EXPLORING MOTIVATION AND INTENT TO BE A LEADER WITHIN STUDENTS ATTENDING THE AGRICULTURE FUTURE OF AMERICA LEADERS CONFERENCE

by

JORDAN LANE DEWITT

(Under the Direction of Jessica Holt)

ABSTRACT

Though undergraduate enrollment within the United States continues to increase, the gap between professional opportunities available within the agricultural industry and experienced graduates widens. Through the assessment of the Theory of Planned Behavior and Self-Determination Theory, this study sought to explore the relationships existing between self-determined motivation to be a leader and intent to be a leader in a career in agriculture. This study indicated a significant relationship exists between internal motivation and intent to be a leader in a career in agriculture. This study further examined the incorporation of the Theory of Planned Behavior and Self-Determination Theory in accordance with prior research.

INDEX WORDS: Self-Determination Theory, Theory of Planned Behavior, Motivation, Intent, Leadership, Agriculture

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CHAPTER 1

INTRODUCTION

According to projections, the agricultural industry will experience an employment deficiency through the year 2022, due in part to the lack of experienced graduates (Goecker, Smith, Fernandez, Ali, & Theller, 2015). On average, 35,400 students graduate each year with experience in food, agriculture, renewable natural resources, and the environment, much fewer than the approximate 57,000 positions available in the agricultural industry. (Goecker et al., 2015). Most agricultural sector employers prefer to hire individuals with prior work or educational experience in these areas, but due to the 39% gap of potential employees, must fill these positions with individuals whose expertise lies outside the scope of agricultural and related sciences (Goecker et al., 2015).

In addition to subject expertise, undergraduate education develops additional competencies including leadership, which is of a particular interest to employers (Cruzvegara, Testani, & Smith, 2018; Dugan & Komives, 2007; Mayhew, Pascarella, & Terenzini, 2016). Leadership defined by Northouse (2010), is "a process whereby an individual influences a group of individuals to achieve a common goal" (p. 3). For employers, leadership increases the human capital value within an entity or organization. This capital is a set of skills directly correlated to productivity and career earnings developed by an individual's involvement in training and educational experiences, which can occur throughout undergraduate education (Becker, 1994; Cruzvergara, Testani, & Smith, 2018). Due to the increased high school graduation rates and

secondary education enrollment, the rising post-millennial workforce will be the most educated generation yet. In the United States, undergraduate enrollment has continued to increase for more than the last three decades (Parker & Fry, 2018). This additional education presents the opportunity to increase future employees' human capital value (Parker & Fry, 2018).

Prior research indicates a rising gap within the preferred pool of potential employees, as well as employers' preference to hire individuals who exhibit leadership competencies (Becker, 1994; Cruzvergara et al., 2018; Goecker et al., 2015; Hu & Wolniak, 2013). Employers in the agricultural industry expect graduates to lead in their respective roles (Goecker et al., 2015). Undergraduate education, through opportunities in the academic institution as well as that of external organizations, can develop this expected leadership competency (Dugan & Komives, 2007; Cruzvergara et al., 2018; NACE, 2016). Both the agricultural industry and employers, as a whole, desire graduates who excel in leadership (Goecker et al., 2015). The Agriculture Future of America (AFA) organization helps students meet employers' growing demand for leadership competency, while encouraging them to pursue and maintain careers in agriculture (Stewart & Barcus, 2018).

AFA acts as a bridge between the agricultural industry and interested undergraduates. Through AFA opportunities, undergraduates pursue leadership, internship, mentorship, and experiential learning opportunities (AFA, 2019; Stewart & Barcus, 2018). Students who participate in AFA are more likely to gain the experience and skills needed to pursue leadership positions within and outside the agricultural industry than students who do not attain similar experiences and skills (Goecker et al., 2015; Stewart & Barcus, 2018).

Because leadership is a desirable skill in potential employees, universities and their students would benefit from a greater understanding of a student's intent to become a leader in the agricultural field. An understanding of a student's underlying motivations and intent can better allow both universities and employers to provide better opportunities through which students can develop their leadership competency through experience and education. In addition to employer preference in the hiring process, students with leadership competency can expect greater success and financial benefits within their chosen career (Sosik, Goshalk, & Yammarino, 2004; Riaz & Haider, 2010). An individual's intent toward a behavior, in this study to become a leader in the agricultural industry, can be examined through utilizing Ajzen's (1991) Theory of Planned Behavior. Researchers used the Theory of Planned Behavior to examine organizational change, purchasing local food, consumer relations, social media, healthcare, and leadership among other topics. (Bakari, Hunjra, & Niazi, 2017; Hagger & Chatzisarantis, 2009; Holt, Rumble, Telg, & Lamm, 2018; Picazo-Vela, Chou, Melcher, & Pearson, 2010). This study examined leadership in agriculture, specifically through the lens of this theory.

The Theory of Planned Behavior

The Theory of Planned Behavior assesses an individual's attitude, perceived control and intent towards a behavior in addition to the behavior itself. The theory also examines the individual's perception of social beliefs concerning the behavior called subjective norms (Ajzen, 1991). A key component in the Theory of Planned Behavior is assessing an individual's belief about the behavior itself. This belief about the behavior directly affects an individual's attitude toward the behavior, subjective norms, as well as, his/her perceived behavioral control toward completing the behavior. To understand the impacts of the variables within the Theory of

Planned Behavior, Ajzen further expanded the Theory of Planned Behavior to include the three beliefs which directly relate to the variables contributing to intent. Ajzen (1991) posited that an individual's beliefs could impact their intention to perform a specific behavior.

Behavioral beliefs, "are assumed to influence attitudes toward the behavior, normative beliefs which constitute the underlying determinants of subjective norms, and control beliefs which provide the basis for perceptions of behavioral control" (Ajzen, 1991, p.189). An individual's intent encapsulates the extent to which he/she intends to perform the behavior. "Intentions are assumed to capture the motivational factors that influence a behavior; they are indications of how hard people are willing to try, of how much an effort they are planning to exert, in order to perform the behavior" (Ajzen, 1985, p.181).

Motivation

To understand the reasons for an individual's pursuit of a behavior, researchers have focused on understanding an individual's motivation (Ryan & Deci, 2000; Deci & Ryan, 1985). Examining internal and external variables which contribute to the pursuit of a behavior help measure an individual's motivation (Deci & Ryan, 1985). To understand further the motivational factors both internally and externally, Ryan and Deci founded Self-Determination Theory (Deci & Ryan, 1985; Ryan & Deci, 2000). Self Determination Theory hinges on the idea that all individuals are moved to act in some manner as a result of intrinsic or extrinsic motivation (Ryan & Deci, 2000; Deci & Ryan, 1985). Within the context of intrinsic or extrinsic motivation, there are multiple types motivational to be studied; intrinsic, identified regulation, external regulation, and amotivation. The purpose of researching further within extrinsic motivation is to understand the external or internal forces influencing the individual. Though measuring motivation is

beneficial for understanding motivational factors among multiple domains, simple assessment does not provide insight into the origin of external influeces necessary to the behavior performance (Ryan & Deci, 2000; Deci & Ryan 1985). Self-Determination Theory does not specifically measure intent or completion of the behavior but rather an individual's regulation and locus of causality in his motivation to perform a behavior (Ryan & Deci, 2000; Deci & Ryan, 1985). Self-Determination Theory provides insight into an individual's motivation to complete a behavior through a continuum of motivation domains. The first, intrinsic motivation, is the most internalized motivation domain.

Within the extrinsic domain of motivation, Ryan and Deci identified four sub-domains of motivation: identified regulation, introjected regulation, integrated regulation, and external regulation, which increase in externalization respectively (Figure 2). Identified regulation relates to an individual's conceptualization of his/her actions and the resulting outcome. An individual who falls within identified regulation would see his action or behavior as a means to an end. Uniquely within Self-Determination Theory, an individual can be represented in the continuum of motivation without internalizing the action, behavior, or its outcomes. The nearly fully externalized domain identified by Ryan and Deci (2000) is identified as amotivation. Amotivation is non-personal and lacks the internalization of the correlation between an individual's action and the culminating outcome of the behavior.

Seeking to examine this continuum of self-determined motivation was examined in a situational context of physical education among students, Guay, Vallerand, and Blanchard (2000) developed the Situational Motivational Scale (SIMS). The SIMS assesses an individual's self-determined motivation within four of the six original Self-Determination Theory domains:

intrinsic motivation, identified regulation, external regulation, and amotivation (Guay et al., 2000). As with Self-Determination Theory, the SIMS does not measure intent to complete a behavior or the behavior itself.

Research utilizes the Theory of Planned Behavior as a tool for examining intent to perform a behavior (Ajzen, 1991). An individual's beliefs surrounding the examined behavior contribute to this intent. These same beliefs (Ajzen, 1991), represent the internalization and conceptualization of the behavior which is also found within types of motivation identified in Self-Determination Theory (Ryan & Deci, 1985; Ryan & Deci, 2000). Incorporating these two theories together has the potential to find overlap in an individual's perception and conceptualization of behavior performance. The Situation Motivational Scale can then examine this relationship in a particular setting. Through assessing variables identified within the Theory of Planned Behavior and Self-Determination Theory, researchers can better understand the relationship between internalization of actions and attitudinal orientation toward an individual's behavior performance.

Statement of the Problem

Previous research indicated a preference by employers within the agricultural industry to hire individuals with experience, education, and skills in leadership, agriculture and related sciences (Goecker et al., 2015; NACE, 2016; Smedick & Rice, 2018). Undergraduate education and involvement leadership organizations assists students in developing this sought-after leadership competency (Cress et al., 2001; Cruzvegara et al., 2018; Dugan & Komives, 2007; Mayhew et al., 2016; Smedick & Rice, 2018). AFA has the potential to develop a student's leadership capability, as well as serve as a bridge between students and those in the industry who

intend to hire agricultural students with leadership competencies (AFA, 2019). Each year, the AFA organization hosts a national conference to encourage and develop further leadership opportunities for undergraduate students interested in pursuing a career in agriculture. Because students have self-identified as leaders at the AFA conference, the need for assessing situational motivation for leadership and intent to become a leader in an agricultural career is vital for their future employment and supporting the agricultural industry as a whole. A better understanding of the intent of these self-identified future leaders in the agricultural industry can help close the discrepancy between professional opportunities and the number of qualified graduates.

Purpose and Objectives

The purpose of this study was to examine the relationship between a participant's self-determined motivation and intent to be a leader in a career in agriculture. Through the measurement of the Theory of Planned Behavior, this study explored the relationship between participant's attitude, subjective norms, perceived behavioral control, and intent to be a leader in a career in agriculture. Each of these variables within the Theory of Planned Behavior encapsulates the internal beliefs of an individual toward being a leader in a career in agriculture (Ajzen, 1991). An individual's internal beliefs culminate to influence intent, which is theorized to measure the extent to which an individual is motivated to complete the behavior. Measuring an individual's behavior through motivation has also been studied as a factor that influences a behavior (Ajzen, 1991).

This study focused on measuring student motivation to be a leader through utilizing Ryan and Deci's Self-Determination Theory (2000) and measuring participant's intent to be a leader in a career in agriculture through Ajzen's (1991) Theory of Planned Behavior. The following research objectives were used to guide this study:

RO1: Identify the relationship between gender and type of motivation to be a leader in a career in agriculture.

H_1: There is a statistically significant relationship between a participant's type of motivation to be a leader and gender.

RO2: Identify the relationships among the following: Participants' 1) attitude, 2) subjective norms, 3) perceived behavioral control, and 4) intent in relation to becoming a leader in the agricultural industry.

H_1: There is a statistically significant relationship among intent to be a leader in a career in agriculture and a participant's attitude, subjective norms, and perceived behavioral control toward being a leader in a career in agriculture.

RO3: Identify the relationship between a participant's type of motivation to be a leader and their intent to be a leader in a career in agriculture.

H_2: There is a statistically significant relationship between a participant's type of motivation to be a leader and intent to be a leader in a career in agriculture.

Significance of Study

This study is significant due to the current defecit of preferred undergraduates to employment opportunities in the agricultural industry. The post-millennial generation is projected to be the highest educated generation and will have the opportunity to use higher education to gain leadership competencies employers value (Cress et al., 2001; Cruzvegara et al., Testani, & Smith, 2018; Dugan & Komives, 2007; Fry & Parker, 2018; Mayhew et al., 2016; Smedick & Rice, 2018). Agricultural industry employers have a desire to employ individuals with experience in agriculture or related sciences, pertinent skills to the industry, and education in a related science (Goecker et al., 2015). These same employers will see a gap between the annual approximation of 34,000 graduates and 57,000 professional opportunities (Goecker et al., 2015).

Motivation to perform a behavior is influenced by multiple factors that have been often characterized by internal and external variables (Deci & Ryan, 1985). In the current study, Self-Determination Theory provided the means for understanding these external and internal variables further. Through a continuum of intrinsic motivation, extrinsic motivation, and amotivation, Self-Determination Theory provides an avenue for further understanding the factors behind an individual's behavioral motivation (Guay et al., 2000; Deci & Ryan, 2002; Ryan & Deci, 2000). This measurement of behavioral motivation can be performed in the context of specific actions and situations through the use of the SIMS scale (Guay et al., 2000).

Context of Study

This study took place at the 2018 Agriculture Future of America Leaders Conference an event in a Midwest conference facility attended by U.S. undergraduates. To attend the AFA Leaders Conference, potential participants submit a formal application which highlights their leadership experience and view of the agricultural industry. Throughout the conference, participants enjoy leadership and skill development opportunities as well as attend an opportunity fair which exhibits organizations within the industry. These partnering agriculture-focused organizations include nonprofit organizations, for-profit commercial entities, governmental agencies, and advocacy groups. The purpose of this opportunity fair is to bridge employment opportunities with a qualified pool of agricultural undergraduates.

Organization of Thesis

This thesis is organized into five chapters. The first chapter is an overview introduction to the study. The second chapter is a review of literature. The third chapter provides insight into the methodology of this study, and the fourth chapter includes the result from the data analysis. The fifth chapter highlights the practical and theoretical implications of the study as well as future recommendations.

Definition of Terms

Agriculture Future of America Leaders Conference (AFA & AFALC): The AFALC is attended by undergraduate students from across the United States after identifying a desire to work within the agricultural industry and experience in leadership (Stewart & Barcus, 2018).

Amotivation: "When amotivated, individuals experience a lack of contingency between their behaviors and outcomes." (Guay, Vallerand, & Blanchard, 2000, p. 177).

External Regulation: This type of motivation "occurs when behavior is regulated by rewards or in order to avoid negative consequences" (Guay, Vallerand, & Blanchard, 2000, p. 177).

Identified Regulation: This type of motivation "occurs when behavior is valued and perceived as being chosen by oneself. Yet, the motivation is still extrinsic because the activity is not performed for itself but as a means to an end." (Guay, Vallerand, & Blanchard, 2000, p. 177).

Intent: Measured through the Theory of Planned Behavior, we can measure an individual's intent to perform a behavior through the measurement of their attitude, subjective norms, perceived behavioral control, and intent (Ajzen, 1991).

Intrinsic Motivation: "Intrinsic motivation refers to performing an activity for itself, in order to experience pleasure and satisfaction inherent in the activity" (Guay, Vallerand, & Blanchard, 2000, p. 177).

Leadership: "A process whereby an individual influences a group of individuals to achieve a common goal" (Northouse, 2010, p. 3).

Motivation: "Having a strong reason to act or accomplish something" (Motivation, 2019).

