (1980). Attribution theory and research. *Annual Review of Psychology, 31,* 457-501. doi: 10.1146/annurev.ps.31.020180.002325

Kendrick, J. S. (2011). Transformational leadership. *Professional Safety, 56*(11), 14.

Kimmelshue, K. E. (2012). *Oklahoma state university freshman-level students' trust in sources for information about agriculture* (Order No. 1513336). Available from Dissertations & Theses @ Oklahoma State University - Stillwater; ProQuest Dissertations & Theses Full Text. (1024285801). Retrieved from http://search.proquest.com/docview/1024285801?accountid=4117

Kirk, R. E. (2013). *Experimental design: Procedures for the behavioral sciences*. Thousand Oaks, CA: SAGE Publications.

Kline, P. (1999). *The handbook of psychological testing* (2nd ed.). London: Routledge.

Komives, S. R., Longerbeam, S. D., Owen, J. E., Mainella, F. C. & Osteen, L. (2006). A leadership identity development model: Applications from a grounded theory. *Journal of College Student Development, 47*(4), 401-418.

Komives, S. R., Owen, J. E., Longerbeam, S. D., Mainella, F. C. & Osteen, L. (2005). Developing a leadership identity: A grounded theory. *Journal of College Student Development, 46*(6), 593-611.

Komives, S. R. & Woodard, D. (2003). *Student services: A handbook for the profession*. San Francisco, CA: Jossey-Bass.

Laub, J. A. (1999). *Assessing the servant organization: Development of the servant organizational leadership assessment (SOLA) instrument*. ProQuest, UMI Dissertations Publishing)

Leeuw, E. H. d., Hox, J. J. & Dillman, D. A. (2008). *International handbook of survey methodology*. New York, NY: Lawrence Erlbaum Associates.

Levine, A. & Dean, D. R. (2012). *Generation on a tightrope: A portrait of today's college student*. San Francisco, CA: Jossey-Bass.

Liden, R. C., Wayne, S. J., Zhao, H. & Henderson, D. (2008). Servant leadership: Development of a multidimensional measure and multi-level assessment. *The Leadership Quarterly, 19*(2), 161-177. doi:10.1016/j.leaqua.2008.01.006

Martinko, M. J., Harvey, P. & Dasborough, M. T. (2010). Attribution theory in the organizational sciences: A case of unrealized potential. *Journal of Organizational Behavior, 32*, 144-146. doi: 10.1002/job.690

Martinko, M. J., Harvey, P. & Douglas, S. C. (2007). The role, function, and contribution of attribution theory to leadership: A review. *The Leadership Quarterly, 18,* 561–585.

Maxwell, J. C. (1999). *The 21 indispensable qualities of a leader.* Nashville, TN: Thomas Nelson, Inc.

Mayer, D. M., Bardes, M. & Piccolo, R. F. (2008). Do servant-leaders help satisfy follower needs? An organizational justice perspective. *European Journal of Work and Organizational Psychology, 17*(2), 180-197.

Meister, J. C. & Willyerd, K. (2010, May). Mentoring millennials. *Harvard Business Review*. Retrieved from https://hbr.org/2010/05/mentoring-millennials

Mitchell, T. (1998, Jan). Mentorship as leadership. *Change, 30*, 48. Retrieved from http://search.proquest.com/docview/208054854?accountid=4117

Morrison, J. L. & Morrison, P. P. (1991). The theory of attribution learning, technology, and intercultural business communication. *Journal of Education for Business*, *66*(3), 140.

Murari, K. & Gupta, K. S. (2012). Impact of servant leadership on employee empowerment. *Journal of Strategic Human Resource Management, 1*(1), 28-37. Retrieved from http://search.proquest.com/docview/1478027992?accountid=4117

National Center for Educational Statistics (NCES). (1995). Community service performed by high school seniors. *Institute of Educational Sciences*. Retrieved from http://nces.ed.gov/pubs/web/95743.asp

National Center for Educational Statistics (NCES). (2011). America's youth: The transition to adulthood. *Institute of Educational Sciences*. Retrieved from http://nces.ed.gov/pubs2012/2012026.pdf

National Center for Educational Statistics (NCES). (2014). The condition of education report. *Institute of Educational Sciences*. Retrieved from http://nces.ed.gov/programs/coe/indicator_cha.asp

National Survey of Student Engagement (NSSE). (2014). *Engagement indicators*. Retrieved from http://nsse.iub.edu/html/engagement_indicators.cfm#top

New Media and Marketing. (2015). *Millennials to outnumber baby boomers.* Retrieved from http://www.newmediaandmarketing.com/millennials-outnumber-baby-boomers/.

Ng, E. S., Schweitzer, L. & Lyons, S. T. (2010). New generation, great expectations: A field study of the millennial generation. *Journal of Business and Psychology, 25*(2), 281-292.

Nicholls, J. G. (1975). Causal attributions and other achievement-related cognitions: Effects of task outcome, attainment value, and sex. *Journal of Personality and Social Psychology, 31*, 379-389.

Nichols, J. D. (2011). *Teachers as servant leaders*. Lanham, MD: Rowman & Littlefield Publishers.

Page, D. & Wong, T. P. (2000). A conceptual framework for measuring servant-leadership. *The human factor in shaping the course of history and development*. Lanham, MD: University Press of America.

Parks, S. D. (2000). *Big questions, worthy dreams: Mentoring young adults in their search for meaning, purpose and faith.* San Francisco, CA: Jossey-Bass.

Parolini, J. L. (2004). Effective servant leadership: A model incorporating servant leadership and the competing values framework. In *Proceedings of the Servant Leadership Research Roundtable.*

Parris, D. L. & Peachey, J. W. (2013). A systematic literature review of servant leadership theory in organizational contexts. *Journal of Business Ethics, 113*(3), 377-393. doi:http://dx.doi.org/10.1007/s10551-012-1322-6

Pascarella, E. T. (2006). How college affects students: Ten directions for future research. *Journal of College Student Development, 47*(5), 508-520. doi:10.1353/csd.2006.0060

Patterson, K. A. (2003). *Servant leadership: A theoretical model* (Order No. 3082719). Available from ABI/INFORM Complete; ProQuest Dissertations & Theses Full Text. (305234239). Retrieved from http://search.proquest.com/docview/305234239?accountid=4117

Perales, J. C. & Shanks, D. R. (2007). Models of covariation-based causal judgment: A review and synthesis. *Psychonomic Bulletin and Review, 14*(4), 577-596.

