

DETERMINING AGRICULTURE STUDENTS' MOTIVATIONS  
FOR CHOOSING A COLLEGE

BY

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THESIS

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## **Abstract**

This is a descriptive-correlational study of the motivations in the college choice process of high school juniors and seniors enrolled in agriculture classes at three central Illinois schools. A total of 78 students were given surveys out of a total sample size of 81 potential participants. The results showed that students who plan to continue their education in agriculture have parents with some level of college education, and value financial aid highly have opinions which differ statistically from those students who do not meet the previous criteria. Implications for high school guidance counselors and college recruiters and recommendations for practice and further research related to college choice are provided. Results of this study may aid in recruitment efforts of these students by allowing for universities target students' interests specifically in recruitment.

*To my mother, father, and everyone who has supported me along the way*

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## **Chapter One: Introduction**

Recent estimates outline a significant shortage of agricultural scientists (McClure, 2014). Because those involved in production agriculture are retiring later in life, they are not handing over their farms and ranches to their children as early and the children often seek other career paths. This often results in the children leaving the field of agriculture (McClure, 2014). This lack of agricultural scientists makes it incredibly important to recruit agriculture students and keep them in the field of agriculture. Responsibility falls, at least in part, upon universities to educate more agricultural scientists in attempt at filling this void.

Illinois education consistently ranks as one of the lowest in terms of government funding in the United States (National Educational Association, 2014). This low funding adversely affects Illinois colleges. With that in mind, it is imperative that colleges in Illinois spend their resources as wisely and efficiently as possible. Recruiting future students requires many resources. It costs public institutions \$457 to recruit each student (Noel-Levitz, 2011). Therefore, an institution such as the University of Illinois enrolling approximately 7,000 freshmen each year spends approximately \$3.2 million on recruiting each freshman class. When considering students who decline to attend require the same investment as those who accept, total return on investment can be seen as a major concern. Any information adding to the database on college choice among high school students can help universities use their finite resources more efficiently.

Studies on college choice have yielded multiple themes of what people found to be important in choosing a college. The ability to receive financial aid was perhaps the most prevalent theme in college choice (Cabrera & La Nasa, 2000; Dale, 2010; Hossler, Schmit & Vesper, 1999). Social and parental influences were another common motif of the relevant literature (Dale, 2010; Flint, 1993; Jones & Larke Jr., 2001; Torres & Wildman, 2001). The physical and academic characteristics of an institution play a significant role in college choice as well (Burns, 2006; Dale, 2010; Hossler et al., 1999; Rocca & Washburn, 2005). Research has also concluded that opportunities at the school and after graduation play a role in potential students' college choice (Burns, 2006; Esters, 2007; Rocca & Washburn, 2005).

The current study seeks to confirm and improve findings from previous studies. One way the present study improves on existing literature is by employing an enhanced model of decision making when compared to many of the studies. Perna's (2000) College Decision Making Framework incorporates the effective elements of more traditionally used decision making frameworks, thus making it an improved version of each. This model involves several layers including: social factors, the role the institution plays, and economic conditions. This multi-layered model is more complete than traditional models relying only on these factors individually. Additionally it improves existing literature is that it involves a more specific population. The data in the current study were collected in central Illinois schools, making for an

audience that is more specific to who Midwestern universities spend the bulk of their finances recruiting. Therefore, this data is more useful for Midwestern institutions than data collected nationally would be. The population is also important in the present study because it focuses solely on students enrolled in agriculture classes. These students likely account for the bulk of students who enroll in colleges with an agriculture major. Another benefit of the current study is its timing. Of all of the relevant literature on college choice found for this study, only one article was published in 2012, with no articles that were published in 2013 and 2014. Even over this brief period of two years, there have been advances in technology that could potentially alter how youth think. One example of this is a meteoric rise in the usage of smart phones, which allow people to access information constantly. It is important to discover whether this rise in technology has an effect on the college choice process. The results of the current study will allow for a comparison to existing literature to determine if the dynamic context that is our world has impacted high school student decision making related to college choice.

The present study is significant for several reasons. Firstly, this information could have an impact on recruitment of agricultural students to Illinois and other Midwestern universities with agricultural programs. By targeting institution selection priorities of students enrolled in agriculture classes, recruitment money can be spent more efficiently. With the amount of money involved in recruitment institutions should welcome any improvement. Additionally, this study can show whether the increase in technology has altered what agriculture students find to be important in an institution of higher education and outline parent and sibling roles factoring in college choice. Additionally, the study may outline differences between the mindsets of high school juniors and seniors.

The growing world population and the increase in the technology of agriculture related fields necessitate agriculture programs securing the right students for the programs and turn them into professionals in the field (World population prospects: The 2012 revision, 2012). With that in mind, it is incredibly important to determine what these students look for in a university to bring in quality students. Illinois is home to 6 universities offering agriculture majors that compete for students, surfacing the importance of each university understanding what motivates potential students in the college choice process. The following research questions and hypotheses were generated to guide the current study:

- 1) What are the demographic characteristics of juniors and seniors in high school agriculture classes in selected Central Illinois school districts?

H<sup>1</sup> It is predicted that a majority of students will be Caucasian and have parents with some level of college education.

- 2) What factors influence high school juniors and seniors enrolled in agricultural education in their choice of college?

H<sup>2</sup> The specific hypothesis is that students' answers will focus mainly on financial factors, social factors, and the academic characteristics of the college.

H<sup>2</sup> The null hypothesis states that all factors will be valued equally by participants.

3) How do juniors and seniors in agriculture classes differ in the factors they consider to be important in their college choice process?

H<sup>3</sup> The specific hypothesis is that seniors will value financial factors more than juniors, who will list social factors as the most important factor in their college choice.

H<sup>3</sup> The null hypothesis states that juniors and seniors will have the same characteristics that are valued highly.

## Chapter Two: Review of Literature

### Theoretical Foundation

The theoretical foundation for this study drew upon several existing theories. The first of these is Arnett's 2006 theory of emerging adulthood and characteristics attributed to these individuals. It also drew upon Schwartz's 2010 characterization of values. Finally, it drew upon Perna's 2000 College Decision Making Framework.