Self-Determination Theory: SDT is a means for characterizing motivation within various domains including intrinsic, identified regulation, external regulation, and amotivation (Deci & Ryan, 2002).

Limitations

This study is not generalizable. The participants within this study have self-identified themselves as leaders and have taken the initiative to attend a conference, and therefore the results in this study could be influenced by the population. Extensive demographic information was not collected due to the lack of generalizability.

Within the use of the Situational Motivational Scale, the situational leadership setting was not explicitly stated. While the entirety of the study was focused on leadership, specifically leadership in a career in agriculture, participants could have neglected to associate situational motivation toward leadership with leadership in a career in agriculture. This study's findings related to motivation should be understood as motivation to be a leader rather than leader in a career in agriculture.

While the exact event attendance is not known, 846 individuals were registered to attend the conference. Out of the 846 potential event attendees, 591 responses were recorded. From the 591 recorded responses, 430 usable responses were received. This discrepancy accounts for participants who did not complete the necessary portions of the survey. With the gap just shy of 50%, there is the limitation potential of sampling error to have occurred (Ary, Jacobs, & Razavieh, 2002). Another limitation of this study is the inability to account for these individuals.

Assumptions

Throughout this study multiple assumptions were made. The researcher assumed all attitudes and perceptions answered by participants on the survey were solely that of the participant.

In the delivery of the survey, the researcher assumed participants are knowledgeable in the navigation of their mobile web browser as they all attained their own device. Should a potential participant not have had the technology necessary, the researcher assumed potential participants would utilize the iPad technology and Internet access offered to them throughout the briefing on the research study purpose and informed consent.

This study assumed that participants would read all content within the survey. To assess this, the researcher incorporated reading checks to evaluate participant's diligence in answering questions. This study assumes that when a participant passed all reading checks, they diligently ready all items.

Chapter Summary

The agricultural industry has a foreseeable gap between the number of students who will graduate with experience in agriculture and the number of jobs available in the industry. Not only do supervisors within the agricultural industry seek graduates with experience in agriculture, they also prefer individuals with experience and competencies relating to leadership. Due to this, agricultural industry members will be sourcing the same candidates as potential employees. Chapter one outlines the potential for the Theory of Planned Behavior to examine the antecedents to behavior as well as the ability of Self-Determination Theory to elucidate motivation to complete a behavior. The significance of this study is to provide insight into the

relationships between variables which influence behavior and types of motivation in their relationship with intent to perform a behavior. The purpose of this relationship examination is to provide the agricultural industry with insight into the relationships which are present and affect potential employee's motivation to be a leader and intent to be a leader in a career in agriculture.

CHAPTER 2

Literature Review

Introduction

Chapter 2 reviews literature concerning the theoretical framework of the study including the Theory of Planned Behavior, Self-Determination Theory, Situational Motivational Scale, the agricultural industry and leadership. Through the review of these concepts, parallels and research incorporating these theories in conceptual and theoretical contexts are discussed.

Theory of Planned Behavior

Assesing human behavior requires the consideration of multiple psychosocial variables (Ajzen, 1991). The Theory of Planned Behavior (Ajzen, 1991) possesses the capability to measure multiple factors that predict behavioral intention and completion of a behavior. The Theory of Planned Behavior, built on the foundations of the Theory of Reasoned Action, is unique in its assessment of attitude toward the behavior, subjective norms, perceived behavioral control, and intent to perform the behavior. The three contributing factors to intent assess both internal and external variability in an individual's belief toward the action (Ajzen, 1991; Ajzen & Fishbein, 1980). Subjective norms, perceived behavioral control, and attitude toward a behavior are impacted by salient beliefs, then affect the individual's intent to perform the behavior (Ajzen, 1991). A variety of research topics including purchasing local food, health-related behaviors, environmental consumerism and smoking cessation have utilized the Theory of Planned Behavior. (Åstr∅sm & Rise, 2001; De Leeuw, Valois, Aijzen, & Schmidt, 2015; Hagger &

Chatzisarantis, 2009; Latimar & Ginis, 2005; Norman, Conner, & Bell, 1999). Though the Theory of Planned Behavior has been criticized for being a self-reported measure, Ajzen posits the model is reliable as long as variables were constructed carefully (Beck & Ajzen, 1991).

Attitude

Attitude is considered, "a disposition to respond favorably or unfavorably to an object, person, institution, or event" (Ajzen, 2005, p. 3). In developing this definition, Ajzen found the defining characteristic of attitude was that of an evaluative nature. An individual's attitude is comprised of a positive or negative relationship toward a behavior, action, or subject (Ajzen, 2005; Eagly & Chaiken, 1993). This insight remains consistent with one component from the Theory of Planned Behavior, attitude toward a behavior. Attitude toward a behavior, "refers to the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question" (Ajzen, 1991, p. 188). This evaluation or appraisal is due to the belief the individual has toward the attitude. That belief is likely to have either a positive or negative inclination toward the behavior.

Beliefs about the behavior are formed through experiences attributing the behavior with events or certain attributes (Ajzen, 1991). An individual draws on behavioral beliefs in their subconscious evaluation of the behavior. Behavioral beliefs allow the individual to link the behavior with the expected outcome and are assessed through prior experience (Holt et al., 2018; Eagly & Chaiken, 1993; Ajzen, 1991). Therefore, it is reasonable to expect that further experience can influence attitude. Although altering an individual's attitudinal belief may be possible, the Theory of Planned Behavior (Figure 1), does not find a direct connection between an individual's attitude and their behavior (Ajzen, 1991). The assessment of the variable of

attitude toward a behavior is instead measured through a narrative style question or series of questions.

Subjective Norms

The second contributing factor of the Theory of Planned Behavior is subjective norms. Subjective norms are described by Ajzen (1991) as, "the perceived social pressure to perform or not to perform the behavior" (p. 188). Subjective norms refer to the peers or influencers most closely connected to the participant (Ajzen, 2005). These peers or influencers are deemed as "important" individuals and are the primary influence on the belief which affects normative beliefs. These normative beliefs are the set of beliefs which originate from the individuals most closely connected with the participant (Ajzen, 1991). Due to this variable being closely related to the individuals in which the participant is subjected to, subjective norms are often measured through asking the participant their perceived belief of their "important" people. Subjective norms can be measured by asking an individual how they believe those who are closest to them would respond to their completion of the behavior. This variable allows for insight not only into the relationship between the action and the participant's social environment, but also how influencers are impacting the individual (Ajzen, 2005).

Latimer and Ginis (2005), inferenced a lack of public scientific support for the continuation of subjective norms due to the weak relationship between the influence of subjective norms in relation to perceived behavioral control and attitudes toward the behavior in former studies. However, Latimer and Ginis (2005) proposed that an individual will have a stronger connection within subjective norms if they are more likely to care what others think of them. The authors contend there was a significant relationship between individuals who are more

concerned with what others think and the influence of subjective norms and intent. As described by the authors, this discovery was the result of examining a multi-item construct and further understanding the participants (Latimer & Ginis, 2005). Latimer and Ginis' (2005) study found individuals who are concerned about the perceptions other individuals around them held would more heavily be influenced to perform a behavior through the effect of subjective norms.

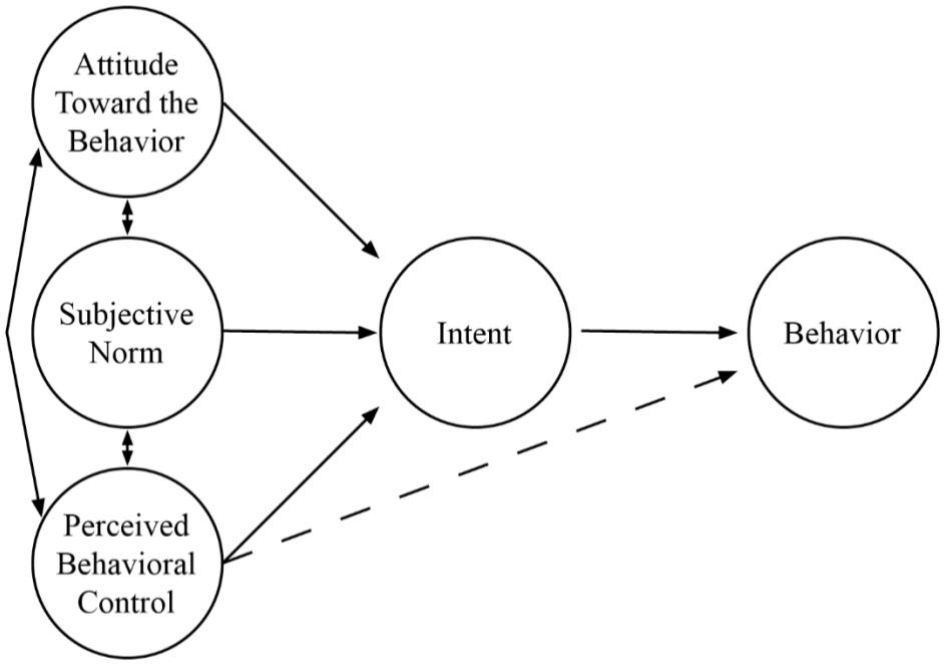

Figure 1. Theory of Planned Behavior (Ajzen,1991)

Perceived Behavioral Control

The third variable in the Theory of Planned Behavior that affects an individual's intent to perform a behavior is perceived behavioral control. This variable was developed in an effort to improve the originating Theory of Reasoned Action (Ajzen, 1991). Perceived behavioral control accounts for prior experience with the behavior and captures the value of the perceived locus of control on behavioral intent and the behavior itself. Perceived behavioral control is unique in its ability to affect intent to complete the behavior. Perceived behavioral control also affects that of performing the behavior with a lesser regard to the other variables within the Theory of Planned Behavior (Ajzen, 2005; Ajzen, 1991; Eagly & Chaiken, 1993).

Perceived behavioral control assesses an individual's locus of control. Locus of control is defined as "a theoretical construct designed to assess a person's perceived control over his or her own behavior" (Locus of Control, 2019). An individual who expresses control of a behavior has a perceived internal locus of control. An individual who expresses a lack of control of a behavior has a perceived external locus of control. This assessment of the individual's perceived locus of control is influenced by his control beliefs. Past behavior, as well as through second-hand information, form control beliefs (Ajzen, 1991). The resources or opportunities to which an individual is exposed influence an individual's control beliefs. The result of this exposure to experience, resources, and/or opportunities is an increased perceived control over his behavior. An internalized locus of control and increased presence of perceived control in relation to the behavior being studied has the potential to circumvent intent and lead the individual directly to performing the behavior itself (Ajzen, 1991).

As shown in Figure 1, a direct line exists between perceived behavioral control and behavior. The direct linear relationship illustrates that if a participant believes strongly enough in his/her ability to perform the behavior, he/she will be able to proceed directly to performing the behavior (Ajzen, 1991; Eagly & Chaiken, 1993). This internalization of an individual's locus of control within the Theory of Planned Behavior highlights the opportunity for empowerment of an individual's ability to complete a behavior.

Perceived behavioral control relies on the participant's conceptualization of performing the behavior (Ajzen, 2002) through the assessment of past behavior and prior knowledge attained (Ajzen, 1991). If an individual has not considered themselves in the position of performing the behavior, there cannot be intent (Ajzen, 2002). The measurement of perceived behavioral control has been utilized through both asking direct and belief-based approaches. While direct approaches may have their benefits, the impact of perceived behavioral control is through the indirect measurement of Bandura's research into self-efficacy through the assessment of the locus of control (Ajzen, 1991). Utilizing a more belief-directed approach has, according to Ajzen (2002), proved to be more effective in measuring perceived behavioral control as it was originally intended.

Intent

Attitude toward the behavior, subjective norms, and perceived behavioral control culminate in the notion of intent. While it is understood that an individual cannot estimate their perceived behavior control without an initial level of intent, the measurement of intent as an individual variable is beneficial in understanding the resulting relationships amongst all variables within the Theory of Planned Behavior (Ajzen, 2002). Although not certain, research has

presented evidence to recognize that the stronger the individual's intent to perform the behavior, the more likely the individual's is to perform the action or behavior (Ajzen, 1991). Attitude toward the behavior, subjective norms, and perceived behavioral control each contribute to developing an individual's intent.

Ajzen contended that each variable is an appropriate avenue for the continued measurement of intent (1991; 2002), however, prior research suggests not each of the variables serve an equal role in contributing to intent. A study examining intent to eat healthy food further exemplified these contributing variables within the Theory of Planned Behavior (Åstr⊘sm & Rise, 2001). Within this study, the researchers found that attitude toward the behavior and perceived behavioral control contributed most strongly to intent. Conner and Armitage (1998) sought to examine the literature regarding the Theory of Planned Behavior to determine reported capabilities of the Theory of Planned Behavior to evaluate intent. This potential for the Theory of Planned Behavior to predict intent to perform the behavior has been observed by Godin and Kok (1996) to account for 41% of the variance and 34% of the variance in completing the behavior. This 41% of variance in the Theory of Planned Behavior to predict intent, is attributed to Ajzen's position that intent is measuring behavioral plans which in conjunction with contributing variables, may lead to completing the plan of the behavior (1996). This conscious planning of the intent to act is understood "to capture the motivational factors that influence a behavior; they are indications of how hard people are willing to try, of how much of an effort they are planning to exert, in order to perform the behavior (Ajzen, 1991, p. 181). This motivational construct is the coinciding of ability and intent or motivation.

Motivation

Ryan and Deci (2000) described motivation as, "to be moved to do something" (p. 54). Examining motivation in its relation to performing a behavior is to understand the presence or absence of the inclination an individual possesses (Ryan & Deci, 2000). Motivation has in many contexts been viewed unilaterally as either a miniscule amount of motivation or conversely in the presence of immense motivation toward a behavior, action, or subject. This school of thought on motivation is typically observed through research highlighting an individual's solely intrinsic or extrinsic motivation (Ryan & Deci, 2000; deCharms, 1968). This perspective was present through behavioral and psychological research during the 1950's in the work of Skinner (1953). Skinner postulated that all behavior is motivated by rewards. These rewards were either of incentivizing proprietary means (extrinsically motivated) or rewarding in the completion of the behavior itself (intrinsically motivated) (Skinner, 1953). The examination of these contrasting domains of motivation served an important role in the further understanding motivation, however, no individual is solely intrinsically or extrinsically motivated in every situation (Ryan & Deci, 2000). Individuals not only possess varying levels of motivation but also varying types of motivation. Ryan and Deci understood this to be true and thus established a theory which serves as a vehicle for understanding these varying types of motivation (Ryan & Deci, 2000; Deci & Ryan, 1985; Deci & Ryan, 2002).

Self-Determination Theory

Self-Determination Theory was developed through the work of Cognitive Evaluation Theory, outlined by Deci and Ryan (1985). Self-Determination Theory (Deci & Ryan, 1985; Deci & Ryan, 2002) highlighted the concept that individuals attain the innate ability to make connections between themselves, their actions, and the outcomes. Through this theory, researchers have the capability of examining an individual's relatedness to a particular opportunity, action, or behavior (Deci & Ryan, 1985; Deci & Ryan, 2002).

Cognitive Evaluation Theory explored the relationship between motivation toward an action and an individual's basic needs. An individual's autonomy, competence, and relatedness are associated with their extent of self-determination toward a behavior (Ryan & Deci, 2000). This is to say; competence will not increase intrinsically motivated behavior without the feeling of autonomy or increased perceived locus of causality. This internal locus of control has been examined through both examing control and autonomy (Zuckerman, Porac, Lathin, Smith, & Deci, 1978; Ryan & Deci, 2000). Research has found through this examination that a sense of autonomy has a greater impact on a resulting internal locus of control. Autonomy, in this sense, is to be understood as an individual's perceived control over their direction and action (Ryan & Deci, 2000).