Polleys, M. S. (2002). One university's response to the anti-leadership vaccine: Developing servant leaders. *Journal of Leadership & Organizational Studies, 8*(3), 117-130.

Prentice, D. A. & Miller, D. T. (1992). When small effects are impressive. *Psychological Bulletin, 112*(1), 160-164. doi:10.1037/0033-2909.112.1.160

Raskoff, S. A. & Sundeen, R. A. (1999). Community service programs in high schools. *Law and Contemporary Problems, 62*(4), 73-111.

Reinke, S. J. (2004). Service before self: Towards a theory of servant-leadership. Global *Virtue Ethics Review, 5*(3), 30.

Rekha, K. N. & Ganesh, M. P. (2012). Do mentors learn by mentoring others? *International Journal of Mentoring and Coaching in Education, 1*(3), 205. doi:10.1108/20466851211279466

Ridgeway, C. L. (1982). Status in groups: The importance of motivation. *American Sociological Review*, *47*(1), 76-88. Retrieved from http://www.jstor.org/stable/2095043

Riemer, B. S. (1975). Influence of causal beliefs on affect and expectancy. *Journal of Personality and Social Psychology*, *31,* 1163-1167.

Rosenthal, R. (1991). *Meta-analytic procedures for social research*. Newbury Park, NJ: SAGE Publications.

Russell, R. F. & Stone, A. G. (2002). A review of servant leadership attributes: Developing a practical model. *Leadership & Organization Development Journal, 23*(3), 145-157. doi:10.1108/01437730210424

Ryan, R. M. & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary educational psychology, 25*(1), 54-67.

Schneider, S. K. & George, W. M. (2011). Servant leadership versus transformational leadership in voluntary service organizations. *Leadership & Organization Development Journal, 32*(1), 60-77. doi: http://dx.doi.org/10.1108/01437731111099283

Seitz, S. & Pepitone, S. (1996). Servant leadership: A model for developing college students. *Metropolitan Universities: An International Forum, 6*(4), 113.

Sendjaya, S., Sarros, J. C. & Santora, J. C. (2008). Defining and measuring servant leadership behaviour in organizations. *Journal of Management Studies, 45*(2), 402-424.

Shadish, W. R., Cook, T. D. & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Boston, MA: Houghton Mifflin.

Single Mother Guide. (2014). *Single mother statistics.* Retrieved from https://singlemotherguide.com/single-mother-statistics/#footnote_2_13

Snowden, M. & Hardy, T. (2012). Peer mentorship and positive effects on student mentor and mentee retention and academic success. *Widening Participation and Lifelong Learning*, *14,* 76-92. Retrieved from http://dx.doi.org/10.5456/WPLL.14.S.76

Smith, B. N., Montagno, R. V. & Kuzmenko, T. N. (2004). Transformational and servant leadership: Content and contextual comparisons. *Journal of Leadership & Organizational Studies, 10*(4), 80-91.

Snyder, M. L., Stephan, W. G. & Rosenfield, D. (1976). Egotism and attribution. *Journal of Personality and Social Psychology*, *33,* 435-441.

Spears, L. C. (1998). *Insights on leadership: Service, stewardship, spirit, and servant-leadership*. New York, NY: Wiley.

Spears, L. C. (2000). On character and servant-leadership: Ten characteristics of effective, caring leaders. *Concepts and Connections, 8*(3).

Spears, L. C. (2002). Tracing the past, present, and future of servant-leadership. *Focus on leadership: Servant-leadership for the twenty-first century*. 1-16.

Spears, L. C. (2004). Practicing servant leadership. *Leader to Leader, 2004*(34), 7-11.

Spears, L.C. (2009). Servant leadership. *Leadership Excellence, 26*(5), 20.

Stogdill, R. M. & Coons, A. E. (1957). *Leader behavior: Its description and measurement*. Columbus, OH: Ohio State University Press.

Stone, A. G., Russell, R. F. & Patterson, K. (2004). Transformational versus servant leadership: A difference in leader focus. *Leadership and Organization Development Journal,* 25, 349-361.

Sullivan, D. & Nomura, C. (2006). *The laws of lifetime growth.* San Francisco, CA: Berrett-Koehler Publishers, Inc.

Tebeian, A. E. (2012). The impact of motivation through leadership on group performance. *Revista De Management Comparat International, 13*(2), 313.

Terrion, J. L. & Leonard, D. (2007). A taxonomy of the characteristics of student peer mentors in higher education: Findings from a literature review. *Mentoring & Teaching, 15*(2), 149-164. doi: 10.1080/13611260601086311

Uhl-Bien, M. (2006). Relational leadership theory: Exploring the social processes of leadership and organizing. *The Leadership Quarterly, 17*(6), 654-676. doi:10.1016/j.leaqua.2006.10.007

University of Twente. (2014). Attribution theory. *Interpersonal Communications and Relations.* Retrieved from http://www.utwente.nl/cw/theorieenoverzicht/Theory%20Clusters/Interpersonal%20Communication%20and%20Relations/attribution_theory/

Upcraft, M. L., Gardner, J. N. & Barefoot, B. O. (2005). *Challenging and supporting the first-year student: A handbook for improving the first year of college*. San Francisco, CA: Jossey-Bass.

Van Dierendonck, D. (2011). Servant leadership: A review and synthesis. *Journal of Management, 37*(4), 1228-1261. doi:10.1177/0149206310380462

Van Dierendonck, D., & Heeren, I. (2006). Toward a research model of servant-leadership. *The International Journal of Servant-Leadership, 2*(1), 147-164.

Van Dierendonck, D. & Kool, M. (2012). Servant leadership and commitment to change, the mediating role of justice and optimism. *Journal of Organizational Change Management, 25*(3), 422-433. doi:10.1108/09534811211228139

Van Dierendonck, D. & Nuijten, I. (2011). The servant leadership survey: Development and validation of a multidimensional measure. *Journal of Business and Psychology, 26*(3), 249-267. doi:10.1007/s10869-010-9194-1

Van Dierendonck, D., Stam, D., Boersma, P., de Windt, N. & Alkema, J. (2014). Same difference?: Exploring the differential mechanisms linking servant leadership and transformational leadership to follower outcomes. *The Leadership Quarterly, 25*(3), 544-562. doi:10.1016/j.leaqua.2013.11.014

Velez, J. J., Cano, J., Whittington, M. S. & Wolf, K. J. (2011). Cultivating change through peer teaching. *Journal of Agricultural Education, 52*(1), 40-49. doi:10.5032/jae.2011.01040

Waddell, J. T. (2009). *Exploratory study of the relationship between servant leadership attribution and the leader's emotional intelligence.* (Order No. 3377776, Regent University). *ProQuest Dissertations and Theses*, 135-n/a. Retrieved from http://search.proquest.com/docview/305135632?accountid=4117. (305135632)

Waite, J. (2011). Research administrators as servant leaders. *Journal of Research Administration, 42*(2), 64.

Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review, 92*(4), 548-573. doi:10.1037/0033-295X.92.4.548

Willyerd, K. (2015, February 27). Millennials want to be coached at work. *Harvard Business Review.* Retrieved from https://hbr.org/2015/02/millennials-want-to-be-coached-at-work

Wong, P. T., Davey, D. & Church, F. B. (2007). Best practices in servant leadership. *Servant Leadership Research Roundtable, School of Global Leadership and Entrepreneurship, Regent University.*

Wong, P. T. & Page, D. (2003). Servant leadership: An opponent-process model and the revised servant leadership profile. In *Proceedings of the Servant Leadership Research Roundtable.*

Wrzesniewski, A., Dutton, J. E. & Debebe, G. (2003). Interpersonal sensemaking and the meaning of work. *Research in Organizational Behavior, 25,* 93-135. Doi:10.1016/S0191-3085(03)25003-6

Yorke, M. & Longden, B. (2004). *Retention and student success in higher education*. Maidenhead: Society for Research into Higher Education.

Zanden, J. W. V. (1978). *Human development* (2nd ed.). New York, NY: Knopf.

Zuckerman, M. (1979). Attribution of success and failure revisited, or: The motivational bias is alive and well in attribution theory. *Journal of Personality*, *47*(2), 245. doi:10.1111/1467-6494.ep7594052

APPENDICES

APPENDIX A

ORIGINAL SERVANT LEADERSHIP SURVEY (SLS)

QUESTIONS & CONSTRUCTS

Table 1 Factor loadings confirmatory factor analysis, Study 2 ($N = 263$), standardized values

	1	2	3	4	5	6	7	8
Empowerment								
1. My manager gives me the information I need to do my work well.	.67							
2. My manager encourages me to use my talents.	.69							
3. My manager helps me to further develop myself.	.82							
4. My manager encourages his/her staff to come up with new ideas.	.81							
12. My manager gives me the authority to take decisions which make work easier for me.	.79							
20. My manager enables me to solve problems myself instead of just telling me what to do.	.71							
27. My manager offers me abundant opportunities to learn new skills.	.72							
Standing back								
5. My manager keeps himself/herself in the background and gives credits to others.		.65						
13. My manager is not chasing recognition or rewards for the things he/she does for others.		.71						
21. My manager appears to enjoy his/her colleagues' success more than his/her own.		.60						
Accountability								
6. My manager holds me responsible for the work I carry out.			.57					
14. I am held accountable for my performance by my manager.			.85					
22. My manager holds me and my colleagues responsible for the way we handle a job.			.63					
Forgiveness								
7. My manager keeps criticizing people for the mistakes they have made in their work (r).				.70				
15. My manager maintains a hard attitude towards people who have offended him/her at work (r).				.75				
23. My manager finds it difficult to forget things that went wrong in the past (r).				.43				
Courage								
8. My manager takes risks even when he/she is not certain of the support from his/her own manager.					.50			
16. My manager takes risks and does what needs to be done in his/her view.					.89			
Authenticity								
9. My manager is open about his/her limitations and weaknesses.						.69		
17. My manager is often touched by the things he/she sees happening around him/her.						.55		
24. My manager is prepared to express his/her feelings even if this might have undesirable consequences.						.67		
28. My manager shows his/her true feelings to his/her staff.						.83		
Humility								
10. My manager learns from criticism.							.75	
18. My manager tries to learn from the criticism he/she gets from his/her superior.							.71	
25. My manager admits his/her mistakes to his/her superior.							.85	
29. My manager learns from the different views and opinions of others.							.71	
30. If people express criticism, my manager tries to learn from it.							.88	
Stewardship								
11. My manager emphasizes the importance of focusing on the good of the whole.								.65
19. My manager has a long-term vision.								.69
26. My manager emphasizes the societal responsibility of our work.								.57

Reprinted from "The Servant Leadership Survey: Development and Validation of a Multidimensional Measure," by D. Van Dierendonck and I. Nuijten, 2011, *Journal of Business and Psychology, 26*, p. 256. Copyright [2010] by Van Dierendonck and Nuijten. Reprinted with permission.

APPENDIX B

INSTITUTIONAL REVIEW BOARD (IRB)

APPROVAL FORM

Oklahoma State University Institutional Review Board

Date:	Friday, August 08, 2014
IRB Application No	AG1436
Proposal Title:	Identifying the Level of Servant Leadership in First-year Student Before and After Exposure to Student Academic Mentors at Oklahoma State University
Reviewed and Processed as:	Exempt

Status Recommended by Reviewer(s): Approved Protocol Expires: 8/7/2017

Principal Investigator(s):

Shannon Norris
103 AG Hall
Stillwater, OK 74078

Shelly Sitton
435 Ag Hall
Stillwater, OK 74078

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

☒ The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1.Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval. Protocol modifications requiring approval may include changes to the title, PI advisor, funding status or sponsor, subject population composition or size, recruitment, inclusion/exclusion criteria, research site, research procedures and consent/assent process or forms
2.Submit a request for continuation if the study extends beyond the approval period. This continuation must receive IRB review and approval before the research can continue.
3.Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of the research; and
4.Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Dawnett Watkins 219 Cordell North (phone: 405-744-5700, dawnett.watkins@okstate.edu).

Sincerely,

Tamara Mix, Interim Chair
Institutional Review Board

Participant Information
Fall 2014 – CASNR AG 1011 Survey

Title: Identifying servant leadership traits in first-year students and student mentors before and after exposure to and serving as Student Academic Mentors at Oklahoma State University.

Investigators: Shannon Norris and Dr. Shelly Sitton, Agricultural Communications

Purpose: The purpose of this research study is to determine perceptions of servant leadership and mentorship influencing incoming students in the College of Agricultural Sciences and Natural Resources at Oklahoma State University. **You must be 18 years or older to participate.**

What to Expect: Participating in this study will require you to complete one questionnaire as a pre-exposure to AG 1011 at the beginning of the course and one post-exposure to AG 1011 at the end of the eight-week questionnaire. Part 1 is an instrument and Part 2 is a demographics section.