Emerging adulthood, the time period spanning from age 18 through the mid-twenties, is a very important time in one's life (Arnett, 2006). This period of time is of particular importance to an individual because people are transitioning from childhood to adulthood. The choices made during this period often work to shape an individual's future. There are numerous different views on this time of life; however I drew upon Arnett's (2006) view of emerging adulthood for this study. There are five characteristics of this age group. These features include identity explorations, instability, being self-focused, feeling in-between, and having possibilities. Each of these will be described in more detail. Emerging adults explore their identity through relationships and career decisions and many ultimately find out who they are and what they want out of life. They experience instability in terms of residence, relationships, school, and work/careers over this time period. Self-focus can be seen because they generally do not have anyone depending on them or large obligations. People this age feel in between in that they do not still consider themselves adolescents but not yet adults either. This period is a time of possibilities in two ways: optimism among people in the age group and ability to move away from a bad home life (Arnett, 2006). 96% of people aged 18-24 believed that they would someday get to where they wanted to be in life (Hornblower, 1997). Many of these, especially identity exploration, being self-focused, and having possibilities, are factors in the process of choosing a venue for post-secondary education.

Another framework used to shape this study was Schwartz's (2010) characterization of values. The concept of values is very important in choosing a college. Values have several unique characteristics. Values are linked to feelings and are desirable goals that motivate action. They also transcend beyond specific actions and situations, serve as standards to guide actions, and can be ranked relative to other values. This relative ranking then guides decision making. With this in mind, it is important for collegiate personnel to find out which values are the most important in the college choice process in order to guide students to an institute of higher education.

College decision making was an additional theoretical approach involved in the formation of this study. I used Perna's (2000) College Decision Making Framework as a basis for the research. In order to make a more comprehensive framework, a combination of the effective elements from the traditional economic model of human capital investment and sociological/cultural theories was constructed. The

human capital investment model lies in the center of her framework. She places the habitus layer around this, which incorporates the ways that social structure helps or hinders student college choice. The next layer incorporates the role that the higher education institutions play in the students' college choice process. The outermost layer describes the influence that changes in social forces, economic conditions, and public policies have on the college choice process. Through this model, people are able to get a much more in-depth look into the college choice process.

There are two traditional models of college choice decision making, the economic model of human capital investment and sociological/cultural approaches (Becker, 2009; Terenzini, Cabrera, & Bernal, 2001). Both of these college choice models are incomplete (Perna, 2000). Human capital investments state that increase productivity, which then increase earnings (Becker, 2009). However, this theory doesn't take into account all differences in college choice across family income and racial or ethnic groups (Perna, 2000). Sociological approaches revolve around factoring socioeconomic background characteristics into college choice (Terenzini et al., 2001). Unfortunately, these approaches do not provide a framework for whether a student applies to a specific college or go to college altogether (Perna, 2000).

### **Decision Making**

Looking at studies of the decision making process of emerging adults is important because many this is the time when the decision of which college to attend is made. It provides insight into one's mind at a time when many are making the decision to attend college. Emerging adults are not fully mature, make decisions based on long term goals and social reasons, are more likely to engage in risky behavior, and vary among different groups of emerging adults.

Emerging adulthood spans from age 18 through the mid-twenties (Arnett 2006). People this age tend to realize they are not fully mature and accordingly make decisions leading to them growing as a person. Many people of this age do not consider themselves to be adults, instead defining adults as their parents and others of that age and above (Arnett, 2006; Hartmann & Swartz, 2006). Emerging adults are trying to find their identity are unique in that they value personal growth very highly (Schwartz, Côté, & Arnett, 2005; Wright, 2012). Tying emerging adult decision making to agriculture, students choose to take agriculture classes to learn life skills they deemed would be important in their future (Harlin & Weeks, 2001; Sutphin & Newsom-Stewart, 1995). Although emerging adults realize they are not fully mature, they often do have long term goals (Harlin & Weeks, 2001; Sutphin & Newsom-Stewart, 1995).

Emerging adults tend to have some long term plans in mind. A large amount of emerging adults have long term goals in mind and are hopeful they can achieve them (Arnett, 2006). A study of college upperclassmen found over 90% of emerging adults have either made a career decision or have thought a lot about their potential career. It also found around 65% of emerging adults have decided on or thought

about marriage and children (Friedman & Weissbrod, 2005). Emerging adults often choose a career based on future advancement opportunities and the perception of financial stability associated with the job (Vincent, Henry, & Anderson, 2012). Emerging adults make decisions towards achieving long term goals but also have other factors involved in their decision making process.

A variety of social reasons are involved in emerging adult decision making. A longitudinal study of how teens in Minnesota structure an important life decision showed parents were an important influence on important decision making (Galotti & Mark, 1994). Friends were also found as an important factor in decision making. Familial reasons played a big role in career choice (Vincent, Henry, & Anderson, 2012). Parents and friends have a big part in the career choice of emerging adults as well (Esters & Bowen, 2005). Emerging adults often make decisions for social reasons, which sometimes can lead to risky decisions being made (Chein, Albert, O'Brien, Uckert, & Steinberg, 2011).

Emerging adults are more likely to engage in risky behavior than full adults. During risk taking activities, the socioemotional and cognitive-control networks are competing in the brain (Steinberg, 2007). The socioemotional portion is more assertive at this time in their lives while the cognitive-control network takes time to develop, leading to more risk-taking behavior. Adolescents increase risky behavior in the presence of their peers (Chein et al., 2011). Additionally, adolescents not only increase risky behavior around their peers but also are more likely to pursue immediate rewards over delayed ones in the presence of their peers (Albert, Chein, & Steinberg, 2013). Emerging adults have a higher frequency of alcohol use and heavy episodic drinking as well as sexual risk-taking behaviors than other age groups (Auerbach & Collins, 2006; Steinberg, 2004; White, McMorris, Catalano, Fleming, Haggerty, & Abbot, 2006). Emerging adults often engage in risky behavior but there is a disparity in the decision making of different groups of emerging adults.