Self-Determination Theory was developed through utilizing the domains of intrinsic and extrinsic motivation, however, this theory does not solely examine intrinsic or extrinsic motivation (Deci & Ryan, 2012). Rather, this theory examines the domains which are within and outside of intrinsic or extrinsic motivation (Deci & Ryan, 2012). Intrinsic motivation, "was considered an inherent characteristic of human beings and was viewed as the prototype of

psychological freedom or self-determination" (Deci & Ryan, 2012, p. 3). This internalization of action motivation then can be acted upon or deterred based on outside forces which leads to the extrinsic motivation domain.

Forming through Self-Determination Theory, Organismic Integration Theory (Deci & Ryan, 1985), further explained the domain of extrinsic motivation by dividing that domain into two individual domains, as well as defining those individuals who are not aligned with either intrinsic or external motivational factors. Due to its application within the context of Self-Determination Theory, Organismic Integration Theory is understood by its founders to be within the domain of the overall Self-Determination Theory (Deci & Ryan, 2012). Organismic Integration Theory is based upon the idea that individuals can internalize actions even when externally motivated.

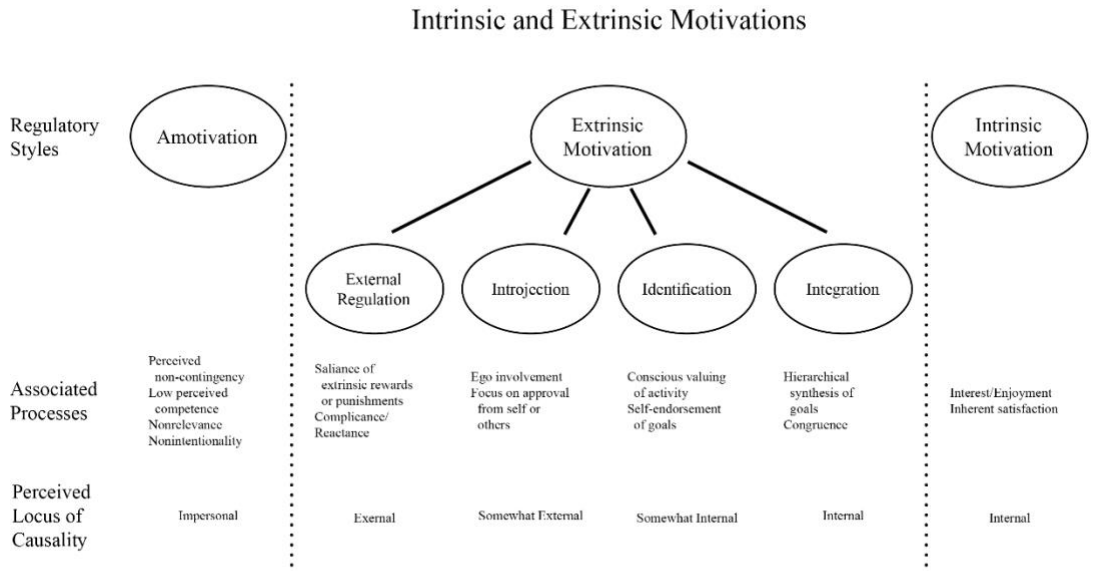

Figure 2. Self-Determination Theory Continuum of Organismic Integration Theory

The continuum that is Organismic Integration Theory within Self-Determination Theory, can be observed in Figure 2. At the far left of the plane, lies Amotivation. Amotivation is unique in that when amotivated, an individual will either not act, or they act passively. Extrinsic motivation has been viewed negatively by researchers, however, the domain of motivation with the least benefit should be seen as that of amotivation (Ryan & Deci, 2000). Amotivation is the least autonomous and least internalized form of motivation.

Types of motivation to the right of the continuum expresses stronger internalization (Ryan & Deci, 2000). Deci and Ryan identified multiple domains of extrinsic motivation (Deci & Ryan, 1985; Deci & Ryan 2002; Ryan & Deci, 2000). External regulation, introjection, identification, and integration are the four domains of extrinsic motivation (Ryan & Deci, 2000). From left to right, these become more internalized by the individual; however, these are unique within themselves in that an individual does not necessarily progress through each type as a cycle.

On the left of extrinsic motivation sits external regulation. External regulation "is the least autonomous form of extrinsic motivation and includes the classic instance of being motivated to obtain rewards or avoid punishments" (Deci & Ryan, 2002, p. 17). External regulation always has a cause or reason for the behavior. Although external regulation is more self-determined than amotivation, the reason for the self-determination is always enacted by an outside force and has an external locus of control (Deci & Ryan, 2002).

While Ryan and Deci were very explicit in their standing that the regulation continuum is not a process of moving from one domain of motivation identification to another, introjection can be seen as the internalization of an externally regulated identification (Ryan & Deci, 2000;

Deci & Ryan, 2002). Introjected regulation addresses that of an individual's ego involvement. An individual within introjected regulation could be seeking to fulfill an external demand or aspiring to a socially constructed achievement (Deci & Ryan, 2002).

Further along the continuum, identified regulation is more self-determined as it involves performing behaviors or actions in the aspiration of achieving a goal which is seen as personally important (Deci & Ryan, 2002). This occurs when an individual values or identifies with the action and are pursuing the action. For example, "a boy who memorizes spelling lists because he sees it as relevant to writing, which he values as a life goal, has identified with the value of this learning activity" (Ryan & Deci, 2000, p. 62).

While Ryan and Deci are firm in asserting the understanding that Organismic Integration Theory within Self-Determination Theory is not to be seen as a cyclical process where-in an individual must move from one domain to another, the theory does encapsulate the belief that an individual may move from one domain to another through the internalization of an action (Deci & Ryan, 2002; Ryan & Deci, 2012). An example of this transition can be seen in the integration domain of extrinsic motivation. The most internally, extrinsically motivated form of identity regulation, integration, is the most autonomous of the extrinsically motivated identities. Even though this form of motivation can be observed very similarly to that of intrinsic motivation, integration is still distinctly extrinsic as the action is understood by the individual as being separate from the outcome.

On the far-right side of the continuum lies intrinsic motivation, which is a domain to itself (Deci & Ryan, 2012; Deci & Ryan, 2002; Ryan & Deci, 2000). Intrinsic motivation is defined as "the doing of an activity for its inherent satisfactions rather than for some separable

consequence" (Ryan & Deci, 2000, p. 56). Intrinsic motivation has been regarded as providing for increased autonomy in the completion of tasks (Hariri-Akbari et al., 2018; Deci & Ryan, 1985). As is human nature, there is an innate desire to orient toward specific activities (Deci & Ryan, 1985). Intrinsic motivation is the only form of motivation identified within SDT that is entirely interpersonally driven.

Self-Determination Theory provides flexibility to adapt to the needs of the research study. In a multi-national study, Self-Determination Theory was utilized to explore work motivation across countries and languages (Gagne et al., 2014). Within this study, authors utilized intrinsic, identified, introjected, extrinsic, and amotivation. A limitation to this study entailed the absence of one domain of the extrinsic motivation domain. Gagne et al. (2014), found through both a pilot test and a review of the literature, introjection could not withstand the factorial problems associated with the motivation domain and was dropped. In a similar manner, research by Hardre and Reeve (2003), also omitted the measurement of introjection within their research.

Hardre and Reeve (2003) sought to examine the relationships that exist between competence, self-determination, and personal capabilities among high school students. This research measured intrinsic motivation, identified regulation, and non-self-determined motivation. These domains of self-determined motivation were chosen through their interpretation of former research by Guay, Vallerand, and Blanchard (2000). This research highlighted the presence of an existing relationship between competence, intrinsic motivation, and self-determined behavior. The scale referenced by Hardre and Reeve (2003), the Situational Motivational Scale (Guay et al., 2000), served as a guiding tool for their research. This

Situational Motivational Scale was ideal for Hardre and Reeve (2003) due to its potential to quantify motivation within a specific context.

Situational Motivational Scale

The Situational Motivational Scale (SIMS) provides a framework for the assessment of an individual's motivation toward a particular activity. This framework was developed through the merging of theoretical and laboratory study's (Guay et al, 2000). The Situational Motivational Scale omitted items from the original Self-Determination Theory continuum (Guay et al., 2000). This decision was made due to a lack of ability to discern all domains of motivation within a small scale. Research has occurred within formal laboratory settings to explore the presence of external factors affecting an individual's perception of whether a specific action is extrinsically or intrinsically motivated (Deci, 1971). Guay et al. (2000) argued for the validity of the SIMS as a way to analyze the motivation for a specific behavior at a specific point in time. Prior to the founding the SIMS, there was not, a method for assessing the focused domains covered within the SIMS.

The development of the SIMS allowed for further exploration of participants motivation in relation to a specific acitivity. The domains addressed within the SIMS are; intrinsic motivation, identified regulation, external regulation and amotivation (Guay et al., 2000). These domains are reciprocated within the continuum of Self-Determination Theory. Noticeably, this scale lacks two of the six domains of motivation outlined by Ryan and Deci (2000). Introjected regulation and integrated regulation are not included within the scale for two reasons. First, these were left off intentionally by the founders in an effort to provide for a concise and flexible scale (Guay, et al., 2000). Secondly, there has been research to show a lack of factorial ability when

utilizing these domains (Gagne et al., 2014; Guay et al., 2000). Therefore, these two domains were removed from the scale to provide for increased validity.

Standage, Treasure, Duda, and Prusak (2003) evaluated the SIMS in the context of physical activity by examining the extent to which a participant was self-determined to engage in physical activity. Standage et al. (2003) utilized the same scale used by Guay et al. (2000) to assist in the validity of the SIMS measurement in motivation research. As a result, Standage et al. (2003) affirmed the inclusion of only four items from original six within Self-Determination Theory, including intrinsic motivation, identified regulation, external regulation, and amotivation. The authors highlighted the adaptability of the SIMS to be utilized in multiple contexts and adapted the previously 16-item scale down to a 14-item scale, for increased clarity and statistical performance of the scale. Likewise, Gillet, Vallerand, and Paty's (2003) adapted 14-item SIMS was also utilized to explore motivational performance within athletes. Gillet et al. (2003) concluded the use of SIMS was "useful to analyze individuals' situational motivational profiles using a cluster analysis to understand the complex link between motivation and performance" (Gillet et al., 2013, p. 1). Gillet et al. (2013) discovered a correlation between self-determined motivation and objective performance and as a result the authors found the more intrinsically motivated an individual is, the better they will perform a behavior.

Theory of Planned Behavior and Self Determination Theory

The Theory of Planned Behavior and the Self Determination Theory share similar variables, especially as it relates to an individual's past experiences. An individual is influenced by past behavior and internalization of a behavior, which both theories share (Ajzen, 1991; Ryan & Deci, 2000). Research by Hagger and Chatziarantis (2009) proposed a model for the measurement of both the Theory of Planned Behavior and Self-Determination Theory when examining health-related behavior. This research was in the context of health-related behavior. This study was a meta-analysis of former studies with the aim to provide implications for the incorporation of the Theory of Planned Behavior and Self-Determination Theory. Results from the study correlated a stronger measure of intent when the participant was more self-determined toward the behavior due to the influence on intent from other theory variables. This influence on intent was evident within attitude toward the behavior and perceived behavioral control, yet there was no direct effect on intention (Hagger & Chatziaranti, 2009).

Prior research sought to integrate the Theory of Planned Behavior and Self-Determination Theory within a singular model (Chan, Fung, Xing, Hagger, 2013; Ntoumanis, 2005; Sarrazin, Vallerand, Guillet, Pelletier, & Cury, 2002; Standage, Duda, & Ntoumanis, 2003; Wilson & Rodgers, 2004). Although multiple research studies have shown the capability for Self-Determination Theory and Theory of Planned Behavior to coincide, these studies have not provided a model as encapsulating of the variables within the two study's as the research by Hagger and Chatziarantis (2009).

Research has implicated the connection of the Theory of Planned Behavior and Self-Determination Theory through merging the two theories (Chan et al., 2013; Ntoumanis, 2005;

Sarrazin et al., 2002; Standage, Duda, & Ntoumanis, 2003; Wilson & Rodgers, 2004). A study by Chan et al. (2013), presented a more centralized classification of motivation. Chan et al. (2013), utilized an alternative classification of Self-Determination Theory in referring to the differing domains of motivation. Chan et al. (2013) described these domains as autonomous motivation, controlled motivation, and amotivation. Intrinsic motivation falls within autonomous motivation. This autonomous motivation is motivation which is engaging in a behavior with a "sense of volition, choice, and personal agency over action" (Chan et al., 2013, p. 370). Autonomous motivation is consistent with intrinsic motivation. Conversely, controlled motivation is that which is externally influenced. Within controlled motivation, extrinsic motivation is situated and its four domains including, Integration, Identified Regulation, Introjection, and External Regulation. Extrinsic motivation is classified as controlled motivation due to the external forces that are synonymous with the control of the motivation. Amotivation, which is a state of the individual lacking self-determined motivation due to a lack internalization of their behavior its outcomes, remains as its own domain due to its lack of self-determination (Chan et al., 2013).

Leadership and the Agricultural Industry

Involvement in undergraduate education and related organizations provides for the development of core competencies (Dugan & Komives, 2007; Cruzvergara, Testani, & Smith, 2018; NACE, 2016). Dugan and Komives (2007) examined the concept of involvement among undergraduate students. This was a national study, which involved over 50,000 participants among 52 campuses. This research found that involvement with out-of-class organizations and events was directly correlated with the attainment of leadership competencies. The attainment of

leadership qualities has been understood to be developed while in college (Mayhew, Pascarella, & Terenzini, 2016). These competencies either are learned or developed through out-of-class involvement, as well as some in-class experiences (Cruzvergara et al., 2018; Dugan & Komives, 2007; Mayhew, Pascarella, & Terenzini, 2016; NACE, 2016).

The value of this development of leadership competency relies on the desire of the employers to have this competency within their employees (Becker 1993; Cruzvergara et al., 2018; NACE, 2016) which is understood as a preference by employers within the agricultural industry (Goecker et al., 2015). The value of leadership as a competency is known as human capital (Becker, 1993). Leadership is defined by Northouse, is "a process whereby an individual influences a group of individuals to achieve of common goal" (2010, p. 3). A critical component to Northouse's definition is the process of leadership rather than a singular action. Becker (1993) outlined the need for elevated human capital to provide for increased productivity within an organization. The desire for leadership within an organization's employees is not only present in the typical place of employment (Becker, 1993; Cruzvergara et al., 2018; NACE, 2016), but also that of the agricultural industry (Goecker et al., 2015).

The needs of the agricultural industry continue to increase as the needs of the growing population continue to develop as well (FAO, 2009). By the year 2050, the world population is projected to be at 9.1 billion. This entails the growth of world food production by 70% (FAO, 2009). Within the United States, agricultural production increased by approximately 1.4% from 1948 to 2011 (Wang, Heisey, Schimmelpfennig, & Ball, 2015). Without an increase in public and private research and development; however, U.S. agricultural production is projected to slow its increase in food production to approximately .80% annually. As the need for food production

increases, so does the demand for qualified agricultural graduates (Goecker et al., 2015). The agricultural industry, on average has 57,000 positions available annually (Goecker et al., 2015). Employers within the agricultural industry prefer to fill these positions with individuals with skills, education, and experience in agricultural and related science. Contrary to preference, the average number of graduates with experience in agricultural and related sciences is 37,000 annually. This 39% gap in positions available and preferred graduates exhibits a considerably smaller pool of preferable graduates. Thus, suggesting that employers will be pursuing many of the same graduates.