Risks: There are no risks associated with this project above normal daily risks. However, to minimize associated risks, names will remain anonymous and student codes associated with the SAMs will be kept confidential. Only the researchers will have access to the codes and the information will never be used to identify you.

Benefits: You may gain an appreciation and understanding of how research is conducted and exposure to the types of research being done by your peers at Oklahoma State University.

Compensation: Students who wish to include their email address at the end of the survey will be added to a drawing for one of four $50 gift cards. The drawing will take place in mid-October. Winners will be notified via email.

Your Rights: Your participation in this research is ***voluntary.*** There is no penalty for refusing to participate, and you are free to withdraw your consent and participation in the research at any time.

Confidentiality: The records of this study will be kept private. Any written results will discuss group findings and will not include information that will identify you. Research records will be stored on a password protected computer in a locked office and only researchers and individuals responsible for research oversight will have access to the records. Data will be destroyed three years after the study has been completed.

Contacts: If you have any questions regarding the research, you may contact Shannon Norris (405-744-9464 or shannon.norris@okstate.edu) or Shelly Sitton (405-744-3690 or shelly.sitton@okstate.edu). If you have any questions about your rights as a research volunteer, you may contact the Oklahoma State University Institutional Review Board (IRB) [Office or Interim Chair, Dr. Tamara J. Mix] at 219 Cordell North, Stillwater, OK 74078, 405-744-3377 or irb@okstate.edu.

If you choose to participate: Please complete the attached questionnaire. All surveys will be collected in 10 minutes when others have completed their surveys.

Please keep this page as a reference should you wish to contact anyone about the data collected from this study.

AG 1011 SURVEY
SCRIPT

Read by another instructor of AG 1011:

Welcome to class. During the next ten minutes, we are conducting a voluntary survey on the impact of servant leadership. Participation in this study is completely voluntary. One of our CASNR graduate students, Shannon Norris, is the chief researcher. If you wish to complete the survey, please pay attention to the following instructions.

Read by chief researcher, Shannon Norris:

Hello, my name is Shannon Norris, and I am a graduate student in the department of Agricultural Education, Communications, and Leadership here at Oklahoma State University. Today, I am asking you for your assistance in helping me collect data for my graduate research thesis. Before we begin handing out the instrument, I want to stress participation in this study is completely voluntary. If you do not wish to complete the instrument, that is completely fine.

The first page in the packet is an information page about today's study and is yours to keep. It also includes my contact information and the other researcher on this study should you have any questions about the research. It also includes information about who to contact regarding your rights as a research volunteer.

After reading the information sheet, if you choose to participate in the study, the next page is a student coding system. Please follow the instructions carefully and do not write your name. Your names will remain anonymous and the code you list will be kept confidential. Any written results will discuss group findings and will not include information that will identify you.

Then, you will find the instrument in two parts. In the first section, you will find questions regarding servant leadership and mentorship. The second part is a demographic section with some additional questions. Please fill it out to the best of your ability. There are no right or wrong answers. You may use pen or pencil. If you have any questions during the survey, please raise your hand.

Are there any questions at this time? If not, we will hand out the instrument. SAMs, please come to the front to receive a packet of surveys for your group of students. Student surveys are white. SAM surveys are blue. We will collect all surveys in approximately 10 minutes when everyone has finished.

I want to stress again this study is completely voluntary; however, if you wish to participate I greatly thank you for your participation in my study.

APPENDIX C

MODIFICATION TO IRB APPROVAL FORM

Oklahoma State University Institutional Review Board

Date:	Wednesday, September 24, 2014 **Protocol Expires: 8/7/2017**
IRB Application No:	AG1436
Proposal Title:	Identifying Servant Leadership Traits in First-year Students and Student Mentors in the College of Agricultural Sciences at Oklahoma State University
Reviewed and Processed as:	Exempt **Modification**

Status Recommended by Reviewer(s) **Approved**

Principal Investigator(s):

Shannon Norris
103 AG Hall
Stillwater, OK 74078

Shelly Sitton
435 Ag Hall
Stillwater, OK 74078

The requested modification to this IRB protocol has been approved. Please note that the original expiration date of the protocol has not changed. The IRB office MUST be notified in writing when a project is complete. All approved projects are subject to monitoring by the IRB.

☒ The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

The reviewer(s) had these comments:

Modification to 1) change title to "Identifying Servant Leadership Traits in First-year Students and Student Mentors in the College of Agricultural Sciences and Natural Resources at Oklahoma State University", 2) add a script for post-exposure surveys, 3) add a post-exposure consent, and 4) remove some of the demographics questions

Signature :

Hugh Crethar, Chair, Institutional Review Board

Wednesday, September 24, 2014
Date

AG 1011 SURVEY
POST-COURSE SCRIPT

Read by another instructor of AG 1011:

Welcome to class. During the next ten to fifteen minutes, we are conducting a post-exposure survey on the impact of servant leadership. Participation in this study is completely voluntary. One of our CASNR graduate students, Shannon Norris, is the chief researcher. If you wish to complete the survey, please pay attention to the following instructions.

Read by chief researcher, Shannon Norris:

Hello, my name is Shannon Norris, and I am a graduate student in the department of Agricultural Education, Communications, and Leadership here at Oklahoma State University. Today, I am asking you again for your assistance in helping me collect data for my graduate research thesis. At the beginning of the semester, we collected a pre-exposure survey. Today, we will do a follow-up, post-exposure survey. Students completing the questionnaire have the option of receiving 10 points of extra credit in AG 1011. There is a different assignment available on the online classroom for anyone who would like to receive extra credit, but does not want to complete the survey. Only one assignment will be counted for extra credit. For students who wish to complete the survey and want extra credit, please complete the individual sheet with your name and email and turn it in to your SAM. It will remain separate from the survey.

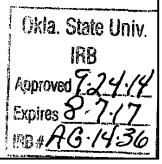
Before we begin handing out the instrument, I want to stress participation in this study is completely voluntary.

The first page in the packet is an information page about today's study and is yours to keep. It also includes my contact information and the other researcher on this study should you have any questions about the research. It also includes information about who to contact regarding your rights as a research volunteer.

After reading the information sheet, if you choose to participate in the study, the next page is a student coding system. Please follow the instructions carefully and do not write your name. Your names will remain anonymous and the code you list will be kept confidential. Any written results will discuss group findings and will not include information that will identify you.