Although of these characteristics are true for most emerging adults, there are some differences in decision making among various groups of emerging adults. There is a variance in important values for emerging adults amongst genders as females appreciated intrinsic value more than males (Wright, 2012). A study of risk seeking behavior found that males and females differ in decision making in regards to risky behavior, as males were likely to bet money with a lower chance of winning it back (Frederick, 2005). In the present study, it may be that females value academic prestige of the university, financial aid, and career placement statistics while males value pleasing family members and social factors more. There are differences among racial groups in decision making as well (Perna, 2000; Schwartz, Côté, & Arnett, 2005). Hispanics tend to enroll in two year colleges more and four year colleges less than the other racial groups. Different groups of emerging adults can have different characteristics.

It is important to consider the decision making of emerging adults because those are the majority of the people deciding on colleges. Emerging adults depend on long term goals and social reasons when making

decisions but have an increased amount of risky behavior as well. It follows that when deciding to enroll in agriculture classes in high school, these students would take these factors into consideration.

### **Choice of Agriculture Class in High School**

It is important to consider what factors students considered to be important in selecting an agriculture class in high school. This knowledge helps to gain insight into the decision-making of the students in the classes. Students chose to enroll in an agriculture course because of social reasons, familial reasons, to prepare for the future, and because of a few miscellaneous reasons.

Social factors proved to be important for high school students in choosing to take an agriculture class in high school. Friends who were also enrolled in the class had a large influence on students to take an agriculture class (Esters, 2007; Esters & Bowen, 2004; Reis & Kahler, 1997). Another significant reason that students choose to take such a class is because they were advised to do so by former students of the class (Jones & Bowen, 1998; Reis & Kahler, 1997). Instructor reputation also had a big impact on a student's choice to take the class. Social factors play a large role in the decision of high school students to take an agriculture class and other factors are involved as well.

One's family is important in the decision to take an agriculture class in high school. Parents are one of the top reasons that students choose to take such a class (Esters, 2007). Parents, especially mothers, were an important reason in enrolling in an agriculture class (Esters & Bowen, 2004; Jones & Bowen, 1998; Reis & Kahler, 1997). Siblings and other relatives also proved to be an important factor in choosing to take an agriculture class (Reis & Kahler, 1997). Students tend to make a decision to take a course based on family reasons and they also do so for other reasons.

Students often chose to take agriculture classes to prepare them for their future. Students chose to enroll because they thought the classes were practical for their future in giving them life and team working skills (Harlin & Weeks, 2001; Sutphin & Newsom-Stewart, 1995). The hands-on learning offered in these classes was a key factor. These would help the students prepare for higher education and introduce them to various careers. While preparation for the future is a large factor in students choosing to take an agriculture class, they consider other reasons as well.

There are a few miscellaneous reasons students chose to take an agriculture class in high school. Students were influenced to take an agriculture class because of the class's ties to the FFA (Harlin & Weeks, 2001). Having farming and other agriculture experience factored into the decision making of students choosing these classes as well (Reis & Kahler, 1997). These students felt that these experiences prepared them to take such a course. Recruitment events were important in choosing to take an agriculture class (Esters & Bowen, 2004; Jones & Bowen, 1998). These events are particularly effective if they focus on people who are successful in the field. High school students' decide to enroll in an agriculture class because of some miscellaneous reasons.

Students make the decision to enroll in a high school agriculture class based on social reasons, familial reasons, to impact their future, and other miscellaneous reasons. Looking at the reasons high school students chose to take high school agriculture classes provides insight into the decision making process of high school students. This decision making process is also applied when emerging adults chose a college. Many of these reasons parallel those of students choosing a college.

### **Choice of an Agriculture Major in College**

Determining reasons emerging adults chose to major in agriculture-related majors in college can provide further insight to the college choice process. It is likely that students consider many of the same factors into college choice as they do in major choice. Emerging adults consider career-related reasons, social reasons, the opinions of non-parent adults and opportunities made available to them when choosing an agriculture related major.

Many emerging adults choose to major in agriculture for career-related reasons. Students consider exposure to careers as a key factor in the decision to major in agriculture in college (Jones & Larke Jr., 2001). Work conditions and advancement opportunities within the job are also highly considered by those choosing a major (Jones & Larke Jr., 2001; Jones & Larke Jr., 2003). Emerging adults also found potential salaries to be important factors in their college major choice. Many students considered the use of technical skills to be important in their decision (Jones & Larke Jr., 2003). Career-related reasons often have an impact on the decision to choose an agriculture major in college, but other factors also have an impact on the decision.

Social reasons are also considered when students choose an agriculture major in college. Students who were already enrolled in an agriculture major have a positive perception of their experience, as do their parents (Osborne & Dyer, 2000). This is important to consider because these students have siblings and friends and are likely sharing their positive experiences with them. Sibling involvement in similar majors had a significant role in agriculture major choice (Jones & Larke Jr., 2001; Shrestha, Suvedi, & Foster, 2011; Torres & Wildman, 2001). Choosing a major because of friends was also common among emerging adults (Shrestha et al., 2011; Torres & Wildman, 2001). Many emerging adults showed that social reasons had a significant impact on college major choice, but additional factors were included in their decision making as well.

Emerging adults are also influenced by extension officers, high school teachers, and academic advisors to take agriculture majors. Employees at the local extension office are large factors in the major choice process (Torres & Wildman, 2001). Emerging adults often chose to major in agriculture because of the influence of high school agriculture teachers (Shrestha et al., 2011; Torres & Wildman, 2001). Academic advisors also played a significant role in the decision (Shrestha et al., 2011). Non-parent adults play a significant role in college major choice and other factors are considered as well.