Chapter Summary

As the agricultural industry seeks to increase production to feed a growing population, the industry faces a challenge of attracting and maintaining qualified employees (Goecker et al., 2015; Wang, Heisey, Schimmelpfennig, & Ball, 2015). The Theory of Planned Behavior provides the opportunity to understand the effects of participants' beliefs and past experiences on their intent to be a leader in a career in agriculture (Ajzen, 1991). This theory is capable of measuring the extent to which an individual intends or is motivated to perform a behavior. The Theory of Planned Behavior provides insight into the variables which influence intent or the extent to which they are motivated, however, this theory does not detail the reason for their intent. Self-Determination Theory employs context to an individual's motivation (Ryan & Deci, 2000). This theory encapsulates motivation from internalization to externalization. To assess this motivation, the use of the Situational Motivational Scale is capable of examining situational motivation in a specific context (Guay et al., 2000). Through the assessment of the variables within the Theory of Planned Behavior and Self-Determination Theory, further exploration of

factors attributing to intent or motivation, as well as, the internalization of that motivation is possible.

CHAPTER 3

RESEARCH DESIGN AND METHODS

The purpose of this exploratory study was to measure the potential relationship between motivation to be a leader and intent to be a leader in a career in agriculture.

Specifically, this research sought to examine the potential relationships between variables within Theory of Planned-Behavior and Self-Determination Theory. The variables examined in this study were: intrinsic motivation, identified regulation, external regulation, amotivation, attitude toward the behavior, subjective norms, perceived behavioral control, and intent to perform the behavior.

To measure the research objectives, a model was developed to address Ryan and Deci's (2000) Self-Determination Theory and Ajzen's (1991) Theory of Planned Behavior (Figure 3). Ryan and Deci's (2000) Self-Determination Theory was addressed through adapting Guay et al.'s (2000) Situational Motivational Scale (SIMS). Ajzen's Theory of Planned Behavior was addressed through the adaptation of Holt's (2014) instrument.

Research Objectives and Hypotheses

The following research objectives were used to guide this study:

RO1: Identify the relationship between gender and type of motivation to be a leader in a career in agriculture.

H_1: There is a statistically significant relationship between a participant's type of motivation to be a leader and gender.

RO2: Identify the relationships among the following: Participants' 1) attitude, 2) subjective norms, 3) perceived behavioral control, and 4) intent in relation to becoming a leader in the agricultural industry.

H_2: There is a statistically significant relationship among intent to be a leader in a career in agriculture and a participant's attitude, subjective norms, and perceived behavioral control toward being a leader in a career in agriculture.

RO3: Identify the relationship between a participant's type of motivation to be a leader and their intent to be a leader in a career in agriculture.

H_3: There is a statistically significant relationship between a participant's type of motivation to be a leader and intent to be a leader in a career in agriculture.

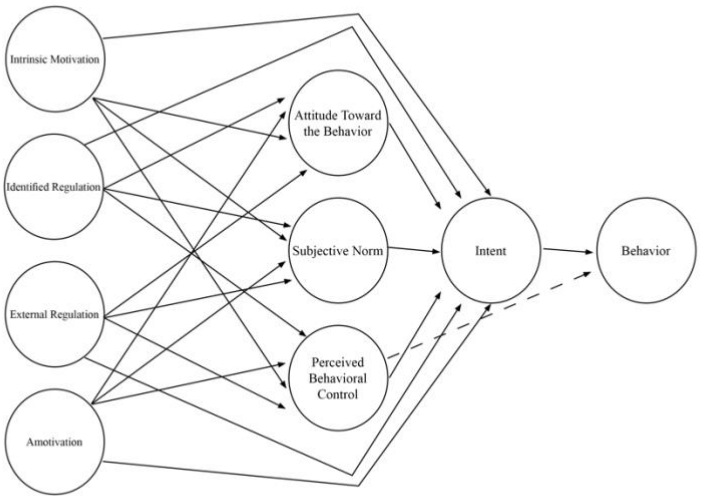

Figure 3. Proposed theoretical model for integrating the Theory of Planned Behavior and Self-Determination Theory

Institutional Review Board Approval

The University of Georgia Institutional Review Board deemed this research study exempt on 10/28/2018. The IRB ID number is MOD00006609 (Appendix E).

Research Design

This study took place at the Agriculture Future of America Leaders Conference in Kansas City, Missouri on Saturday, November 3, 2018. A descriptive, quantitative survey was chosen to measure the constructs related to behavior and motivation. The self-determined behavior in question was "to be a leader in a career in agriculture." Prior to answering any questions in the survey, participants were prompted with the guiding definition of leadership from Northouse (2010). The study consisted of undergraduate students enrolled in an agriculture or related science major from an accredited university in the U.S. As part of the conference design, event attendees were divided into four tracks.

Two unique groups, not included within the four-track program, facilitated conference programming. These two groups were participants, as well as, facilitating leaders among other participants. Due to their capacity as colleagues and mentors for other event attendees, these individuals were briefed on the research study and invited to participate prior to the beginning of the event. The night before the start of the conference, the researcher informed these individuals on the context, content, known risks, and purpose for the study. At that time, these individuals were invited to participate and were given the password to access the research survey. These potential participants were all pre-assigned to a specific track within the conference by the hosting organization and was not influenced in any way by the researcher. These potential participants, should they have chosen to participate, were instructed to answer their track number

with that which was assigned to them. These potential participants were given the flyer handout found in Appendix C and verbally given the password to the research survey. These potential participants were instructed not to provide this password or information to other event attendees prior to their formal invitation. This instruction was given to ensure all participants are thoroughly informed about the research study.

Prior to data collection, participants were sent an email invitation to participate (Appendix B). This email invitation was informed by guiding suggestions from Dillman (2011) This email informed potential participants of their opportunity to participate in the research study. This email included a link to the survey; however, the survey was locked to prevent participants from participating without being in attendance. During the pre-scheduled time on the agenda, attendees were invited to participate in this research study. Participants were prompted by the researcher to visit a website on their mobile phone through the utilizing utiliazation of a QR code, website address, and a pre-emailed link (Appendix B; Appendix C). Upon accessing the survey website, a password was needed. This survey was password protected because individuals who were registered for the conference, yet did not attend, could receive the email. The password was provided on multiple large projectors in the conference rooms for each group (Appendix D).

To prevent sampling bias, students were prompted to utilize tablets provided by the researcher, if a mobile phone was not immediately available. However, no tablets were requested or used. Approximately 15-20 minutes were given to participants to complete the survey in each group. The average time taken to complete the survey by participants was 18 minutes. The survey remained open until the following morning's first event at 8:30 a.m.

During the invitation to participate, students were informed of an incentive to participate. The incentive was a gift card which each winner was randomly selected. There were four gift cards awarded. One randomly selected participant from each track was given a gift card. On the survey (Appendix A), participants indicated their desire to be considered for the incentive. If the participant was interested in the incentive, they provided their first and last name and their phone number. This information was deleted prior to data analysis to avoid any bias resulting from the information.

Sample

A convenience sample of participants for this study were attendees at the Agriculture Future of America Leaders Conference in Kansas City, Missouri. Conference attendees were selected to attend through an application process. The researcher did not have influence or connection with the selection process of the sample. As was common with the conference, the majority of students did not pay a registration or conference fee. All event attendees were enrolled in an agriculture or related science major at an accredited university in the U.S. Through application to the conference, students self-identified as a leader within their professional, educational, and/or personal lives.

While this study cannot be generalized to the overall population of undergraduate students within agriculturally related majors, careful implications or insight may be made through the results of this study. This convenience sample was necessary due to the constraints of the study and the unique setting of the research site. A limitation to this study is the lack of accountability for sample size. According to conference records, 846 individuals were registered to attend the conference. Of the registered attendees, 430 usable responses were received from

the 591 participants who responded to the recruitment solicitation. This discrepancy accounts for participants who did not complete the necessary portions of the survey. With the gap of 39%, there is the limitation potential of sampling error to have occurred (Ary, Jacobs, & Razavieh, 2002). A limitation of this study resulted in the lack of ability to account for the individuals who were pre-registered to attend the conference and did not take the survey, due to their lack of involvement with the conference.

Participants (*n* = 430) were 26.9% (*n*=115) male and 73.1% (*n*=313) female with 2 responses missing. Undergraduate class representation was as follows: 20.3% freshman (*n*=87), 30.4% sophomore (*n*=130), 22.7% junior (*n*=97), and 26.6% senior (*n*=114). There were two responses missing. There were 57% first-year conference participants (*n*=245), 26.8% second-year conference participants (*n*=114), 9.3% third-year conference participants (*n*=38), and 6.9% of fourth-year conference participants (*n*=28). There were two responses missing.

Instrumentation

Instrument Variables

Mediating Variables

The mediating variables within this study include attitude toward the behavior, subjective norms, perceived behavioral control, intrinsic motivation, identified regulation, external regulation, and amotivation. Each of these have been identified in previous research (Ajzen, 1991; Hagger & Chatzirantis, 2009) as contributing factors to the dependent variable.

"In general, a given variable may be said to function as a mediator to the extent that it accounts for the relation between the predictor and the criterion. Mediators explain how external physical events take on internal psychological significance. Whereas moderator variables specify

when certain effects will hold, mediators speak to how or why such effects occur" (Baron & Kenny, 1986, p. 1176).

Theory of Planned Behavior Mediating Variables

The first variable in the Theory of Planned Behavior (Ajzen 1991), attitude toward the behavior, was measured through seven questions on a five-point, semantic differential scale. The semantic differential scale was utilized as suggested by Eagly and Chaiken (1993) to be used as an effective means for measuring an individual's orientation towards a topic. The question was prompted by asking respondents to "please indicate your attitude toward being a leader in a career in agriculture." Respondents were then asked to respond on a bi-polar semantic differential scale with words including, "good: bad," "not important: important," "positive: negative," "wise: foolish," boring: interesting," "beneficial: harmful," and "unprofitable: profitable." Items alternated in being positively and negatively connotated to ensure validity.

The second variable in the Theory of Planned Behavior (Ajzen 1991), subjective, was measured through four questions on a five-point Likert scale. The question was prompted by asking respondents to "please indicate your level of agreement or disagreement with the following statements." The points on the scale were coded as: "Strongly agree," was equated to 5, "Agree," was equated to 4, "Neither agree nor disagree," was equated to 3, "Disagree," was equated to 2, and "Strongly disagree," was equated to 1. Questions included, "the people in my life whose opinions I value, are leaders in their career," "the people who are important to me would approve of me being a leader in an agricultural career," "the people who are important to me would support my decision to be a leader in a career in agriculture," and "the people who are important to me encourage me to be a leader in a career in agriculture."

The third variable in the Theory of Planned Behavior (Ajzen 1991), perceived behavioral control, was measured through four questions on a five-point semantic differential scale. The semantic differential scale was utilized as suggested by Eagly and Chaiken (1993) to be used as an effective means for measuring an individual's orientation towards a topic. The question was prompted by asking respondents to "please indicate your attitude toward being a leader in a career in agriculture. Being a leader in agriculture is:" Respondents were then asked to respond on a bi-polar semantic differential scale with words including, "not possible for me: possible for me," "easy for me to do: not easy for me to do," "not in my control: in my control," and "up to me: not up to me." Items alternated in being positively and negatively connotated to ensure validity.

Self-Determination Theory Mediating Variables

Intrinsic motivation was measured through asking participants a series of four questions on a five-point scale. This five-point scale provided response options ranging from "exactly like me" to "not at all like me." The prompt to this scale was the statement,"Thinking about your leadership experience, please answer the following questions: I am currently engaged in leadership because:" Intrinsic motivation questions included, "I think leadership is interesting," "I think being a leader is pleasant," "being a leader is fun," and "I feel good when I am a leader." These survey questions were adapted from Guay, Vallerand, and Blanchard's (2000) Situational Motivational Scale. Identified regulation was measured through asking participants a series of four questions on a five-point scale. This five-point scale provided response options ranging from "exactly like me" to "not at all like me." The prompt to this scale was "Thinking about your leadership experience, please answer the following questions: I am currently engaged in

leadership because:" Identified regulation questions included, "I am doing it for my own good," "I think being a leader is good for me," "I am a leader by personal decision," and "I believe being a leader is important for me." These survey questions were adapted from Guay, Vallerand, and Blanchard's Situational Motivational Scale (2000).

External regulation was measured through asking participants a series of four questions on a five-point scale. This five-point scale provided response options ranging from "exactly like me" to "not at all like me." The prompt to this scale was "Thinking about your leadership experience, please answer the following questions: I am currently engaged in leadership because:" External regulation questions included, "I am supposed to do it," "being a leader is something I have to do," "I do not have any choice," and "I feel that I have to be a leader." These survey questions were adapted from Guay, Vallerand, and Blanchard's Situational Motivational Scale (2000).

Amotivation was measured through asking participants a series of four questions on a five-point scale. This five-point scale provided response options ranging from "exactly" like me" to "not at all like me." The prompt to this scale was "Thinking about your leadership experience, please answer the following questions: I am currently engaged in leadership because:" Amotivation questions included, "there may be good reasons, but personally, I don't see any," "I don't know; I don't see what being a leader brings me," and "I do this, but I am not sure it is a good thing to pursue being a leader." These were adapted from Guay, Vallerand, and Blanchard's Situational Motivational Scale (2000).

Dependent Variable

A dependent variable is defined as "a consequence of or dependent on an antecedent (independent)variable (Ary, Jacobs, & Razavieh, 2002, p. 558). In the theoretical model (Figure 3), intent to be a leader in a career in agriculture is the sole dependent variable.

Intent to be a leader in a career in agriculture is a culminating piece and an essential component in the Theory of Planned Behavior (Ajzen, 1991). Intent within the Theory of Planned Behavior leads to behavior, however, within the context of this study, behavior was not measured. Intent was measured through asking four questions on a five-point scale. The prompt for this question was, "please indicate your level of agreement or disagreement about your intentions to be a leader in a career in agriculture." The points on the scale were coded as: "Strongly agree," was equated to 5, "Agree," was equated to 4, "Neither agree nor disagree," was equated to 3, "Disagree," was equated to 2, and "Strongly disagree," was equated to 1. The four questions included, "I plan to be a leader in a career in agriculture when the opportunity is available," "I will look for opportunities to be a leader in my career in agriculture," "I intend to be a leader in a career in agriculture," and "I will go out of my way to be a leader in my agricultural career."

Instrument Development

The survey instrument was researcher adapted from former studies (Alt, 2015; Pascarella, Seifert, & Blaich, 2009; NSSE, 2019; Guay et al., 2000; Holt 2014). To measure participant's self-determined motivation to be a leader, the Situational Motivation Scale (SIMS) by Guay et al. (2000) was adapted. To measure a participant's intent to be a leader, Ajzen's (1991) Theory of Planned Behavior was measured through the adaption of Holt's (2014) survey instrument.