Then, you will find the instrument in two parts. In the first section, you will find questions regarding servant leadership and mentorship. The second part is a demographic section with some additional questions. Please fill it out to the best of your ability. There are no right or wrong answers. You may use pen or pencil. If you have any questions during the survey, please raise your hand.

Are there any questions at this time? If not, we will hand out the instrument. SAMs, please come to the front to receive a packet of surveys for your group of students. Student surveys are white. SAM surveys are blue. We will collect all surveys in approximately 10-15 minutes.



Participant Information
Fall 2014 – CASNR AG 1011 Servant Leadership Questionnaire

Title: Identifying servant leadership traits in first-year students and student mentors in the College of Agricultural Sciences and Natural Resources at Oklahoma State University.

Investigators: Shannon Norris and Dr. Shelly Sitton, Agricultural Communications

Purpose: The purpose of this research study is to determine perceptions of servant leadership and mentorship influencing incoming students in the College of Agricultural Sciences and Natural Resources at Oklahoma State University. **You must be 18 years or older to participate.**

What to Expect: Participating in this study will require you to complete one questionnaire as a pre-exposure to AG 1011 at the beginning of the course and one post-exposure to AG 1011 at the end of the eight-week questionnaire. Part 1 is an instrument and Part 2 is a demographics section.

Risks: There are no risks associated with this project above normal daily risks. However, to minimize associated risks, names will remain anonymous and student codes associated with the SAMs will be kept confidential. Only the researchers will have access to the codes and the information will never be used to identify you.

Benefits: You may gain an appreciation and understanding of how research is conducted and exposure to the types of research being done by your peers at Oklahoma State University.

Compensation: Students who wish to include their name and email address at the end of the post-exposure survey will receive 10 points extra credit in the AG 1011 course. Another extra credit option will be available for students who do not wish to complete the survey.

Your Rights: Your participation in this research is ***voluntary.*** There is no penalty for refusing to participate, and you are free to withdraw your consent and participation in the research at any time.

Confidentiality: The records of this study will be kept private. Any written results will discuss group findings and will not include information that will identify you. Research records will be stored on a password protected computer in a locked office and only researchers and individuals responsible for research oversight will have access to the records. Data will be destroyed three years after the study has been completed.

Contacts: If you have any questions regarding the research, you may contact Shannon Norris (405-744-9464 or shannon.norris@okstate.edu) or Shelly Sitton (405-744-3690 or shelly.sitton@okstate.edu). If you have any questions about your rights as a research volunteer, you may contact the Oklahoma State University Institutional Review Board (IRB) [Office or Interim Chair, Dr. Tamara J. Mix] at 219 Cordell North, Stillwater, OK 74078, 405-744-3377 or irb@okstate.edu.

If you choose to participate: Please complete the attached questionnaire. All surveys will be collected in 10-15 minutes when others have completed their surveys.

Please keep this page as a reference should you wish to contact anyone about this study.

APPENDIX D

PRE-QUESTIONNAIRE

Identifying Servant Leadership Traits
in First-year Students and Student Mentors

Questionnaire

Your Student Code: _____--_____--_____

Example: 01-1234-RNL

Shannon Norris

Candidate for Master of Science

Shelly Peper Sitton, Ph.D.

Faculty Chair

OPTIONAL: If you wish to be included in the drawing for one of four $50 gift cards, please include your email address below. Student codes will only be entered once. Drawing will take place in mid-October.

Thank you for participating in this study. Please return this questionnaire to your SAM when finished.

INSTRUCTIONS:

When completing this questionnaire, please consider your most influential mentor. In this questionnaire, you will be asked to answer two sets of questions. The first section relates toward your perception(s) and the second section is a demographic inventory. All responses will be reported as a group, and your responses will not be individually reported.

SECTION 1: *Considering your most influential mentor, circle the best response. Rank your score based on the following scale: Strongly Disagree (StD); Disagree (D); Somewhat Disagree (SwD); Somewhat Agree (SwA); Agree (A); or Strongly Agree (StA).*

1.	My mentor gives me the information I need to do my work well.	StD	D	SwD	SwA	A	StA
2.	My mentor encourages me to use my talents.	StD	D	SwD	SwA	A	StA
3.	My mentor helps me to further develop myself.	StD	D	SwD	SwA	A	StA
4.	My mentor encourages others to come up with new ideas.	StD	D	SwD	SwA	A	StA
5.	My mentor keeps himself/herself in the background and gives credits to others.	StD	D	SwD	SwA	A	StA
6.	My mentor holds me responsible for the work I carry out.	StD	D	SwD	SwA	A	StA
7.	My mentor keeps criticizing people for the mistakes they have made in their work.	StD	D	SwD	SwA	A	StA
8.	My mentor takes risks even when he/she is not certain of the support from others.	StD	D	SwD	SwA	A	StA
9.	My mentor is open about his/her limitations and weaknesses.	StD	D	SwD	SwA	A	StA
10.	My mentor learns from criticism.	StD	D	SwD	SwA	A	StA
11.	My mentor emphasizes the importance of focusing on the good of the whole.	StD	D	SwD	SwA	A	StA
12.	My mentor gives me the authority to make decisions which make work easier for me.	StD	D	SwD	SwA	A	StA
13.	My mentor is not chasing recognition or rewards for the things he/she does for others.	StD	D	SwD	SwA	A	StA
14.	I am held accountable for my performance by my mentor.	StD	D	SwD	SwA	A	StA
15.	My mentor maintains a hard attitude towards people who have offended him/her.	StD	D	SwD	SwA	A	StA
16.	My mentor takes risks and does what needs to be done in his/her view.	StD	D	SwD	SwA	A	StA
17.	My mentor is often touched by the things he/she sees happening around him/her.	StD	D	SwD	SwA	A	StA
18.	My mentor tries to learn from the criticism he/she gets from his/her superior(s).	StD	D	SwD	SwA	A	StA
19.	My mentor has a long-term vision.	StD	D	SwD	SwA	A	StA
20.	My mentor enables me to solve problems myself instead of just telling me what to do.	StD	D	SwD	SwA	A	StA
21.	My mentor appears to enjoy his/her colleagues' success more than his/her own.	StD	D	SwD	SwA	A	StA
22.	My mentor holds me and my colleagues responsible for the way we handle a job.	StD	D	SwD	SwA	A	StA
23.	My mentor finds it difficult to forget things that went wrong in the past.	StD	D	SwD	SwA	A	StA
24.	My mentor is prepared to express his/her feelings even if this might have undesirable consequences.	StD	D	SwD	SwA	A	StA
25.	My mentor admits his/her mistakes to his/her superior(s).	StD	D	SwD	SwA	A	StA
26.	My mentor emphasizes the societal responsibility of our work.	StD	D	SwD	SwA	A	StA
27.	My mentor offers me abundant opportunities to learn new skills.	StD	D	SwD	SwA	A	StA
28.	My mentor shows his/her true feelings to others.	StD	D	SwD	SwA	A	StA
29.	My mentor learns from the different views and opinions of others.	StD	D	SwD	SwA	A	StA
30.	If people express criticism, my mentor tries to learn from it.	StD	D	SwD	SwA	A	StA