Emerging adults choose an agriculture major because of the opportunities such a major makes available to them. Many chose to major in agriculture because of the availability of scholarships (Shrestha et al., 2011; Torres & Wildman, 2001). The opportunity to secure internships and belong to agriculture related clubs swayed a significant amount of students toward agriculture majors (Shrestha et al., 2011; Torres & Wildman, 2001). Emerging adults consider available opportunities when choosing an agriculture-related major. Students factored the ability to study abroad into their agriculture major decision (Shrestha et al., 2011)

Emerging adults make the decision to pursue an agriculture related major because of career-related reasons, social reasons, the opinions of non-parent adults and opportunities made available to them. These reasons give insight into the decision making process of emerging adults. Students also apply this decision making process when choosing a college and include many of the same factors into their decision.

### **Choice of College**

Gaining insight into why all students choose a college helps to frame the college choice of students in agriculture programs. The present study attempts to gain a further understanding of the factors students find important in the college choice process. Students tend to enroll in a college for financial factors, social factors, because of physical and academic characteristics of a school, and because of opportunities after graduation.

Emerging adults consider financial factors when choosing a college. The ability to receive financial aid influenced many emerging adults to choose a college (Cabrera & La Nasa, 2000; Dale, 2010; Hossler, Schmit & Vesper, 1999). Emerging adults who find out early about this financial aid are given a more realistic picture of potential colleges to attend (Flint, 1993). Potential students also highly considered the total cost of the college into their decision (Galotti & Mark, 1994; Hossler et al., 1999). Financial factors play a large role in the college choice process, but other factors play a significant role as well.

Social factors are a noteworthy factor in the college choice process of emerging adults. Parents contribute a great deal to the college choice process (Dale, 2010; Flint, 1993). In fact, adolescents are more likely to attend a four year university if their parents attended one as well (Cabrera & La Nasa, 2000). Relatives who attended the school also influenced emerging adults to pick a college (Burns, 2006; Hossler et al., 1999). Emerging adults were also convinced to enroll in a college by friends who currently attend or will attend (Burns, 2006; Hossler et al., 1999). Although emerging adults consider social factors when choosing a school, they use other criteria to help with the decision.

The physical characteristics of the school play a role in the college choice process. Potential students consider the distance and location of a school to be important in choosing a college (Dale, 2010; Hossler et al., 1999). Many emerging adults factored the campus atmosphere into their college decision (Galotti

et al., 1994). The size of classes at a particular school also plays a role in the choice to attend a school (Rocca & Washburn, 2005). Campus safety is another significant factor in the college choice process (Burns, 2006; Rocca & Washburn, 2005). The physical characteristics of the school as well as are considered important to emerging adults in the college choice process, but other factors are considered, too.

Emerging adults consider the academic characteristics of the school into their college choice process. Many students state that admissions requirements play a large role in their college choice (Galotti et al., 1994). The academic reputation and prestige of a school also play a significant factor for potential students (Burns, 2006; Hossler et al., 1999). Emerging adults also prefer to have high quality instructors at their school (Hossler et al., 1999). Potential students made sure to pick an institution that offered their preferred major (Galotti et al., 1994). Many emerging adults also cited talks with influential staff members as a reason for choosing a college (Cole & Thompson, 1999). Emerging adults choose a college based on the academic characteristics of the school and other factors as well.

Emerging adults choose to attend a college that offers more opportunities after graduation. A large volume of students stated that preparation for employment was a significant reason in their college choice (Burns, 2006; Esters, 2007; Rocca & Washburn, 2005). Job opportunities available at graduation were also important to these students (Esters, 2007; Rocca & Washburn, 2005). Opportunities after graduation have a significant influence over the college choice of emerging adults.

Financial factors, social factors, physical and academic characteristics of a school, and opportunities after graduation are significant factors in the college choice process for all students. Many of these factors are considered by agriculture students choosing a college as well. Understanding why all students choose a college provides insight into why people would choose an agriculture college. The present study will aid in the understanding of what individuals who attend an agriculture class find important in a college.

## **Chapter Three: Methodology**

This chapter includes five sections. The first section describes the design of the study. The second section describes the research question. The third section describes the problem statement for the study. This is followed by a section about statistical hypotheses. The fifth section describes the populations and how they were selected. The instrumentation procedures are described in the sixth section. The seventh section describes how the data was collected. The final section describes how the data was analyzed.

### **Design of the Study**

A quantitative design was chosen for this study as the researcher surveyed the population on their college choice process. This method was chosen because it helps to gather “trends, attitudes, or opinions of a population by studying a sample of that population” (Creswell, 2009, p. 12). The independent variables in the study were students of junior and senior years in high school and enrollment in an agriculture class in rural and urban communities. The dependent variables were the self-reported values attributed to factors in college choice.

### **Problem Statement and Objectives**

Education in Illinois is the second lowest funded by state in the United States (National Educational Association, 2014). Therefore, resources must be spent wisely and as efficiently as possible. Recruiting future students requires many resources. Public institutions spend \$457 to recruit each student (Noel-Levitz, 2011). This means that a university such as the University of Illinois, which enrolls approximately 7,000 freshmen each year, spends approximately \$3.2 million on their freshman class. This does not account for students that opt to go elsewhere, so the total recruitment cost can mount quickly. Any information adding to the database on college choice among high school students can help universities use their finite resources more efficiently.

The growing world population and the increase in the technology of agriculture related fields necessitate that agriculture programs secure the right students for their programs and turn them into professionals in the field (World population prospects: The 2012 revision, 2012). With that in mind, it is incredibly important to determine what these students look for in a university to bring in the right students. Illinois is home to 6 universities offering agriculture majors that compete for students, so it is important for each university to understand what motivates their potential students in the college choice process. The following research questions and hypotheses were generated to guide the current study:

- 1) What are the demographic characteristics of juniors and seniors in high school agriculture classes in selected Central Illinois school districts?

H<sup>1</sup> It is predicted that a majority of students will be Caucasian and have parents with some level of college education.

2) What factors influence high school juniors and seniors enrolled in agricultural education in their choice of college?

H<sup>2</sup> The specific hypothesis is that students' answers will focus mainly on financial factors, social factors, and the academic characteristics of the college.