The SIMS, was developed by Guay et al. (2000) to measure situational, self-determined motivation. This instrument measures intrinsic motivation, identified regulation, external regulation, and amotivation through four questions for each domain of motivation. In the fifth study by Guay et al. (2000), the reliabilities assessed through evaluating the variables Cronbach's alpha values for the instrument are as follows: intrinsic motivation had a reliability of .86, identified regulation had a reliability of .65, external regulation had a reliability of .73, and amotivation had a reliability of .73. While those reliability measurements are not all ideal, studies during development of the instrument provided increased reliabilities.

Measurement of intent, attitude toward the behavior, subjective norms, and perceived behavioral control were measured through an adapted version of Ajzen's Theory of Planned Behavior (1991), which was previously utilized by Holt (2014) for dissertation research. Within Holt's (2014) study, reliability was evaluated through assessing each variables Cronbach's Alpha. To measure attitude, Holt (2014) used a six-item scale which had a Cronbach Alpha of .89. To measure subjective norms, Holt (2014) used a four-item construct which had a Cronbach Alpha of .82. To measure perceived behavioral control, Holt (2014) used a five-item scale which had a Cronbach Alpha of .86. To measure intent, Holt (2014) used a three-item scale which had a Cronbach Alpha of .78.

Instrument Analysis

After data collection for the current study, the Cronbach's Alpha for each construct was evaluated.

The measurement of Ajzen's Theory of Planned Behavior (1991) was evaluated through the adaption of Holt's (2014) instrument. Attitude toward being a leader was initially measured

in the current study through a seven-item scale and had a Cronbach's Alpha value of .673. After reliability evaluation of attitude toward being a leader scale items, there was not an item which could be deleted to provide for a higher construct Cronbach Alpha value. Subjective norms was initially in the current study measured through a four-item scale and had a Cronbach's Alpha value of .51. After reliability evaluation of subjective norms scale items, the removal of one item would provide for an increased construct reliability of subjective norms for a Cronbach's Alpha value of .69. Perceived behavioral control was initially measured in the current study through a seven-item scale and had a Cronbach's Alpha value of .626 After reliability evaluation of perceived behavioral control scale items, there was not an item to delete for a higher construct Cronbach Alpha value. Intent to be a leader in a career in agriculture was initially measured in the current study through a seven-item scale and had a Cronbach's Alpha value of .88. After reliability evaluation of intent scale items, there was not an item to delete for a higher construct Cronbach Alpha value.

Assessment of participant's self-determined motivation to be a leader was assessed through the adaption of the Situational Motivation Scale (Guay et al., 2000). Intrinsic motivation was initially measured in the current study through a four-item scale and had a Cronbach's Alpha value of .78. After reliability evaluation of intrinsic motivation scale items, there was not an item which could be deleted to provide for a higher construct Cronbach's Alpha value. Identified regulation initially measured in the current study through a four-item scale and had a Cronbach's Alpha value of .68. After reliability evaluation of identified regulation scale items, the removal of one item would provide for an increased construct reliability of identified regulation for a Cronbach's Alpha value of .75. External regulation was initially in the current study measured

through a four-item scale and had a Cronbach's Alpha value of .73. After reliability evaluation of identified regulation scale items, the removal of one item would provide for an increased construct reliability of identified regulation for a Cronbach's Alpha value of .76. Amotivation was initially measured in the current study through a four-item scale

Validity "refers to the appropriateness, meaningfulness, and usefulness of the specific inferences made from test scores" (American Psychological Association, 1985, p.9; Pedhazur & Schmelkin, 1991). Throughout the current study, every effort was made to ensure the highest standard of ethical research and validity possible.

The Pearson Correlation is the primary data analysis test used throughout this study. It should be noted that the relationship of the Pearson Correlation is understood to be linear. The presence of a correlation between two variables can be understood to have a relationship. However, this does not entail a causation between the two variables (Pedhazur & Schmelkin, 1991). While the Pearson Correlation cannot define a causation or predict behavior, this form of data analysis can define the presence of a relationship or interaction between two variables.

Criteria related variables within this study identify actions and past behavior which should only be seen as such. In this specific study, participants were instructed to self-report their behavior in reference to their actions during the current semester. The criterion variables were utilized to determine the presence of an interaction or relationship between variables. Criterion reliability was measured through the assessment of the Cronbach's Alpha. The variables attitude toward the behavior, subjective norms, perceived behavioral control, intent to be a leader in a career in agriculture, intrinsic motivation, identified regulation, external regulation, and amotivation were all measured through the adaptation of former survey instruments. These

proved reliable with at least a .70 alpha value in prior research (Alt, 2015; Pascarella, Seifert, & Blaich, 2009; NSSE, 2019; Guay et al., 2000; Holt 2014). This instrument was valid for the contexts utilized in prior research. However, it should be acknowledged that no test is valid in all contexts (Ary, Jacobs, & Razavieh, 2002). To assess the validity of the instrument, peer review with members of the graduate thesis research commitee was utilized to minimize measurement error. This committee was comprised of experts in the field of agricultural leadership, education, and communication.

Coverage error was addressed as the specified population all had equal access to email and technology during data collection. This survey was assessed for ease of access on both a desktop and mobile browser. A welcome page, which included instructions for the survey was added to the survey for clarity. The survey was organized for ease of reading. More difficult questions were asked initially and became "easier" as the survey progressed. There were a total of 65 questions on the instrument.

It should be noted that this study's sample is not generalizable or representative of the overall population of U.S. undergraduates. Further, these participants could be described as highly motivated, to the extent that participants chose to attend an extracurricular conference . These participants also required prior initiative and cannot be certified as indicative of the U.S. population of undergraduates.

Chapter Summary

Chapter three further presented objectives, which guided the research and ultimately resulted in the formation of the hypotheses, through reviewing pertinent literature. Chapter three also outlined the instrumentation utilized within this study which includes defining validity and reliability for this study. The instrument utilized in this study was designed through the adaptation of former studies. The sample this instrument examined is also discussed within chapter three and is described through individual's class year and gender.

CHAPTER 4

RESULTS

The results for the current study were evaluated utilizing the conceptual model (Figure 3). This model was utilized in the assessment of the relationship between variables within the Theory of Planned Behavior and Self-Determination Theory. The following variables were addressed in this study: attitude toward being a leader in a career in agriculture, subjective norms toward being a leader in a career in agriculture, perceived behavioral control toward being a leader in a career in agriculture, intent to be a leader in a career in agriculture, intrinsic motivation to be a leader, identified regulation of being a leader, external regulation of being a leader, amotivation toward being a leader, and demographical assessments. The dependent variable was the participant's intent to be a leader in a career in agriculture. The mediating variables were the participant's intrinsic motivation toward being a leader, identified regulation of being a leader, external regulation of being a leader, amotivation toward being a leader, attitude toward being a leader in a career in agriculture, subjective norms toward being a leader in a career in agriculture, and perceived behavioral control toward being a leader in a career in agriculture.

Chapter four provides the analysis of the data collected from the sample. Particularly, Chapter four provides an overview of the pertinent demographics, means, reliabilities, correlation, and hypothesis testing.

Descriptive Analysis

The survey was administered through the use of Qualtrics, an online survey hosting software. The survey was taken by 591 respondents, however, there were 430 useable responses. The overall survey response rate was 70%. Respondents were removed if they did not pass the first reading check measure (n = 80), did not pass the first reading check measure (n = 100), did not complete all variables within the Theory of Planned Behavior Construct (n = 71), and did not complete all variables within the Self-Determination Theory (n = 62).

Demographics

Participants (n = 430) were 26.9% (n = 115) male and 73.1% (n = 313) female with 2 responses missing. Undergraduate class representation was as follows: 20.3% freshman (n = 87), 30.4% sophomore (n = 130), 22.7% junior (n = 97), and 26.6% senior (n = 114). There were two responses missing. There were 57% first-year conference participants (n = 245), 26.8% second-year conference participants (n = 114), 9.3% third-year conference participants (n = 38), and 6.9% of fourth-year conference participants (n = 28) (Table 1). Two unknown class year participants were found within the data.

Table 1. Pearson Correlation of the relationship between type of motivation to be a leader and intent to be a leader in a career in agriculture

	N	%
Gender		
Male	115	26.9
Female	313	73.1
Unknown	2	-
Class		
Freshman	87	20.3
Sophomore	130	30.4
Junior	97	22.7
Senior	114	26.6
Unknown	2	-

Analysis of Variables

Intent to be a Leader in a Career in Agriculture

Intent to be a leader in a career in agriculture was measured through narrative statements posited to the participants regarding their attitude toward the statement. Questions were asked on a 5-point, Likert-type scale. The points on the scale were coded as: "Strongly agree," was equated to 5, "Agree," was equated to 4, "Neither agree nor disagree," was equated to 3, "Disagree," was equated to 2, and "Strongly disagree," was equated to 1. The questions in this variable were: "I plan to be a leader in a career in agriculture" which had a mean of 4.26 (*SD*=1.09), "I will look for opportunities to be a leader in my career in agriculture" which had a mean of 4.40 (*SD*=.99), "I intend to be a leader in a career in agriculture" which had a mean of 4.30 (*SD*= 1.10), and "I will go out of my way to be a leader in my agricultural career" which

had a mean of 3.98 (*SD*=1.28). The overall mean for participants intent to be a leader in a career in agriculture was *M* = 4.23, with an alpha reliability of .88.

Attitude Toward being a Leader in a Career in Agriculture

Attitude toward being a leader in a career in agriculture, a mediating variable, was evaluated through the use of a bi-polar, semantic differential scale. Participants were presented with seven adjectives which were placed on either end of a five-point Likert-type scale. This question alternated in reverse coding. The order for reverse coding is available in the survey (Appendix A). The overall mean was 4.73 with an alpha reliability of .67. The adjectives, means, and standard deviation were as follows: "Good: Bad" which had a mean of 4.90 (*SD*=.30949), "Positive: Negative" which had a mean of 4.85 (*SD*=.39), "Wise: Foolish" which had a mean of 4.73 (*SD*=.58), "Beneficial: Harmful" which had a mean of 4.78 (*SD*=.66), "Important: Not Important" which had a mean of 4.78 (*SD*=.58), "Interesting: Boring" which had a mean of 4.73 (*SD*=.59), and "Profitable: Unprofitable" which had a mean of 4.35 (*SD*=.82).

Subjective Norms toward being a Leader in Agriculture

Participants' subjective norms toward being a leader in a career in agriculture, a mediating variable, was measured through a three question, 5-point Likert-type scale. The points on the scale were coded as: "Strongly agree," was equated to 5, "Agree," was equated to 4, "Neither agree nor disagree," was equated to 3, "Disagree," was equated to 2, and "Strongly disagree," was equated to 1. During post-data collection reliability analysis, one question was removed. After re-evaluation of the scale, the resulting alpha reliability for the remaining three questions were .69. The overall mean for subjective norms were 4.75. Measurement of this construct was carried out through the following three questions: "The people who are important

to me would approve of me being a leader in a career in agriculture" which had a mean of 4.78 (*SD*=.47), "The people who are important to me support my decision to be a leader in a career in agriculture" which had a mean of 4.79 (*SD*=.43), and "The people who are important to me encourage me to be a leader in a career in agriculture" which had a mean of 4.69 (*SD*=.55).

Perceived Behavioral Control toward being a Leader in a Career in Agriculture

Participants' perceived behavioral control toward being a leader in a career in agriculture, a mediating variable, was measured through a bi-polar, five-point semantic differential scale. The overall mean of the perceived behavioral control scale was 4.29 with an alpha reliability of .63. This question alternated in reverse coding. The order for reverse coding is available in the survey (Appendix A). The measurement statements posited to participants were as follows: "Possible for me: Not Possible for me" which had a mean of 4.72 (*SD*=.51), "Easy for me to do: Not easy for me to do" which had a mean of 3.58 (*SD*=1.01), "In my control: Not in my control" which had a mean of 4.36 (*SD*=.73), "Up to me: Not up to me" which had a mean of 4.47 (*SD*=.78).

Intrinsic Motivation

Participants' intrinsic motivation to be a leader, a mediating variable, was measured through asking participants to select the degree of their agreement with a series of questions. Utilizing a five-point Likert-type scale, a series of statements were presented to participants. The overall mean of the perceived behavioral control scale was 4.27 with an alpha reliability of .79. The five-point scale options were as follows: "Exactly like me," "A lot like me," "Moderately like me," "A little like me," and "Not at all like me." This variable's statements were mixed intermittently with other Self-Determination Theory variable's statements. The order for this is

available in the survey (Appendix A). The measurement questions were as follows: “I think leadership is interesting” which had a mean of 4.32 (*SD*=.74), “I think being a leader is pleasant” which had a mean of 4.09 (*SD*=8.84), “I think being a leader is fun” which had a mean of 4.18 (*SD*=.89), and “I feel good when I am a leader” which had a mean of 4.52 (*SD*=.71).

Identified Regulation

Participants’ identified regulation of being a leader, a mediating variable, was measured through asking participants to select the degree of their agreement with a series of questions. This variable initially included four questions, however, after data collection and reliabilities were assessed, the decision was made to omit one question to raise the overall reliability for the variable. The overall mean of the perceived behavioral control scale was 4.54 with an alpha reliability of .75. Utilizing a five-point Likert-type scale, a series of statements were presented to participants. The five-point scale options were as follows: “Exactly like me,” “A lot like me,” “Moderately like me,” “A little like me,” and “Not at all like me.” This variable’s statements were mixed intermittently with other Self-Determination Theory variable’s statements. The order for this is available in the survey (Appendix A). The measurement questions were as follows: “I think being a leader is good for me” which had a mean of 4.56 (*SD*=.66), “I am a leader by personal decision” which had a mean of 4.46 (*SD*=.74), and “I believe being a leader is important to me” which had a mean of 4.60 (*SD*=.60).

External Regulation

Participant’s external regulation of being a leader, a mediating variable, was measured through asking participants to select the degree of their agreement with a series of questions. This variable initially included four questions, however, after data collection and reliabilities

were assessed, the decision was made to omit one question to raise the overall reliability for the variable. The overall mean of the perceived behavioral control scale was 3.21 with an alpha reliability of .76. Utilizing a five-point Likert-type scale, a series of statements were presented to participants. The five-point scale options were as follows: “Exactly like me,” “A lot like me,” “Moderately like me,” “A little like me,” and “Not at all like me.” This variable’s statements were mixed intermittently with other Self-Determination Theory variable’s statements. The order for this is available in the survey (Appendix A). The measurement questions were as follows: “I am supposed to do it” which had a mean of 3.11 (*SD*=1.13), “Being a leader is something I have to do” which had a mean of 3.23 (*SD*=1.25), “I feel that I have to be a leader” which had a mean of 3.28 (*SD*=1.31).

Amotivation

Participants’ amotivation to be a leader, a mediating variable, was measured through asking participants to select the degree of their agreement with a series of questions. Utilizing a five-point Likert-type scale, a series of statements were presented to participants. The overall mean of the perceived behavioral control scale was 1.51 with an alpha reliability of .72. The five-point scale options were as follows: “Exactly like me,” “A lot like me,” “Moderately like me,” “A little like me,” and “Not at all like me.” This variable’s statements were mixed intermittently with other Self-Determination Theory variable’s statements. The order for this is available in the survey (Appendix A). The measurement questions were as follows: “There may be good reasons but personally I do not see any” which had a mean of 1.36 (*SD*=.81), “I am a leader but I am not sure if it is worth it” which had a mean of 1.67 (*SD*=.96), “I do not know. I do not see what being a leader brings me” which had a mean of 1.37 (*SD*=1.86), and “I do this

but I am not sure it is a good thing to pursue being a leader" which had a mean of 1.63 (*SD*=1.02).