SECTION 2: *Circle the best response. If you answer "other," complete the corresponding blank to the best of your ability.*

1. Who is your most influential mentor?
   - Club / Organization Adviser
   - Athletic Coach
   - Teacher
   - Parent
   - Student / Peer
   - Religious / Church Leader
   - Other _____

2. In your opinion, what is the **most important** quality of a mentor?
   - Empowering
   - Humility
   - Stands back
   - Authenticity
   - Forgiving
   - Courageous
   - Accountable
   - Good stewardship

3. On average, how often do you seek mentorship?
   - Daily
   - Weekly
   - Monthly
   - On occasion (less than monthly mentorship)
   - Never

4. On average, how many close mentors (those from whom you seek mentorship on a regular basis) do you have? _____

5. Do you serve as a mentor for anyone? Yes No

6. On average, how often do you mentor someone else?
   - Daily
   - Weekly
   - Monthly
   - On occasion (less than monthly mentorship)
   - Never

7. In the past month, what general types of community service activities have you participated in? ***Please select all that apply.***
   - Youth Development
   - Need-based Organizations
   - Faith-based Organizations
   - Service to Elderly or Retired
   - Veteran Affairs
   - Community Development or Beautification
   - None

8. If applicable, please list specific types of community service you participated in during the last month. Examples: Big Brothers, Big Sisters; Soup Kitchen; roadside clean-up; etc.

   _____
   _____
   _____
   _____
   _____

9. Estimate how many hours of community service you completed in the last month. _____

10. In which of the following organizations were you a member while in high school? ***Please circle all that apply.***

FFA	Music Organizations (Band, Choir, Orchestra, etc.)
4-H	Faith-based Organizations (Church youth groups, FCA, etc.)
National Honor Society	
Student Council	Team Sport (Basketball, Football, Softball, Volleyball, etc.)
Individual Sport (Equestrian, Golf, Tennis, Wrestling, etc.)	Boy Scouts / Girl Scouts
Other clubs or organizations	

_____

11. Are you an AG 1011 Student Academic Mentor (SAM)? Yes No
If yes, how many years have you served as an AG 1011 SAM? _____

12. What is your classification?

Freshman	Junior
Sophomore	Senior

13. What is your primary major? ***Please circle only one; if you are a double major, select only the first major on your degree sheet.***

Agribusiness	Entomology
Agribusiness (PreVet)	Entomology (PreVet)
Agricultural Communications	Environmental Science
Agricultural Economics	Food Science
Agricultural Education	Horticulture
Agricultural Leadership	Landscape Architecture
Animal Science	Landscape Management
Animal Science (PreVet)	Natural Resource Ecology & Management
Biochemistry & Molecular Biology	Natural Resource Ecology & Management (PreVet)
Biochemistry & Molecular Biology (PreVet)	Plant & Soil Sciences
Biosystems & Agricultural Engineering	Undecided

14. Is your academic adviser housed under the LASSO (Learning and Student Success Opportunity) Center?

Yes	No

15. Prior to attending Oklahoma State University, where did you live? *Pick the one that most closely matches.*

On a farm or ranch	In a large town (10,000-50,000)
In a rural area/small town (10,000 or less)	In a large city (50,000 or more)

16. To which racial or ethnic group(s) do you most identify?

African-American (non-Hispanic)	Latino or Hispanic
Asian/Pacific Islanders	Native American or Native Alaskan
Caucasian (non-Hispanic)	Other _____

17. What is your biological sex? Male Female Prefer not to respond

18. What is your age? _____

APPENDIX E

POST-QUESTIONNAIRE

Identifying Servant Leadership Traits
in First-year Students and Student Mentors

Questionnaire

Your Student Code: _____--_____--_____

Example: 01-1234-RNL

Shannon Norris

Candidate for Master of Science

Shelly Peper Sitton, Ph.D.

Faculty Chair

Thank you for participating in this study. Please return this questionnaire to your SAM when finished. Write your name and email on the insert and turn it in for 10 points extra credit.

INSTRUCTIONS:

When completing this questionnaire, please consider your most influential mentor. In this questionnaire, you will be asked to answer two sets of questions. The first section relates toward your perception(s) and the second section is a demographic inventory. All responses will be reported as a group, and your responses will not be individually reported.

SECTION 1: *Considering your most influential mentor, circle the best response. Rank your score based on the following scale: Strongly Disagree (StD); Disagree (D); Somewhat Disagree (SwD); Somewhat Agree (SwA); Agree (A); or Strongly Agree (StA).*