H<sup>2</sup> The null hypothesis states that all factors will be valued equally by participants.

3) How do juniors and seniors in agriculture classes differ in the factors they consider to be important in their college choice process?

H<sup>3</sup> The specific hypothesis is that seniors will value financial factors more than juniors, who will list social factors as the most important factor in their college choice.

H<sup>3</sup> The null hypothesis states that juniors and seniors will have the same characteristics that are valued highly.

### **Population and Sample**

The population for this study included juniors and seniors currently enrolled in agriculture classes for the Spring Semester in three selected Central Illinois Public High Schools. Participants and their parents were able to deny consent in participation. These schools included one in an area classified as a distant town (enrollment of 540), a second in an area classified as a fringe town (enrollment around 1000), and another located in a small city located in an urbanized area which houses a large, state university (enrollment around 1500) (Illinois State Board of Education, 2014). The largest of these schools is located in an urban area whereas the others are located in rural areas. The schools were chosen because they were a fair representation of central Illinois schools. Juniors and seniors were chosen to participate in the study because the researchers hypothesized that these individuals would have more concrete college plans than underclassmen. 78 of a total of 81 students chose to participate in the study and 1 person dropped out during the survey. This made for a 95% rate of participation. These participants were organized by year in school, gender, parental levels of education, and number of agriculture classes taken. 33 participants (43%) identified themselves as juniors whereas 44 participants (57%) identified themselves as seniors. The population consisted of 41 males (53%), 34 females (44%), and 2 transgendered individuals (3%). 3 participants (4%) chose not to disclose their racial demographics. Of those who did disclose their racial demographics, 70 (93%) identified themselves as Caucasian, 3 (4%) identified themselves as black, 1 (1.5%) identified them self as Hispanic, and 1 (1.5%) identified them self as Asian. This population was comprised of 27 students from the small city in an urbanized territory, 29 from the distant town, and 21 from the fringe town.

### **Instrument**

The survey instrument for this study was developed after reviewing the relevant literature regarding relevant factors in college choice decision-making. For example, the cost and social factors were very

prominent themes in the research (Burns, 2006; Cabrera et al., 2000; Robinson, Garton, & Washburn, 2007; Rocca, 2013). The items included in the questionnaire were organized into four categories: demographics, college plans, characteristics of a college/university deemed important, and general decision-making. Participants were asked to respond to questions using free form answers, multiple-choice questions, yes or no questions, or using a five point Likert Scale. Numerical values were assigned for each possible response category as follows: (1) very unlikely, (2) unlikely, (3) undecided, (4) likely, (5) very likely and (1) not important, (2) unlikely to be important, (3) somewhat important, (4) important, (5) very important. A copy of this instrument is included in Appendix A.

### **Collection of Data**

A recruitment flyer and parental consent form were approved by the Institutional Research Board and then given to students by their agriculture teacher one week prior to distributing surveys in the classroom. Questionnaires were provided to students during their regularly scheduled agriculture class. The researcher provided students with information about the questionnaire, such as instructions, example questions, and instructing participants to skip questions that made them uncomfortable. Participant assent was secured when surveys were distributed. Questionnaires were administered through Qualtrics for the ease of data collection and proctored by the researcher in the schools. Participants were not asked for their names during the surveys, so there is no information to link participants to particular questionnaires. The majority of participants took less than 15 minutes to complete the survey. Non-participants ( $n = 3$ ) were instructed to work on homework during the given time. Because of the low percentage of non-participants, they were not asked to give their reasoning for declining to participate. With such a low response rate, it is unlikely that a nonresponse bias occurred (Huck, 2012).

### **Analysis of the Data**

This study was designed to gain insight into the college choice process of agriculture students. Following the collection period, data were coded and entered into SPSS for Windows. To assess the importance of various items on the questionnaire, descriptive statistics including means and standard deviations were calculated for each item. A correlational analysis was conducted for each significant factor and demographic. The data was analyzed with a chi-square to find a relationship among the variables. Significance was set a priori with a .05 alpha level, which is standard in social science research.

There were some limitations to this study. The sample size was relatively low; therefore its data may not be generalizable beyond the population studied. Additionally, there may be confounding variables that influence how the participants attributed value to certain characteristics. Participants may have also shown some social bias by answering what they thought the researchers were looking to see. One example of this is ranking social reasons relatively low while valuing them highly in one's mind. Selection bias may have also occurred because the schools that were surveyed were not picked at random.

## Chapter Four: Results

This chapter presents the results of the study; they will be sequenced according to the research questions listed earlier, which are as follows:

- 1) What are the demographic characteristics in high school agriculture classes in central Illinois?
- 2) What factors influence agriculture high school juniors and seniors from urban and rural backgrounds in their choice of college?
- 3) How do juniors and seniors in agriculture classes differ in the factors they consider to be important in their college choice process?

The chapter will start with demographic characteristics of the participant, such as the type of town participants reside in, gender, race, year in school, number of agriculture classes taken, parental levels of education, and whether or not siblings are in college. It continues by displaying participants' self-described likelihood of attending various forms of higher education and the characteristics they find important in institutions. The section will conclude with a comparison of the answers of juniors and seniors.

### 1) Demographic Outcomes

Objective one sought to find the demographic information of each participant. The majority of participants chose to participate in the survey ( $N = 78, 95\%$ ) out of the total population ( $N = 81$ ). This population was comprised of students from the small city in an urbanized territory ( $n = 27, 35\%$ ), students from a distant town ( $n = 29, 37\%$ ), and students from a fringe town ( $n = 21, 28\%$ ). The population consisted of 41 males (53%), 34 females (44%), and 2 trans-gendered individuals (3%). A small minority of participants ( $n = 3, 4\%$ ) chose not to disclose their racial demographics. Of those who did disclose their racial demographics, the majority identified themselves as Caucasian ( $n = 70, 93\%$ ), some identified themselves as black ( $n = 3, 4\%$ ), one identified themselves as Hispanic ( $n = 1, 1.5\%$ ), and one identified themselves as Asian ( $n = 1, 1.5\%$ ). Those who identified themselves as seniors in high school ( $n = 44, 57\%$ ) outnumbered juniors ( $n = 33, 43\%$ ). These students had taken anywhere from one through eight agriculture classes at the high school level. Twelve students (15%) were taking their first agriculture class, 14 (18%) were in their second, 17 (22%) were in their third, 22 (28%) were in their fourth agriculture class, three (4%) were in their fifth, six (8%) were in their sixth class, three (4%) were in their seventh, and one (1%) was in their eighth agriculture class.