After understanding each variable and assessing the results from each variable outcome, research objectives were evaluated and types of statistical analyses were selected. Each variable was assessed in accordance with the guiding research objectives to assess each variables relationships. To analyze these variables, the following data analysis tests were performed: ANOVA, Pearson Correlation, and descriptive statistics.

RO1: Pearson Correlation and Descriptive Statistics

Analysis of the first research objective assessed both gender and motivation. To analyze this data, descriptive statistics were performed on type of reported motivation to be a leader. Type of motivation to be a leader was then examined through Pearson Correlation tests to examine the relationship between gender.

Descriptive analysis presented intrinsic and identified regulation to be the most prevalent type of motivation among the current sample. The mean for intrinsic motivation was below that of identified regulation. Intrinsic motivation had a mean of 17.10 (*SD*=2.50), while identified regulation had a mean of 17.56 (*SD*=2.16). Identified regulation also presented a lower standard deviation than that of intrinsic motivation (Table 2).

The types of motivation which would be defined as lacking self-determined motivation (e.g. External Regulation and Amotivation) were found to have the lowest means of motivation types within this study. External regulation had a mean of 11.09 (*SD*=3.40),which is higher than that of amotivation with a mean of 6.04 (*SD*=2.71). Although external regulation had a higher

Table 2: Descriptive Statistics of participant's self-determined motivation to be a leader.

	N	Mean	*SD*
Intrinsic Motivation	430	17.10	2.50
Identified Regulation	430	17.56	2.16
External Regulation	430	11.09	3.40
Amotivation	430	6.04	2.71

mean among participants' responses, amotivation presented a lower standard deviation than did external regulation (Table 2).

Through the examination of gender in relation to type of motivation, study participants were found to be 26.9% male (*n* = 115) and 73.1% female (*n* = 313) (Table 1). Through the assessment of a Pearson Correlation test (Table 3), results indicated no type of motivation had a significant correlation in its relationship with participant's gender. Due to this lack of significant correlation between gender and type of motivation (Table 3), the first hypothesis was not confirmed and thus the data did not validate H1.

Table 3: Pearson Correlation of the relationship between gender and participant's self-determined motivation to be a leader

	Intrinsic	Identified Regulation	External Regulation	Amotivation
Gender	.037	-.020	-.059	-.070

*=significant at .05 level.

RO2: Pearson Correlation

Research objective two explored the relationship between participants' attitude toward being a leader in a career in agriculture, subjective norms in relation to being a leader in a career in agriculture, perceived behavioral control toward being a leader in a career in agriculture, and intent to be a leader in a career in agriculture. Analysis for this research objective was accomplished through utilizing Pearson Correlation and analysis of variance (ANOVA) data analyses in SPSS 25. An ANOVA is a statistical test, which determines if there is a difference between two groups through utilizing the *F*-ratio (Field, 2009). Pearson Correlation magnitudes were assessed through utilizing and defined by Davis' Correlation Convention (1971).

The Pearson Correlation indicated a significant relationship between attitude toward being a leader in a career in agriculture and intent to be a leader in a career in agriculture (Table 4). As a variable, attitude toward being a leader in a career in agriculture, assessed a participant's behavioral beliefs through positing statements which would be understood as *being a leader is good* or *being a leader is bad.* The Pearson Correlation presented a large-positive correlation coefficient between attitude toward being a leader in a career in agriculture and intent to be a leader in a career in agriculture. This large-positive correlation coefficient of .441, which was found significant at the .05 level, indicates that a participant's internalization of a positive belief toward being a leader in a career in agriculture, positively increases that participant's intent to be a leader in a career in agriculture.

Similarly, the Pearson Correlation indicated a significant relationship between subjective norms in relation to being a leader in a career in agriculture and intent to be a leader in a career in agriculture (Table 4). As a variable, subjective norms assessed a participant's normative

beliefs or the perceived beliefs of individuals in which they hold in high regard, through positing statements such as "the people who are important to me support my decision to be a leader in a career in agriculture." The Pearson Correlation presented a large-positive correlation coefficient between subjective norms and intent to be a leader in a career in agriculture. This large-positive correlation coefficient of .368, which was found significant at the .05 level, indicates that as the participant's perception of the beliefs held by those they value increases, so too does the individual's intent to be a leader in a career in agriculture increase.

The Pearson Correlation indicated a significant relationship between perceived behavioral control toward being a leader in a career in agriculture and intent to be a leader in a career in agriculture (Table 4). As a variable, perceived behavioral control toward being a leader in a career in agriculture, assessed a participant's control beliefs through positing statements which would be understood as *being a leader is possible for me* or *being a leader is not possible for me.* The Pearson Correlation presented a large-positive correlation coefficient between perceived behavioral control toward being a leader in a career in agriculture and intent to be a leader in a career in agriculture. This large-positive correlation coefficient of .376, which was found significant at the .05 level, indicates that a participant's internalization of their control toward being a leader in a career in agriculture positively increases that participant's intent to be a leader in a career in agriculture.

Through the use of ANOVA testing, multiple significant trends were identified. There was a significant effect of the variable attitude toward being a leader in a career in agriculture on intent to be a leader in a career in agriculture, $F\ (12,417) = 9.43$, $p < .05$. There was a significant effect of the variable subjective norms in its relation to being a leader in a career in agriculture

on intent to be a leader in a career in agriculture, F (7,422) = 12.48, $p < .05$. There was a significant effect of the variable perceived behavioral control toward being a leader in a career in agriculture on intent to be a leader in a career in agriculture, F (10,419) = 8.76, $p < .05$.

The presence of these relationships indicate that the second hypothesis is confirmed and validated. There are significant relationships with attitude toward the behavior, subjective norms, and perceived behavioral control with that of intent. The strongest relationship of these is that of attitude toward the behavior with that of intent (Table 4).

Table 4. Pearson Correlation of the relationship between type of motivation to be a leader and intent to be a leader in a career in agriculture

	Attitude	Subjective Norms	Perceived Behavioral Control
Intent	.441*	.368*	.376*
Attitude	-	.348*	.288*
Subjective Norms		-	.281*
Perceived Behavioral Control			-

* Correlation is significant at the 0.05 level (2-tailed).

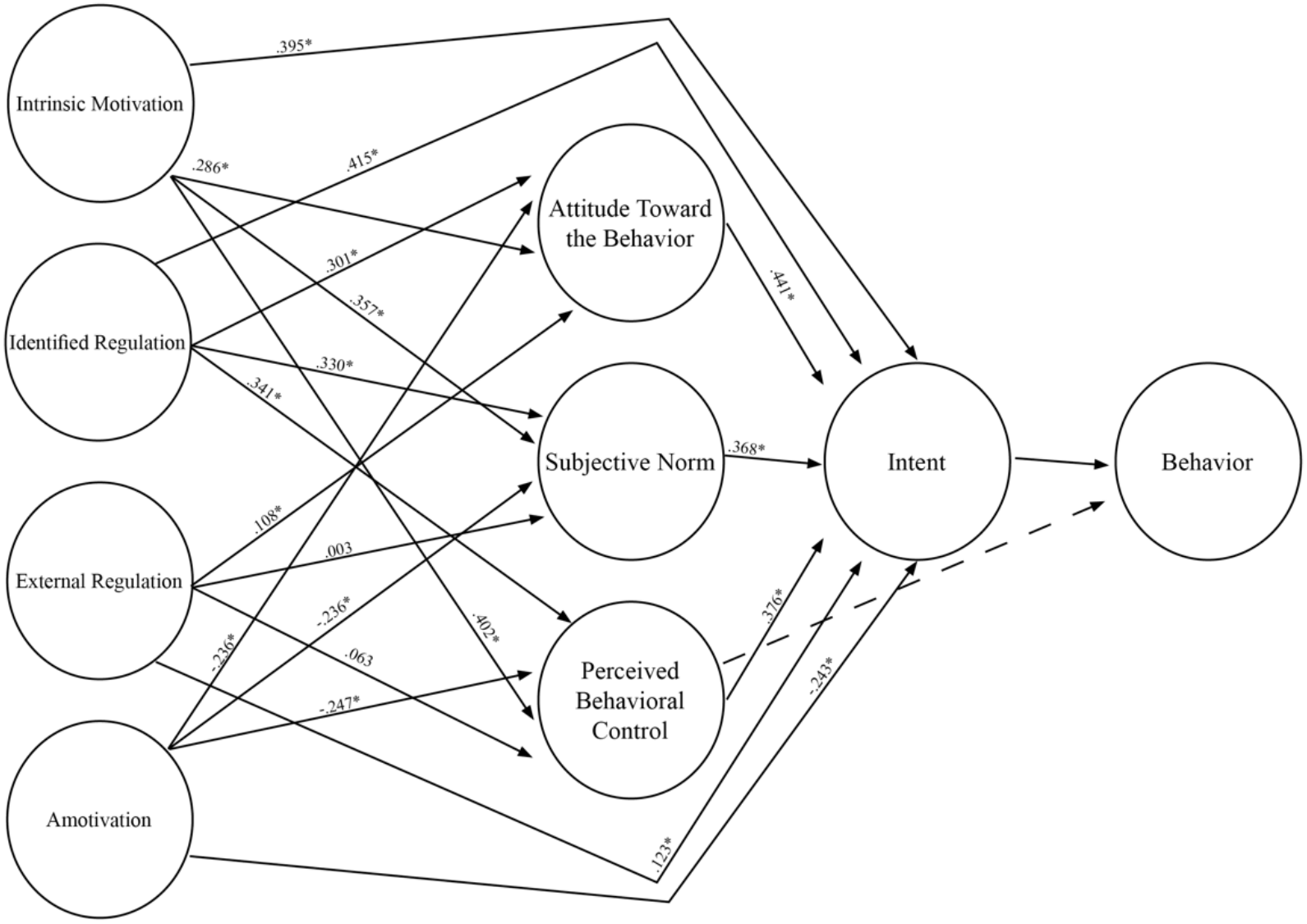

Figure 4. Pearson Correlation coefficient analysis of the proposed theoretical model incorporating the Theory of Planned Behavior and Self-Determination Theory

RO3: Pearson Correlation

Research objective three examined the relationship between a participant's type of motivation to be a leader and intent to be a leader in a career in agriculture. Analysis for this research objective was accomplished through utilizing Pearson Correlation data analysis in SPSS 25. The four mediating variables were intrinsic motivation, identified regulation, external regulation, and amotivation were measured in their relationship with the dependent variable, intent to be a leader in a career in agriculture.

The results, discussed below, validated the third hypothesis for this research study. There was a significant relationship between type of motivation and intent to be a leader. Specifically, there were two large positive relationships, one small positive relationship, and one medium

The relationship between intent to be a leader in a career in agriculture was measured through the use of Pearson Correlation data analysis testing. Pearson Correlation tests indicated multiple significant relationships with intent to be a leader in a career in agriculture by forms of motivation. These relationships were assessed for their strength through utilizing the Davis Correlation Convention (1971).

Intrinsic motivation which assessed the internalized and most self-determined motivation to be a leader, expressed a large-positive relationship with intent to be a leader. This relationship is significant and provides insight because as intrinsic motivation toward a behavior increases, so too does that individuals intent. Intrinsic motivation, which posited statements such as "Being a leader is fun," had a correlation coefficient of .395 which was the second strongest relationship found among motivation domains (Table 4). This level of significance in the relationship between intrinsic motivation and intent was found at the .05 level of significance.

Identified regulation which assessed mostly-internalized and second most self-determined motivation to be a leader, also expressed a large-positive relationship with intent to be a leader. Identified regulation, which posited statements such as "I am doing it for my own good," had a correlation coefficient of .415, which was the strongest relationship found among motivation domains (Table 4). This level of significance in the relationship between identified regulation and intent was found at the .05 level of significance.

External regulation, which assessed externalized motivation to be a leader, expressed a small positive relationship with intent to be a leader. External regulation, which posited statements such as "being a leader is something I have to do," had a correlation coefficient of .123, which was the weakest relationship found among motivation domains (Table 4). This level of significance in the relationship between identified regulation and intent was found at the .05 level of significance.

Amotivation, which assessed impersonal and non-self-determined motivation to be a leader, expressed a medium negative relationship with intent to be a leader. External regulation, which posited statements such as "there may be good reasons, but personally, I don't see any," had a correlation coefficient of -.243, which was the only negative relationship found among motivation domains (Table 4). This level of significance in the relationship between amotivation and intent was found at the .05 level of significance.

Table 4. Pearson Correlation of the relationship between type of motivation to be a leader and intent to be a leader in a career in agriculture

	Intrinsic Motivation	Identified Regulation	External Regulation	Amotivation
Intent	.395*	.415*	.123*	-.243 *
Intrinsic Motivation	-	.698*	.056	-.333*
Identified Regulation		-	.155*	-.351
External Regulation			-	.229*
Amotivation				-

* Correlation is significant at the 0.05 level (2-tailed).

Chapter Summary

Chapter four details the results from the study, as well as, assessing the conclusion of the tested hypotheses. Two out of the three hypotheses were confirmed and validated. The first hypothesis was the sole hypothesis to fail testing. This was due to the lack of a relationship between gender and motivation to be a leader. Hypotheses two and three were confirmed and significant relationships were found among motivation to be a leader and intent to be a leader, as well as, the variables with contribute to intent. The strongest relationship with intent to be a leader among Theory of Planned Behavior variables was attitude toward being a leader. In a similar level of strength, identified regulation, from Self-Determination Theory, held a strong relationship with intent in the testing of the second hypothesis.

CHAPTER 5

CONCLUSIONS

This study sought to explore the relationships between Self-Determination Theory and Theory of Planned Behavior variables. This study assessed Self-Determination Theories' self-determined motivation to be a leader, juxtaposed with the Theory of Planned Behavior's variables of attitude toward the behavior, subjective norms, perceived behavioral control, and intent, in relation to being a leader in a career in agriculture.

The assessment of self-determined motivation was performed through utilizing the Situational Motivational Scale (SIMS) (2000). The SIMS assesses four of the six original types of motivation defined by Ryan and Deci (2000). The four types of motivation assessed through the SIMS are intrinsic motivation, identified regulation, external regulation, and amotivation. A key component of utilizing the SIMS is the assessment within a specific behavioral context. The behavioral context within the scope of this study is being a leader in an agricultural setting. This assessment of situational motivation was measured in conjunction with situational behavior. Assessing situational behavior was performed through variables within the Theory of Planned Behavior. Prior research has encouraged the juxtaposition of the two theories (Hagger & Chatzisarantis, 2009). The proposed theoretical interaction can be found in Figure 3.

Findings from the use of the two theories indicate relationships between variables within the Theory of Planned Behavior and types of motivation within Self-Determination Theory. The results of these relationships are found in Chapter 4, while a discussion of the implications

resulting from the relationships are discussed here in Chapter 5. Both theoretical and practical implications are discussed as they relate to the agricultural industry.

In an effort to answer this study's research questions, the results from this study found a few key areas of focus. First, there was not a significant relationship between gender and types of motivation to be a leader, however, there was an increased presence of reported levels of autonomous motivation toward being a leader. This result indicates the particpants at the Agriculture Future of America Conference may value leadership, find interest in being a leader, and internalize the value of leadership and the outcomes of leadership as a behavior. Along with high levels of reported autonomous motivation, results indicated multiple relationships between variables within the both the Theory of Planned Behavior and Self-Determination Theory. These results facilitated the validation of the second and third hypotheses.