1.	My mentor gives me the information I need to do my work well.	StD	D	SwD	SwA	A	StA
2.	My mentor encourages me to use my talents.	StD	D	SwD	SwA	A	StA
3.	My mentor helps me to further develop myself.	StD	D	SwD	SwA	A	StA
4.	My mentor encourages others to come up with new ideas.	StD	D	SwD	SwA	A	StA
5.	My mentor keeps himself/herself in the background and gives credits to others.	StD	D	SwD	SwA	A	StA
6.	My mentor holds me responsible for the work I carry out.	StD	D	SwD	SwA	A	StA
7.	My mentor keeps criticizing people for the mistakes they have made in their work.	StD	D	SwD	SwA	A	StA
8.	My mentor takes risks even when he/she is not certain of the support from others.	StD	D	SwD	SwA	A	StA
9.	My mentor is open about his/her limitations and weaknesses.	StD	D	SwD	SwA	A	StA
10.	My mentor learns from criticism.	StD	D	SwD	SwA	A	StA
11.	My mentor emphasizes the importance of focusing on the good of the whole.	StD	D	SwD	SwA	A	StA
12.	My mentor gives me the authority to make decisions which make work easier for me.	StD	D	SwD	SwA	A	StA
13.	My mentor is not chasing recognition or rewards for the things he/she does for others.	StD	D	SwD	SwA	A	StA
14.	I am held accountable for my performance by my mentor.	StD	D	SwD	SwA	A	StA
15.	My mentor maintains a hard attitude towards people who have offended him/her.	StD	D	SwD	SwA	A	StA
16.	My mentor takes risks and does what needs to be done in his/her view.	StD	D	SwD	SwA	A	StA
17.	My mentor is often touched by the things he/she sees happening around him/her.	StD	D	SwD	SwA	A	StA
18.	My mentor tries to learn from the criticism he/she gets from his/her superior(s).	StD	D	SwD	SwA	A	StA
19.	My mentor has a long-term vision.	StD	D	SwD	SwA	A	StA
20.	My mentor enables me to solve problems myself instead of just telling me what to do.	StD	D	SwD	SwA	A	StA
21.	My mentor appears to enjoy his/her colleagues' success more than his/her own.	StD	D	SwD	SwA	A	StA
22.	My mentor holds me and my colleagues responsible for the way we handle a job.	StD	D	SwD	SwA	A	StA
23.	My mentor finds it difficult to forget things that went wrong in the past.	StD	D	SwD	SwA	A	StA
24.	My mentor is prepared to express his/her feelings even if this might have undesirable consequences.	StD	D	SwD	SwA	A	StA
25.	My mentor admits his/her mistakes to his/her superior(s).	StD	D	SwD	SwA	A	StA
26.	My mentor emphasizes the societal responsibility of our work.	StD	D	SwD	SwA	A	StA
27.	My mentor offers me abundant opportunities to learn new skills.	StD	D	SwD	SwA	A	StA
28.	My mentor shows his/her true feelings to others.	StD	D	SwD	SwA	A	StA
29.	My mentor learns from the different views and opinions of others.	StD	D	SwD	SwA	A	StA
30.	If people express criticism, my mentor tries to learn from it.	StD	D	SwD	SwA	A	StA

SECTION 2: *Circle the best response. If you answer "other," complete the corresponding blank to the best of your ability.*

1. Who is your most influential mentor?
   - Club / Organization Adviser
   - Athletic Coach
   - Teacher
   - Parent
   - Student / Peer
   - Religious / Church Leader
   - Other _____

2. In your opinion, what is the **most important** quality of a mentor?
   - Empowering
   - Humility
   - Stands back
   - Authenticity
   - Forgiving
   - Courageous
   - Accountable
   - Good stewardship

3. On average, how often do you seek mentorship?
   - Daily
   - Weekly
   - Monthly
   - On occasion (less than monthly mentorship)
   - Never

4. On average, how many close mentors (those from whom you seek mentorship on a regular basis) do you have? _____

5. Do you serve as a mentor for anyone? Yes No

6. On average, how often do you mentor someone else?
   - Daily
   - Weekly
   - Monthly
   - On occasion (less than monthly mentorship)
   - Never

7. In the past month, what general types of community service activities have you participated in? ***Please select all that apply.***
   - Youth Development
   - Need-based Organizations
   - Faith-based Organizations
   - Service to Elderly or Retired
   - Veteran Affairs
   - Community Development or Beautification
   - None

8. If applicable, please list specific types of community service you participated in during the last month. Examples: Big Brothers, Big Sisters; Soup Kitchen; roadside clean-up; etc.

   _____

   _____

   _____

9. Estimate how many hours of community service you completed in the last month. _____

10. Are you an AG 1011 Student Academic Mentor (SAM)? Yes No
    If yes, how many years have you served as an AG 1011 SAM? _____

Thank you for participating in this study. Please return this questionnaire to your SAM when finished.
Write your name and email on the insert and turn it in for 10 points extra credit.

APPENDIX F

STUDENT CODING SYSTEM

Servant Leadership Questionnaire
Student Coding Instructions

Please fill out the blanks and write the numbers or letters from the highlighted sections below in the student code blank. Then write your code on the top of the actual questionnaire.

Your Date of Birth (MM/DD/Year): __ __ / _X_ _X_ / _X_ _X_ _X_ _X_

Last 4 digits of your Social Security Number: _X_ _X_ _X_ / _X_ _X_ / __ __ __ __

Father's Initials: __ __ __

STUDENT CODE: _____--_____--_____

Birthday Month *Last 4 Digits of S.S.* *Father's Initials*

Example: D.O.B.: 01/01/1995; S.S. Number: XXX-XX-1234; Father's Initials: RNL
Example Student Code: 01-1234-RNL

* Names will remain anonymous and only researchers will have access to your codes. They will be kept confidential and your information will not be individually reported.

**Please fill in your student code at the top of the survey. You may keep this page for your records.

APPENDIX G

CONGRATULATORY EMAIL FOR PRE-QUESTIONNAIRE DRAWING WINNERS

Congratulations!

Your name was drawn for one of four $50 book scholarships associated with completing the servant leadership thesis questionnaire in CASNR's AG 1011 class in August!

Before we can start the paperwork to send the money to your Bursar account, I need confirmation whether or not you accept the award, your OSU email address, CWID number, and confirmation that you will be attending OSU next year. If you are planning on transferring next year, you will become ineligible for the drawing money.

To receive this gift, please respond to shannon.norris@okstate.edu by 12 p.m. Wednesday, Dec. 10, or your name will be pulled and another name will be drawn.

Looking forward to hearing from you soon. Please let me know if you have any questions. Thank you again for assisting in my research!

Good luck with finals this week!

Shannon

Shannon Norris
Student Development Graduate Assistant
College of Agricultural Sciences & Natural Resources
Oklahoma State University

103 Ag Hall
Stillwater, OK 74078
Phone: (405) 744-9464
Email: shannon.norris@okstate.edu

APPENDIX H

REMOVABLE AG 1011 EXTRA CREDIT INSERT FOR COMPLETING POST-QUESTIONNAIRE

Servant Leadership Questionnaire
Extra Credit Opportunity

If you would like to receive **10 points of extra credit** for completing this post-survey, please write your name and email address on this piece of paper. Hand back to your SAM.