Demographic information was also collected about the family of the participants in order to identify whether this information helps predict college choice. Seventy-six of the 78 participants chose to answer questions about the education of their parents. The participants were asked to enter the highest level of education of each parent in their lives and were given up to four parents to enter information about. Researchers were interested in the highest level of education completed by the participants' parent who

advanced the furthest in academics. The mean level of education was 3.47 with an *SD* of 1.01 (when applying numbers for each of the categories in ascending order of education,) meaning that the average participant had a parent who had secured between some college experience and a bachelor’s degree. A low number of participants had their highest academic parent that had some high school education ( $n = 1$ , 1%), a relatively low number of participants had a parent that had completed high school ( $n = 9$ , 12%), A relatively high number of participants had some college experience ( $n = 25$ , 33%), a high amount of participants had secured a bachelor’s degree ( $n = 32$ , 42%), a relatively low number of participants had a parent who had a post-graduate degree ( $n = 7$ , 9%), and a low number of participants were unsure about their parents’ level of education ( $n = 2$ , 3%). Those accepted into college had parents with a mean education of 3.29 with an *SD* of .839, meaning they had gone to some college but not completed a bachelor’s degree. This is lower when compared to the 3.47 mean of the overall sample and with a lower *SD* as well. Among these participants, every participant had their parent going the furthest academically at least complete high school (100%) with a significant amount stopping after this milestone ( $n = 5$ , 18%), the greatest number of participants had a parent that had completed some college ( $n = 12$ , 43%), a relatively high amount had a four year degree ( $n = 9$ , 32%), and a small percentage had a post graduate degree ( $n = 2$ , 7%). Of the 76 participants who addressed a question about whether or not their siblings attended college, a minority of participants ( $n = 28$ , 37%) answered that they had a sibling in college while the majority ( $n = 48$ , 63%) answered that they did not have a sibling in college. Eight participants identified that they had a sibling in community college, fourteen participants had siblings attending 4-year universities in Illinois, one participant had a sibling at a community college with the intent to transfer to a 4-year university, four participants had siblings at 4-year universities outside of Illinois, and 1 participant had a sibling in military school. Table 1 graphically represents the findings related to education level of the parents in the all participants and more specifically those who have been accepted to an institution already. Table 2 outlines the education of the participants’ siblings.

Table 1  
*Highest level of education of the furthest academic achieving parent of all participants and parents of students already accepted into institutions (N = 76)*

Highest Level of Education	Total Participants	Percentage	Accepted Participants	%
Some High School	1	1%	0	0%
High School Diploma	9	12%	5	18%
Some College	25	33%	12	43%
Bachelor’s Degree	32	42%	9	32%
Post-Graduate Degree	7	9%	2	7%
Do not know	2	3%	0	0%
Totals	76		28	

Table 2

*Number of participants with siblings attending academic institutions (N = 28)*

Institution	Number of Participants	%
Illinois Community Colleges	8	28%
Illinois 4-year Universities	14	50%
Community College to Transfer	1	4%
Out of State 4-year University	4	14%
Military Academy	1	4%

## 2) Specific Questions Regarding College Choice

Participants were asked to address questions about their likelihood of attending college, a 4-year university, and continuing their education with an agriculture related major. Their answers are represented in table 4 below. Nearly 3/4<sup>th</sup> of participants considered themselves to be very likely to seek some sort of formal education after high school ( $n = 71$ ). The distribution was much more even when participants were asked about likelihood of attending a 4-year university immediately. Nearly 40% identified themselves as likely to ( $n = 29$ ), whereas 32% considered themselves unlikely to ( $n = 24$ ), leaving 29% undecided  $n = 22$ ). 44% of participants stated that they were likely to pursue agriculture related majors in college ( $n = 33$ ), 21% were unsure ( $n = 16$ ), and 35% were unlikely to continue in agriculture ( $n = 26$ ). Table 3 displays the participants' self-described likelihood of continuing their education in various ways.

Table 3

*Participants' self-described likelihood of continuing their education in college, 4-year universities, and within agriculture*

Question	Mean	SD	N
Plan to continue education	4.61	.797	77
Plan on immediately attending a 4-year university	3.15	1.41	75
Plan on continuing education with an agriculture major	3.25	1.45	75

Note. Scale used 1 = Very Unlikely, 2 = Unlikely, 3 = Undecided, 4 = Likely, 5 = Very Likely

Participants were also asked if they had been accepted to any colleges at the time of the survey. A minority of participants ( $n = 28$ , 37%) participants indicated that they had been accepted to a college at this point and the majority ( $n = 48$ , 63%) indicated that they had not. Those who had chosen where to attend ( $n = 23$ , 82%) heavily outnumbered those who had not ( $n = 5$ , 18%). Eight of these participants indicated they intended on attending a community college, eight participants intended on attending Illinois 4-year universities, three were set to attend community college and transfer to 4-year institutions, and five were set to attend schools out of state. Of those who had not been accepted at the time of the survey, the majority ( $n = 8$ ) were opting for community college. Other choices included Illinois 4-year universities ( $n = 4$ ), community colleges to transfer ( $n = 3$ ), 4-year universities outside of Illinois ( $n = 3$ ), and military academies ( $n = 1$ ). Table 4 shows these results graphically. Of the participants who had been accepted, most were seniors ( $n = 26$ ) with a few juniors ( $n = 2$ ) and the gender was evenly

distributed ( $n$  males = 14,  $n$  females = 13,  $n$  trans = 1). Ten (36%) of those accepted declared having a sibling attending higher education and eighteen (64%) did not.