This validation of the second and third hypotheses confirms the potential for the incorporation of the two theories. As has been done in prior research (Chatzsirantis & Hagger, 2009), the Theory of Planned Behavior and Self-Determination Theory should be incorporated within a singular model to explore the interaction of motivation and behavior. While the context of this study did not seek to predict relationships, further research could incorporate these two models for that purpose.

Theoretical Implications

The Theory of Planned Behavior (Ajzen, 1991) provided for the measurement of participants' attitude toward being a leader in a career in agriculture, subjective norms in relation to being a leader in a career in agriculture, perceived behavioral control toward being a leader in a career in agriculture, and intent to be a leader in a career in agriculture. Consistent with prior

research findings, attitude toward being a leader in a career in agriculture, subjective norms in relation to being a leader in agriculture, and perceived behavioral control toward being a leader in a career in agriculture were found to all have a significant positive correlation with intent to be a leader in a career in agriculture (Ajzen, 1991; Ajzen, 2005; Åstr⊘sm & Rise, 2001; Beck & Ajzen, 1991; Godin & Kok, 1996; Holt, 2014; Holt et al., 2018).

The current study found the strongest relationship between attitude toward being a leader in a career in agriculture and intent to be a leader in a career in agriculture. This relationship between attitude and intent remains consistent with Eagly and Chaiken's (1993) inference toward the strength of an individual's attitude toward the behavior influencing the individual's intent toward performing the behavior. The assessment of an individual's attitude toward the behavior is fostered through their prior experiences (Ajzen, 2005; Eagly & Chaiken, 1993). Further theoretical research should assess an individual's past experience to determine the particular relationship between past experience and attitude. This suggestion, fostered through the meta-analysis by Hagger and Chatzsirantis (2009), also has the potential to provide insight into past experiences' influence on other variables within the Theory of Planned Behavior.

The current study found a significant relationship between subjective norms in relation to being a leader in a career in agriculture and that of intent to be a leader in a career in agriculture. While this relationship was not as strong as that of attitude toward the behavior or perceived behavioral control with that of intent, this relationship is still worth noting as Davis' Correlation Convention would define this relationship as a large-positive correlation. Davis' Correlation serves as a guideline for determining what is notable in reporting relationships found through testing Pearson's Correlation. This presence of a positive relationship indicates that as one

variable increases, there is a notable difference in the increasing of another variable. Based on this finding, participants' perception of the beliefs held by those they deem as important to them, have an effect on their intent to be a leader in a career in agriculture. This influence, assessed through defining the influence as normative beliefs, should be further examined to assess its direct relationship with subjective norms. Particularly within a similar population, further research should examine the effect of specific demographical questions and past experiences to determine their effect on the participant's social environment.

Similar to the relationship between attitude and intent, perceived behavioral control presented a significant correlation in the relationship with that of intent to be a leader in a career in agriculture. This finding not only supports the use of perceived behavioral control within the context of measuring the Theory of Planned Behavior variables but also supports the continued need for further examination of this variable. This further examination of an individuals' perceived control over the behavior in question should specifically delve into the impact of prior experience on their perceived control over the behavior. Ajzen identified the potential of past experience to impact perceived behavioral control due to past experience directly affects perceived future control of a behavior (Ajzen, 2002). This is because, if an individual has previously engaged in the activity, they will likely have a strong perceived control belief. In the context of this study, further research should examine students prior experience serving as a leader within professional environments in conjunction with perceived behavioral control concepts.

The value of examining the relationship of motivation with that of intent is further exemplified through Ajzen's depiction of intent being similar to motivation in that it assesses the

extent to which an individual infers they will perform the behavior. Motivation in this context was assessed through the Situational Motivational Scale (SIMS) (Guay et al., 2000). The SIMS provided for the measurement of an individual's self-determined situational motivation which was guided by Self-Determination Theory (Ryan & Deci, 2000). Overall, participants expressed more intrinsic motivation and identified motivation toward being a leader. This aligns with prior research and the founding of the study in consideration of the participants (Ryan & Deci, 2000; Guay et al., 2000). This finding highlights the opportunity for further research to examine further intrinsic motivation among similar participants. Future research should consider the incorporation of integration and introjection as types of extrinsic motivation (Ryan & Deci, 2000), as a means for further understanding motivation to be a leader.

Figure 4 presents the existing relationship between the Theory of Planned Behavior variables and Self-Determination Theory variables. The strongest relationship between motivation and intent was that of identified regulation. This remains consistent between the defining characteristics of identified regulation and that of the context of the study. Participants, overall, viewed leadership as a *means to an end,* which remains consistent with their purpose for attending the leadership conference. Further research should examine the effect of this type of motivation in longevity to examine if the behavior becomes further internalized by the participant. This finding infer that these individuals have internalized the outcomes of their choice to be a leader. The participant who possesses strong identified regulation toward being a leader understands the value in which this action has in its relation to an outcome.

Although identified regulation expressed the strongest relationship with intent, intrinsic motivation also expressed a significant relationship with intent. This relationship is also

consistent with the characteristics of this type of motivation and the context of the study within the leadership conference. A participant who is more intrinsically motivated to be a leader will find satisfaction and enjoyment out of being a leader (Ryan & Deci, 2000), which is potentially what could have led them to attend the leadership conference. This motivation's relationship with intent is also not surprising as it is reasonable to expect that an individual which finds enjoyment and satisfaction in being a leader will continue to pursue being a leader within their career.

Although not nearly as strong as intrinsic or identified regulation, external regulation did present a significant correlation with intent. External regulation's relationship with intent was a significant small positive relationship. This relationship is noteworthy in knowing an individual's motivation has a lesser effect on intent when it is extrinsically motivated. A participant which would be more externally regulated would be characterized as motivated by extrinsic rewards or avoidance of punishment (Ryan & Deci, 2000). Based on the defining characteristics of this motivation, this individual would likely pursue leadership in a career in agriculture solely based on the external factors at play. Further research should explore potential external factors which could influence an individual's external regulation of their behavior.

Uniquely, amotivation was the sole domain of motivation to present a negative relationship with intent. This negative relationship, while smaller than the positive relationship between intrinsic motivation and identified regulation, exhibits the importance of internalization of an action. An individual defined as amotivated would lack the internalization of an action or the understanding of resulting outcomes (Ryan & Deci, 2000). The value of this rests in understanding a lack of internalization of an action has a negative effect on performing the

action. Based on this finding, it is reasonable to suggest that the individual which does not find congruence between being a leader and a correlating outcome is likely to not intend to pursue being a leader in a career in agriculture. Again, this individual likely would not have perceived importance of the action which results in their amotivation.

The presence of the significant relationships between variables within Self-Determination Theory and the Theory of Planned Behavior provides further support for the use of the two theories within one model. Prior research identified the capability of this integration; however, prior research has not integrated the theories in a similar framework to which this study sought to explore (Chan, Fung, Xing, Hagger, 2013; Ntoumanis, 2005; Sarrazin, Vallerand, Guillet, Pelletier, & Cury, 2002; Standage, Duda, & Ntoumanis, 2003; Wilson & Rodgers, 2004). Incorporating the Theory of Planned Behavior's variables and Self-Determination Theory's variables entails a potential interaction amongst all variables with (Figure).

Intrinsic motivation was found to have a significant relationship with attitude toward the behavior, subjective norms, and perceived behavioral control. The Theory of Planned Behavior's variables' relationships with intrinsic motivation, which is the most internalized and self-determined motivation, is further supported through prior research (Ajzen, 1991; Ryan & Deci, 2000). This relationship posits that an individual's enjoyment of the activity (intrinsic motivation) has a positive relationship with that of their attitude toward the behavior, perception of other's beliefs about the behavior, and their perception of their ability to control the behavior.

Identified regulation was found to have a significant relationship with attitude toward the behavior, subjective norms, and perceived behavioral control. The Theory of Planned Behavior's variables' relationship with identified regulation, which is the second-most internalized and self-

determined motivation, is further supported through prior research (Ajzen, 1991; Ryan & Deci, 2000). This relationship posits that an individual's internalization of the value of the activity (identified regulation) has a positive relationship with that of their attitude toward the behavior, perception of other's beliefs about the behavior, and their perception of their ability to control the behavior.

External regulation was found to have a significant relationship only with attitude toward the behavior. Subjective norm's relationship with external regulation, which is the most externalized type of motivation measured, is further supported through prior research (Ajzen, 1991; Ryan & Deci, 2000). This relationship posits that an individual's externalization of the value of the activity (external regulation) has a positive relationship with that of their attitude about the behavior. This relationship with attitude is likely due to the individual's assessment and value of the behavior being solely for external gain. This relationship is depicted as a small positive correlation as defined by by Davis' Correlation Convention (1971). This magnitude was defined by Davis (1971) as a means for determining the strength and notability of relationships through use of the Pearson correlation.

Amotivation was found to have a significant relationship with attitude toward the behavior, subjective norms, and perceived behavioral control. Unique to amotivation, within this study, is the presence of a negative relationship. Amotivation exhibited a significant negative medium relationship with attitude toward the behavior, subjective norms, and perceived behavioral control, as defined by Davis' correlation convention (1971). This presence of negatively attributing to attitude toward the behavior, subjective norms, and perceived behavioral control is likely due to the lack of internalization between the action and outcome (Ryan & Deci,

2000). If a participant were to find no personal relevance or lack intentionality, the participant would be reffered to as possessing amotivation. This is defined by the characteristics established by Ryan and Deci (2000) in their establishment of amotivation. This is present both in the present study and prior research (Guay et al., 2000; Ryan & Deci, 2000).

Practical Implications

Individuals within the agricultural industry, particularly those with an interest in developing and sourcing individuals with leadership competencies, will potentially find relevance in the findings of this study. This study has the opportunity to provide implications toward fostering leadership among undergraduates within the context of agriculture. In short, this study found increased internalization of leadership will most strongly lead to both intent to be a leader in a career in agriculture, as well as, the variables which attribute to this intent.

Exemplified by the strength in the relationship by both intrinsic motivation and identified regulation, internalization of leadership as a behavior most strongly attributes to the variables within the Theory of Planned Behavior. The relationship between internalized motivation and attitude toward the behavior suggests the potential that personal relevance has on behavioral beliefs. These behavioral beliefs, which Ajzen (1991) and Eagly and Chaiken (1993) found to attribute to attitude toward the behavior, encompass the individual's perception of the outcome of the behavior which is informed by both their past experience and knowledge of the behavior. This finding suggests the need for individuals within the agricultural industry to enhance knowledge dissemination and fostering opportunities to engage in leadership. Not only should knowledge be enhanced but also fostering the positive perception of the knowledge individuals have obtained. That is, emphasis should be placed on fostering a positive perception of

knowledge and experience gained among individuals. While the context of this study did not entail measuring behavior, internalization of the behavior and attitude toward the behavior attributed significantly to that of intent. It would be reasonable, based on these findings, to suggest that fostering the internalization of a behavior through leadership information dissemination and offering experiences being a leader could increase the extent to which an individual intends to pursue being a leader in a career in agriculture. However, it should be noted that correlation does not depict causation. Enhancing this intent to be a leader in a career in agriculture is necessary as the agricultural industry is projected to have a lack of employees to fulfill the full extent of opportunities available.

Individuals which are more self-determined and have developed a more internalized motivation to be a leader were found to have a significant relationship with that of the variable which examines the social environment of the participants. Through their interaction with subjective norms, intrinsic motivation and identified regulation exhibit a significant relationship in subjective norms. This relationship highlights the likelihood that individuals who have attained a more internalized process of leadership are also more likely to have supportive individuals they regard as important (Ajzen, 1991). Also, worth noting is the negative relationship between that of amotivation and subjective norms. This relationship suggests that as an individual's negative perception of the perception of those the participant deems important increases, so too does their amotivation.

If practitioners would like to increase an participant's self-determination toward a behavior, these practioners should also seek to increase the participant's perception of the perception held by those they determine as important. These contrasting relationships would

suggest enhancing the internalization of actions correlates with an individual's support system. Practitioners should be encouraged by this outcome as it perpetuates the potential opportunity to increase an individual's internalization of actions. This opportunity would be carried out through the incorporation of communities and relationships which value being a leader. This research commends that as an individual internalizes an action, the individual's intent to perform the action increases. Individuals within the agricultural industry should encourage the establishment of supportive environments for students. This encouragement could be in the form of sponsorships, internships, mentorships, and other environments which could be conducive to supporting and encouraging students to be a leader.

Not only are types of motivation affected by prior experience but also that of an individuals perceived control of a behavior. This is exemplified in the Theory of Planned Behavior through assessing an individuals perceived behavioral control. Perceived behavioral control also exhibited a significant relationship with types of internalized motivation. The presence of the relationship between self-determined motivation and perceived control over the behavior is consistent with prior research due to the characteristics of the two variables (Ajzen, 1991; Ryan & Deci, 2000). Ajzen (1991) depicted the importance of an individual internalizing or having perceived their self performing the behavior on the evaluation of perceived behavioral control (Ajzen, 1991). Further evidence for the support of this is present in the relationship between amotivation and perceived behavioral control. This significant negative relationship highlights the need for the internalization of an action. Amotivation is understood as being impersonal and lacking the contingency of the behavior (Ryan & Deci, 2000), which is necessary to positively attribute to perceived behavioral control (Ajzen, 1991). To enhance both

internalized types of motivation and perceived behavioral control, practitioners should enhance opportunities to be a leader. This is supported by Ajzen's (1991) defining characteristic of perceived behavioral control, which highlights the reality that an individual's perceived behavioral control will be strong, if they have already completed the behavior. Therefore practitioners should encourage and provide opportunities for individuals to be a leader to increase the likelihood that these individuals will be a leader in their career.

Unsurprisingly, intrinsic motivation and identified regulation, the two most internalized types of motivation measured within this study, correlated most strongly with intent over the alternate types of motivation. This is consistent with prior research and exemplifies the need for the internalization of the behavior in their intent to perform the behavior. Intrinsic motivation and identified regulation are characterized by their valuing of the behavior (Ryan & Deci, 2000). This value may be understood as enjoyment or satisfaction, as is found within intrinsic motivation or the value may be in the form of understanding the action is a means to an end which is most desirable for longterm success. The value of this internalization of the behavior is further evident through the assessment of the relationship between amotivation and intent. The significant negative relationship between amotivation and intent is one that could be understood as impersonal and lacking an understanding of outcomes from actions. Therefore, practitioners should enhance individuals internalization of the action through providing opportunities for individuals to gain a personal understanding of the action and the culminating outcomes.

Conclusion

In summation, the current study continues to support the use of the Theory of Planned Behavior and Self-Determination Theory. Further research should explore the predictive nature of the two theories. The adding of a variable to examine past-behavior, as seen in Hagger and Chatzsirantis' study (2009) could provide further examination of the beliefs which influence the two variables. In practice, this study highlights the existing relationships between internalization of the behavior with that of the variables which have been proven to attribute to intent and intent to perform the behavior itself.

As the agricultural industry seeks to increase the matriculation of individuals into the industry, practitioners should seek to enhance more self-determined motivation through knowledge and experience for potential employees. This experience and knowledge could be accomplished through sponsorship, mentorship, internships, and outreach opportunities which focus on the support and encouragement of students within an intent to pursue a career in agriculture. It should be noted that this study did not examine the predictive nature of the variables, however, the presence of significant relationships identify the potential for the impact of societal support, past experiences, education, and personal beliefs on an individual's intent to be a leader in a career in agriculture.