Name: _____

Email: _____

SAM: _____

APPENDIX I

ALTERNATIVE EXTRA CREDIT AG 1011 ASSIGNMENT IN PLACE OF COMPLETING POST-QUESTIONNAIRE

AG 1011 - CASNR Research **Extra Credit** Assignment

Name:_____ SAM:_____ SECTION: _____

Directions: (OPTIONAL) Each class member has an opportunity to complete an extra credit assignment worth 10 points. If students did not choose to complete the in-class Servant Leadership survey, they can complete the following assignment.

This form is due by 5:00 p.m. Friday, October 10 to 103 AG Hall. ☺

Use online or in-person resources to investigate undergraduate research opportunities in CASNR.

Helpful Link: http://scholardevelopment.okstate.edu/index.php?slab=undergraduate-research

Research Information

Example of Undergraduate Research Program (Undergraduate Research Network):

_____

Name of Principle Researcher: _____

Contact Information: _____

Is there funding available for qualified students? YES_____ NO_____

Project Description: _____

_____

What is the name of an undergraduate research scholarship?

_____

When is the application due? _____

What things interest you about undergraduate research?

What is the value of research at a land-grant institution?

What does the CUR Registry stand for? What is its value?

Explain the basics of the Freshmen Research Scholars Program.

Research the Oklahoma Agricultural Experiment Station. What are some examples of current research being conducted?

APPENDIX J

RESPONSES FOR "OTHER" HIGH SCHOOL

ORGANIZATIONAL INVOLVEMENT

Responses to Pre-Questionnaire: Section 2, Question #10
"Other" High School Organizational Involvement Listings

A Team
Academic Team & Bowl (6)
Academy of Finance
Advancement Via Individual Determinism (AVID)
American Angus Association
American International Charolais Association
Army Junior Reserve Officer Training Corps (JROTC) (2)
Art Club (3)
Ayrshire Breeders Association
Band Pit Crew
BbBs
BECA
Best Buddies
Beta Club (8)
Big Brother/Big Sister
Book Club
Business Professionals of America (BPA) (7)
Calculus Club
California Scholarship Federation
Chamber Student Leader
Class Board / Officer (3)
Colorguard
Community Service Club (2)
Computer Club
Cycling for Charity
Dance Company
DECA (2)
Drug Free Youth
Entrepreneurship Club
French Club (2)
French National Honor Society
Future Business Leaders of America (FBLA)
G-Club
German Club
Global Awareness Youth Club
Green Club
Hacky Sack Club
High School Heroes
History Club
HOSA (5)
Hunger
ICTC
JCC
Junior Civics Club
Junior Lions Club
Key Club (13)
Latin Club
Leo Club
Library Club / Library Council (2)
Link Crew (3)
Make a Wish Foundation
Marine Science Club
Math Club (Mathlete)
Mentor Club (Freshmen Mentor, Students as Mentors) (2)
Mock Trial
Multicultural Club
National Art Honor Society
National Hispanic Honor Society
National Jr. Angus Association (2)
National Technical Honor Society (3)
Native American Club (2)
NEHS
Newspaper & Journalism (3)
Oklahoma Cattlemen's Association
Oklahoma Jr. Angus
Operation Beautiful
PALs (3)
Pre-Medical Society
Principal's Advisory Council
PRO Intern Class
Prom Committee
Public Forum Debate Team
Random Acts of Kindness (RAK)

Robotics (2)
Rock Bridge Reaches Out (Volunteer Club)
Rotary / Interact Club (2)
Science Club (Science Olympiad) (5)
Senior Advisory Committee
Skills USA
Spanish Club (6)
Spanish National Honor Society
Speech & Debate (4)
Spirit Club
Stand for the Silent
Student / Teacher Advocate Program
Student Government (3)
Student Leadership Initiative Program
Students with a Mission
SWAT (2)
Swing Club
Technology Student Association (TSA)
Texas Simmental & Simbrah Association
Theater / Drama (8)
United States Team Roping Championships (USTRC)
University Interscholastic League (UIL)
Washington Angus Association
Western Horsemanship Club
Writing Club (2)
Yearbook (5)
Young Men's Christian Association (YMCA)
Youth in Government
Zoology Club

APPENDIX K

RESPONSES FOR MOST INFLUENTIAL

MENTOR CLASSIFICATION

Responses to Pre- and Post-Questionnaires: Section 2, Question #1
Most Influential Mentor Listings

PRE-QUESTIONNAIRE LISTINGS:

Athletic Coach (28)
Aunt / Uncle (4)
Boss / Manager (11)
Breeder (1)
Chiropractor (1)
Club / Organization Advisor (47)
Grandparent (4)
High School Counselor (1)
Horse Trainer (1)
Neighbor / Community Member (1)
"Older Adult" (1)
Other Family Member (3)
Parent (222)
Past Military Supervisor (1)
Psychologist (1)
Religious / Church Leader (17)
"Role Model Who Keeps Their Word" (1)
Sibling (17)
Student / Peer (19)
Teacher (51)

POST-QUESTIONNAIRE LISTINGS:

Athletic Coach (17)
Aunt / Uncle (5)
Boss / Manager (9)
Breeder (2)
Chiropractor (1)
Club / Organization Advisor (42)
Grandparent (5)
High School Counselor (1)
Neighbor / Community Member (2)
Other Family Member (1)
Parent (193)
"Role Model Who Keeps Their Word" (1)
Sibling (17)
Student / Peer (42)
Teacher (39)

VITA

Shannon L. Norris

Candidate for the Degree of

Master of Science

Thesis: MENTORSHIP AND SERVANT LEADERSHIP: PERCEPTIONS OF FIRST-SEMESTER COLLEGE STUDENTS

Major Field: Agricultural Communications

Biographical:

Education:

Completed the requirements for the Master of Science degree in Agricultural Communications at Oklahoma State University, Stillwater, Oklahoma, in May, 2015.

Completed the requirements for the Bachelor of Science degree in Agricultural Education at New Mexico State University, Las Cruces, New Mexico, in May, 2013.

Graduated from Cliff High School, Cliff, New Mexico, in May 2008.

Experience:

Employed as a graduate teaching assistant in the College of Agricultural Sciences and Natural Resources Student Success Center, Oklahoma State University, Stillwater, Oklahoma from August 2013 – May 2015.

Served as a team leader for the National FFA Organization Washington Leadership Conference, Washington, D.C. from May 2013 – August 2013.

Professional Memberships:

Agricultural Communicators of Tomorrow, March 2014-May 2015.

Graduate Students in Agricultural Education, Communications, and Leadership, August 2013 – May 2015.

The Honor Society of Phi Kappa Phi, November 2014 – May 2015.