Table 4

*Schools chosen by participants who have been accepted to colleges/ universities*

School Chosen	# Accepted		# Yet To Be Accepted	
	<i>f</i>	%	<i>f</i>	%
Illinois Community Colleges	8	35%	8	23%
Illinois 4-year Universities	8	18%	4	2%
Community College to Transfer	3	7%	3	2%
Out of State 4-year University	5	7%	3	4%
Military Academy	0	0%	1	2%
Yet to Decide	5	18%	30	63%
Total	29		49	

Of those who had not chosen where they would attend school, financial aid was a common theme. Participants also brought up being unsure about what they wanted to do with life and being unsure about going to a school close to home or at a further distance. All participants were also asked to address the importance of various characteristics in their college choice. Available financial support proved to be the most important answer to participants, with the mean showing that it falls between important and very important. Participants also found job placement statistics and the school's academic reputation to be highly influential in their decision. Participants considered class size, social reasons, and pleasing a parent/ family member the least important, with mean scores in the "somewhat important" range. These responses are also depicted in Table 5.

Table 5

*Importance of various characteristics as ranked by students.*

Factor	Mean	SD	<i>N</i>
Available financial support and scholarships	4.16	0.95	75
Job placement statistics	3.97	1.12	74
School's academic reputation	3.85	1.00	74
Seeing similar people to you at the institution	3.30	1.08	73
Available ag-related majors/ clubs	3.17	1.48	73
Social reasons (friends/ significant other attending, social atmosphere of school, etc.)	3.08	1.17	74
Pleasing parent/ family member	2.99	1.32	73
Class size	2.97	1.13	74

Note. Scale used 1 = Very Unimportant, 2 = Unimportant, 3 = Undecided 4 = Important 5 = Very Important

Participants were also given the opportunity to write in additional factors they find important in their college choice process. Fifty-eight participants chose to write in factors. The most common theme that was brought up was the location or distance of the school, being brought up by 23 participants. Other themes were campus feel/ safety, athletics, available major, and quality/ availability of the faculty. These are outlined in Table 6. Some of the factors mentioned fit into categories already proposed by the

researcher, such as financial aid, price, and cost of a school fitting into the financial aid category, partying and friendly environment fitting into the social category, university and campus size fitting into class size, getting a good job fitting into the job placement statistics category, and quality/ friendly professors fitting into the academic reputation category. These answers were recoded, marked with a star on Table 5, and analyzed in Table 4 if the response differed from the earlier response. There were 7 factors that students wrote in that were not a characteristic provided in the options previously. Five write-in themes were considered to already fit into a provided category.

Table 6

*Number of participants writing in various factors as important in choosing a college (N = 58)*

Factor	Number of People Proposing Factor	%
Location/ distance	23	40%
Athletics	7	12%
Available Major	6	10%
Campus Feel/ Safety	4	7%
Quality/ Friendly Professors	3	5%
Available Part-Time Jobs	2	3%
Student Organizations	2	3%
Cost <sup>1</sup>	8	14%
Social Reasons <sup>2</sup>	6	10%
Size <sup>3</sup>	4	7%
Career readiness <sup>4</sup>	3	5%
Quality professors <sup>5</sup>	2	3%

Note. <sup>1</sup> falls into “available financial support and scholarships” category <sup>2</sup> falls into “social reasons” category <sup>3</sup> falls into “class size” category <sup>4</sup> falls into “job placement statistics” category <sup>5</sup> falls into “school’s academic reputation” category

When asked about whom they went to for help with difficult decisions such as choosing a college, nearly all of the participants identified that they would go to a parent. Additional answers included guidance counselors, agriculture teachers, friends, or other family members. Participants were also asked to write in the three factors they considered to be most important in their college choice process. Overall, financial aid/cost of school proved to be the most commonly considered factor in all three conditions, brought up by 42 of the 67 people who answered the section. Other common answers included availability of major/ relationship to agriculture (27 people), academic reputation (28 people), job placement statistics (18 people), and location (25 people). These choices are broken down by importance given to them by the participants in Table 7. For the choice considered the top factor, a majority of participants listed the financial aid/ cost of school, with major/ relationship to agriculture as another high influences. Location, job placement statistics, and class/ school size were also common factors listed. For the second most important factor, there was a greater variety of influences listed. Financial aid still proved to be the most commonly listed influence, but other choices such as location, social factors, class/ school size, academic reputation, and major/ relationship to agriculture were also listed in a large portion

of the responses. For the third factor, academic reputation was the factor most commonly listed. Location, financial aid, and social factors were also listed by a fair amount of participants.

Table 7

*Participants' listing of their three characteristics they deem most important in their college choice (N = 67)*

Factor	Number of Participants Listing as Factor #1		Number of Participants Listing as Factor #2		Number of Participants Listing as Factor #3	
		%		%		%
Financial Aid/ Cost	23	35%	14	23%	5	9%
Major/ Connection to Agriculture	16	25%	8	13%	3	5%
Location	9	14%	7	12%	8	14%
Class Size	5	8%	6	10%	4	7%
Job Placement	5	8%	8	13%	4	7%
Statistics						
Academic Reputation	4	6%	6	10%	18	32%
Social Factors	1	2%	6	10%	8	14%
Pleasing Family	1	2%	1	2%	2	4%
Atmosphere	1	2%	2	3%	2	4%
Seeing People Similar to you	0	0%	1	2%	1	2%
Sports	0	0%	1	2%	1	2%