Chapter Summary

Chapter five provides insight into the impact of the study. This chapter juxtaposes prior research and literature with the results of this study. Through detailing theoretical and practical implications, this chapter highlights the potential for this research to guide the agricultural industry. Theoretically, this research provides insight into the incorporation of the Theory of

Planned Behavior and Self-Determination Theory. This is exemplified through the presence of relationships amongst the variables within each theory. Practically, this research suggests methods for which practitioners within the agricultural industry may best encourage and foster leadership in potential employees. This would most well be performed by providing leadership involvement prior to graduation through internships, mentorship, and experiences in agricultural careers.

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Appendix A. AFA Leadership Survey

AFA Leadership Survey

Survey Flow

Block: Default Question Block (2 Questions)
Standard: TPB (4 Questions)
Standard: Motivation 1 (1 Question)
Standard: Motivation 2 (1 Question)
Standard: Engagement (3 Questions)
Standard: Demographics (7 Questions)
Standard: Block 6 (3 Questions)

Page Break

Start of Block: Default Question Block

Q45 We are researchers in the College of Agricultural and Environmental Sciences at The University of Georgia. We invite you to participate in a research study titled **Measuring the Potential Impact of Engagement on Student Motivation to be a Leader in a Career in Agriculture** that is being conducted under the auspices of the Office of the Associate Dean for Extension. The purpose of this study is to identify student's perceptions and attitudes towards being a leader. Your participation will involve taking an online survey and should only take about 10 - 12 minutes. Your involvement in the study is voluntary, and you may choose not to participate or to stop at any time without penalty or loss of benefits to which you are otherwise entitled. If you decide to withdraw from the study, the information that can be identified as yours

will be kept as part of the study and may continue to be analyzed, unless you make a written request to remove, return, or destroy the information. Your responses will be kept anonymous. The results of the research study may be published, but your name or any identifying information will not be used. In fact, the published results will be presented in summary form only. Your name will only be used to enter you into the drawing for the gift card. Your name will not be kept with your responses. The findings from this project may provide information for future communication, marketing, technology development, and/or workshops for student leaders in educational and professional areas related to agriculture. There are no known risks or discomforts associated with this research. As an incentive, your name will be entered into a drawing for a $50 gift card. **The drawing will take place at the end of the conference. The winner will be contacted via phone. The gift card must be picked up at the AFA welcome booth.** Participation is not required to be entered into the drawing. If you have any questions about this research project, please feel free to call me Jordan DeWitt at (912) 282-9649 or send an e-mail to jdewitt@uga.edu. Questions or concerns about your rights as a research participant should be directed to The Chairperson, University of Georgia Institutional Review Board, telephone (706) 542-3199; email address irb@uga.edu. By selecting "Yes" below you are agreeing to participate in this research. Thank you for your consideration! Please keep a screenshot of this page for your documentation. Sincerely, Jordan DeWitt, Jessica

Holt, Abigail Borron, and Lauren Griffeth

○ I **agree** to participate in this research (1)

○ I **do not agree** to participate in this research (2)

Q2

For the purposes of this survey, please see the following definition of leadership.

"Leadership is a process whereby an individual influences a group of individuals to achieve a common goal (Northouse, 2010)."

End of Block: Default Question Block

Start of Block: TPB

Display This Question:

If We are researchers in the College of Agricultural and Environmental Sciences at The University of... = I agree to participate in this research

Q14 Please indicate your level of agreement or disagreement with the following statements.

	Strongly agree (1)	Agree (3)	Neither agree nor disagree (5)	Disagree (8)	Strongly disagree (9)
The people in my life, whose opinions I value, are leaders in their career (1)	○	○	○	○	○
The people who are important to me would approve of me being a leader in an agricultural career (2)	○	○	○	○	○
The people who are important to me support my decision to be a leader in a career in agriculture (4)	○	○	○	○	○
The people who are important to me encourage me to be a leader in a career in agriculture (5)	○	○	○	○	○

Display This Question:

If We are researchers in the College of Agricultural and Environmental Sciences at The University of... = I agree to participate in this research

Q16 Please indicate your attitude toward being a leader in a career in agriculture

	1 (1)	(2)	3 (3)	(4)	5 (5)	
Good	○	○	○	○	○	Bad
Not Important	○	○	○	○	○	Important
Positive	○	○	○	○	○	Negative
Wise	○	○	○	○	○	Foolish
Boring	○	○	○	○	○	Interesting
Beneficial	○	○	○	○	○	Harmful
Unprofitable	○	○	○	○	○	Profitable

Display This Question:

If We are researchers in the College of Agricultural and Environmental Sciences at The University of... = I agree to participate in this research

Q17 Please indicate your attitude toward being a leader in agriculture. Being a leader in a career in agriculture is:

	1 (1)	(2)	3 (3)	(4)	5 (5)	
Not possible for me	○	○	○	○	○	Possible for me
Easy for me to do	○	○	○	○	○	Not easy for me to do
Not in my control	○	○	○	○	○	In my control
Up to me	○	○	○	○	○	Not up to me

Display This Question:

If We are researchers in the College of Agricultural and Environmental Sciences at The University of... = I agree to participate in this research

Q12

Please indicate your level of agreement or disagreement about your intentions to be a leader in career in agriculture.

	Strongly agree (1)	Agree (3)	Neither agree nor disagree (5)	Disagree (8)	Strongly disagree (9)
I plan to be a leader in a career in agriculture when the opportunity is available (1)	○	○	○	○	○
I will look for opportunities to be a leader in my career in agriculture (2)	○	○	○	○	○
I intend to be a leader in a career in agriculture (17)	○	○	○	○	○
I will go out of my way to be a leader in my agricultural career (4)	○	○	○	○	○

End of Block: TPB

Start of Block: Motivation 1

Display This Question:

If We are researchers in the College of Agricultural and Environmental Sciences at The University of... = I agree to participate in this research

Q1

Thinking about your leadership experience, please answer the following questions:

I am currently engaged in leadership because:

	Exactly like me (1)	A lot like me (2)	Moderately like me (3)	A little like me (4)	Not at all like me (5)
I think leadership is interesting (1)	○	○	○	○	○
I am doing it for my own good (2)	○	○	○	○	○
I am supposed to do it (3)	○	○	○	○	○
There may be good reasons, but personally I don't see any (4)	○	○	○	○	○
I think being a leader is pleasant (5)	○	○	○	○	○
I think being a leader is good for me (6)	○	○	○	○	○
Being a leader is something I have to do (7)	○	○	○	○	○
I am a leader but I am not sure if it is worth it (8)	○	○	○	○	○

Display This Question:

If We are researchers in the College of Agricultural and Environmental Sciences at The University of... = I agree to participate in this research

Q33

Thinking about your leadership experience, please answer the following questions:

I am currently engaged in leadership because:

	Exactly like me (1)	A lot like me (2)	Moderately like me (3)	A little like me (4)	Not at all like me (5)
Being a leader is fun (1)	○	○	○	○	○
I am a leader by personal decision (2)	○	○	○	○	○
I do not have any choice (3)	○	○	○	○	○
I don't know; I don't see what being a leader brings me (4)	○	○	○	○	○
Please select "Moderately like me" on the answer choice (5)	○	○	○	○	○
I believe being a leader is important to me (6)	○	○	○	○	○
I feel that I have to be a leader (7)	○	○	○	○	○
I do this. but I am not sure it is a good thing to pursue being a leader (8)	○	○	○	○	○
I feel good when I am a leader (17)	○	○	○	○	○

End of Block: Motivation 2

Start of Block: Engagement

Display This Question:

If We are researchers in the College of Agricultural and Environmental Sciences at The University of... = I agree to participate in this research

Q34 Please select the social media channels you use for the following:

(Select all that apply)

	Facebook (1)	Twitter (2)	Instagram (3)	Snapchat (4)	LinkedIn (5)	Website (6)	None (7)
Receive updates from individuals involved with agriculture (1)	☐	☐	☐	☐	☐	☐	☐
Receive updates from agriculturally-based companies/organizations (3)	☐	☐	☐	☐	☐	☐	☐
Receive updates from colleges of agriculture (4)	☐	☐	☐	☐	☐	☐	☐
Receive updates from key leaders in agriculture (5)	☐	☐	☐	☐	☐	☐	☐

Display This Question:

If We are researchers in the College of Agricultural and Environmental Sciences at The University of... = I agree to participate in this research

Q11

Thinking about your technology use during the current semester, please indicate your current

engagement with the following activities on social media AS IT RELATES TO AGRICULTURE? (e.g. Blogs, Facebook, Instagram, LinkedIn, Snapchat, Twitter)

	More than once daily (19)	Daily (21)	4-6 times a week (22)	2-3 times a week (23)	Once a month (24)	3 or less times a month (25)	Never (26)
Read updates (1)	○	○	○	○	○	○	○
Read news updates (6)	○	○	○	○	○	○	○
Read commercial updates (11)	○	○	○	○	○	○	○
Share news alerts (8)	○	○	○	○	○	○	○
Share industry updates (10)	○	○	○	○	○	○	○
Please select "2-3 times a week" on the answer choice (7)	○	○	○	○	○	○	○
Respond to others' posts (2)	○	○	○	○	○	○	○
Respond to news information (17)	○	○	○	○	○	○	○
Post information (4)	○	○	○	○	○	○	○
Hold conversations (chats) with others (5)	○	○	○	○	○	○	○

Display This Question:

If We are researchers in the College of Agricultural and Environmental Sciences at The University of... = I agree to participate in this research

Q18

Not including this event, please answer the following based on your current involvement

RELATED TO AGRICULTURE.

	More than once daily (28)	Daily (29)	4-6 times a week (30)	2-3 times a week (31)	Once a month (32)	3 or less times a month (33)	Never (34)
I discuss career plans with peers (14)	○	○	○	○	○	○	○
I participate in university/college-organized events (4)	○	○	○	○	○	○	○
At my university/college, I participate in clubs or organizations (6)	○	○	○	○	○	○	○
I participate in clubs or organizations not affiliated with my institution (13)	○	○	○	○	○	○	○
Outside of class, I participate in community service opportunities (7)	○	○	○	○	○	○	○
Outside of class, I discuss ideas with my peers (8)	○	○	○	○	○	○	○
Outside of class, I work with my peers to plan/execute events/activities (9)	○	○	○	○	○	○	○

End of Block: Engagement

Start of Block: Demographics

Display This Question:

If We are researchers in the College of Agricultural and Environmental Sciences at The University of... = I agree to participate in this research

Q36 Prior to this conference, please select any opportunities you have been involved in with AFA

Select all that apply

- ☐ AFA Leaders Conference (1)
- ☐ AFA Leaders Institute (E.g. Food, Technology, Policy, Animal, Crop Science) (2)
- ☐ AFA Leader Fellowship (3)
- ☐ ONTAP Web Series (4)
- ☐ AFA Student Advisory team (6)
- ☐ AFA Ambassadors (7)
- ☐ None (8)

Display This Question:

If We are researchers in the College of Agricultural and Environmental Sciences at The University of... = I agree to participate in this research

Q37 Which AFA track are you in?

- Track 1 (1)
- Track 2 (2)
- Track 3 (3)
- Track 4 (4)

Display This Question:

If We are researchers in the College of Agricultural and Environmental Sciences at The University of... = I agree to participate in this research

Q44 Including this conference, how many AFA Leaders Conferences have you attended?

- 1 (1)
- 2 (2)
- 3 (3)
- 4 (4)

Display This Question:

If We are researchers in the College of Agricultural and Environmental Sciences at The University of... = I agree to participate in this research

Q38 What is your major?

_____

Display This Question:

If We are researchers in the College of Agricultural and Environmental Sciences at The University of... = I agree to participate in this research

Q5 I am

- Male (1)
- Female (2)

Display This Question:

If We are researchers in the College of Agricultural and Environmental Sciences at The University of... = I agree to participate in this research

Q24 What is your current class year?

- Freshman (1)
- Sophomore (2)
- Junior (3)
- Senior (4)

Display This Question:

If We are researchers in the College of Agricultural and Environmental Sciences at The University of... = I agree to participate in this research

Q39 Would you like to enter a chance to win a $50 gift card?

- Yes (1)
- No (2)

End of Block: Demographics

Start of Block: Block 6

Q42 This information will solely be used for the awarding of the $50 gift card

Q40 Name

_____

Q41 Cell Phone Number

_____

Appendix B. AFA Leadership Survey Email Invitation

Hello fellow leader!

I am Jordan DeWitt, and I am a master's student at the University of Georgia. Like yourself, I also attended the AFA Leaders Conference and had an experience like no other. I hope you are also enjoying your time here at the AFA Leaders Conference.

During your next session, we invite you to participate in a research study titled Measuring the Potential Impact of Engagement on Student Motivation to be a Leader in a Career in Agriculture that is being conducted under the auspices of the Office of the Associate Dean for Extension. The purpose of this study is to identify student's perceptions and attitudes towards being a leader.

Your participation will involve taking an online survey and should only take about 10 - 12 minutes. Your involvement in the study is voluntary. You may choose not to participate or to stop at any time without penalty or loss of benefits to which you are otherwise entitled. If you decide to withdraw from the study, the information that can be identified as yours will be kept as part of the study and may continue to be analyzed, unless you make a written request to remove, return, or destroy the information.

Your responses will be kept anonymous. The results of the research study may be published, but your name or any identifying information will not be used. In fact, the published results will be presented in summary form only. Your name, should you choose to provide it for a gift card drawing, will not be kept with your responses.

The findings from this project may provide information for future communication, marketing, technology development, and/or workshops for student leaders in educational and professional areas related to agriculture. There are no known risks or discomforts associated with this research. As an incentive, your name will be entered into a drawing for a $50 gift card should you choose to provide it. **The drawing will take place at the end of the conference. The winner will be contacted via phone. The gift card must be picked up at the AFA welcome booth.** Participation is not required to be entered into the drawing.

Research Survey Link: tinyurl.com/y73f3nnh

If you have any questions about this research project, please feel free to call me, Jordan DeWitt at (912) 282-9649 or send an e-mail to jdewitt@uga.edu. Questions or concerns about your rights as a research participant should be directed to The Chairperson, University of Georgia Institutional Review Board, telephone (706) 542-3199; email address irb@uga.edu.

Sincerely,

Jordan DeWitt, Jessica Holt, Abigail Borron, and Lauren Griffeth

Appendix C. AFA Leadership Survey Flyer Invitation

Appendix D. AFA Leadership Survey Slide

Research Survey

tinyurl.com/y73f3nnh
Password: **Kansas**

UNIVERSITY OF GEORGIA
College of Agricultural & Environmental Sciences

The purpose of this survey is to measure the potential impact of engagement on student's motivation to be a leader in a career in agriculture. Participation is not necessary to enter the drawing.

Appendix E. IRB Approval

Measuring the impact of engagement on student motivation to be a leader in a career in agriculture

Protocol ID#STUDY00006627

PI:	Jessica Holt	**Primary Contact:**	Jordan Dewitt
Submission Type:	Initial Study	**Detailed State:**	Approved
IRB Coordinator:	William Westbrook	**Parent Protocol:**	
Review Category:	Exempt	**2018 Settings Enabled:**	false
Approved Date:	10/29/2018	**Begin Date:**	10/29/2018
Expiration Date:	10/28/2023	**External IRB Information:**	
		External IRB Expiration Date:	

Project Follow Ons

Name	ID	Type	State	Created Date	Last Snapshot
Measuring the impact of engagement on student motivation to be a leader in a career in agriculture	MOD00006609	Modification	Pre-Submission	10/30/2018 1:23 AM	Snapshot