The results show that agriculture students who plan to continue their education in agriculture differ statistically in some ways in what they find important in a college from the general population in agriculture classes. There was a difference in the factor considered to be of top priority by those who planned to continue their education in agriculture and this proved to be statistically significant with a chi-square test  $X^2(40, N=75) = 61.261, p = .017$ . There also proved to be a statistically significant difference when participants named their third most important characteristic with a chi-square test,  $X^2(40, N=60) = 56.744, p = .042$ . The availability of ag majors and clubs was also statistically significant. This correlation was also shown in a chi-square test,  $X^2(16, N=73) = 89.996, p = .000$ . There was a correlation between continuing an education in agriculture and preferring to see similar people to them. A chi-square test showed results of  $X^2(16, N=71) = 33.902, p = .006$ . Continuing in agriculture also effected how important someone finds job placement statistics, with chi-square results of  $X^2(16, N=71) = 27.819, p = .033$ . There was also a positive correlation between having more than one parent with some amount of college experience and continuing education in agriculture, with chi-square values of  $X^2(4, N=75) = 10.269, p = .036$ . Additionally, the more agriculture classes someone has taken in high school is positively correlated with being more likely to continue with an agriculture major in college,  $X^2(8, N=75) = 16.150, p = .040$ . Gender also seemed to effect whether someone planned to continue with an

agriculture major, with chi-square values of  $X^2(8, N = 75) = 30.829, p = .000$ . This data is represented in Table 8.

Table 8

*Significant effects of continuing an education in agriculture on various characteristics*

Factor	Agricultural education plans		$X^2$	<i>P</i>	<i>N</i>
	Continuing	Not continuing			
Most Important Factor	4.40 (2.647)	3.19 (2.413)	61.261*	.017	75
Third Most Important Factor	4.74 (2.64)	3.60 (2.38)	56.744*	.042	60
Available Ag Major	4.31 (.998)	2.29 (1.223)	89.996*	.000	73
Job Placement Stats	4.10 (.923)	3.88 (1.269)	27.819*	.033	71
Multiple Parents with College Experience	1.42 (.502)	1.69 (.468)	10.269*	.036	75
Number of Agriculture Classes Taken	2.03 (.769)	1.69 (.604)	16.150*	.040	75

Note \* = significant at  $p \leq .05$ , Standard Deviations appear in parentheses below the means

There was a significant relationship between ranking financial aid highly and ranking school's academic reputation highly. A chi-square test was performed and found a significant relationship between these values,  $X^2(16, N = 74) = 43.155, p = .000$ . Another statistic of note is that there was a significant correlation between available financial aid and job placement statistics,  $X^2(16, N = 73) = 55.400, p = .000$ . There also was a positive correlation between ranking available financial aid highly and class size with a chi-square test  $X^2(16, N = 74) = 26.669, p = .045$ . Seeing people similar to them and available financial aid also had a positive correlation with a chi-square test  $X^2(16, N = 73) = 63.106, p = .000$ , as did who they went to for advise,  $X^2(35, N = 68) = 42.136, p = .047$ . These results are represented in Table 9.

Table 9

*Significant effects of valuing financial aid highly on other characteristics*

Factor	Financial Aid Rank		$X^2$	<i>P</i>	<i>N</i>
	High	Low			
Academic Reputation	3.93 (.899)	3.50 (1.345)	43.155*	.000	74
Job Placement Stats	4.14 (1.025)	3.29 (1.267)	55.400*	.000	73
Class Size	3.13 (1.096)	2.29 (1.069)	26.699*	.045	74
Seeing Similar People	3.49 (.972)	2.50 (1.160)	63.106*	.000	73
Advise/Tough Decisions	3.53 (2.41)	4.07 (2.78)	42.136	.047	68

Note \* = significance at  $p \leq .05$ , Standard Deviations appear in parentheses below the means

There also proved to be a positive correlation between one's parents' highest level of education and several factors. One of these factors is who an individual goes to for advise, which had a positive correlation with a chi-square of  $X^2(35, N = 68) = 50.138, p = .047$ . Job placement statistics also proved to have a significant relationship with parents' education, with a chi-square of  $X^2(20, N = 72) = 36.934, p = .012$ . The choice listed as the third most important also had a significant correlation with parental education, with a chi-square of  $X^2(40, N = 60) = 58.234, p = .031$ . This data is represented in Table 10.

Table 10  
*Significant effects of parental levels of education on various characteristics*

Factor	Parental College Experience		$X^2$	<i>P</i>	<i>N</i>
	Some +	None			
Advise/Tough Decisions	4.17 (2.39)	2.42 (1.240)	50.138*	.047	68
Job Placement Stats	4.15 (.971)	3.08 (1.443)	36.934*	.012	72
Third Most Important Factor	3.46 (2.49)	4.36 (2.38)	58.234*	.031	60

Note \* = significance at  $p \leq .05$ , Standard Deviations appear in parentheses below the means

There also proved to be some statistically significant data that did not fit into the above tables. There was a positive correlation between seeking some sort of formal education after college and the characteristic listed as the second most important in their college choice process with chi-square values of  $X^2(28, N = 63) = 81.653, p = .000$ . Those who had been accepted into college also had a positive correlation with the second most important characteristic,  $X^2(7, N = 63) = 17.252, p = .016$ . There also was a positive correlation between having several parents with college experience and the type of school one's sibling attended,  $X^2(3, N = 27) = 8.392, p = .039$ .

### 3) Year in School

Surprisingly, one's year in school did not have a significant impact on what a student finds to be important in an institution when analyzed with a chi-square test. The availability of agriculture related clubs and majors showed an insignificant positive correlation with year in school with a chi-square test,  $X^2(4, N = 75) = 1.669, p = .796$ . Available financial support and scholarships also showed to have an insignificant relationship with year in school, with a chi-square test,  $X^2(4, N = 74) = 5.128, p = .274$ . There was a non-significant effect of year in school on university/ class size with a chi-square test,  $X^2(4, N = 74) = 1.872, p = .759$ . Job placement statistics had a non-significant relationship with school year as well, with a chi-square test of  $X^2(4, N = 73) = 4.013, p = .404$ . Pleasing a parent/ family also had an insignificant relationship with year in school with a chi-square test,  $X^2(4, N = 73) = 7.661, p = .105$ . There was a statistically insignificant effect of year in school on school's academic reputation with a chi-square test,  $X^2(4, N = 74) = 3.211, p = .523$ . The effect of year in school on seeing people similar to themselves proved to be insignificant with a chi-square test,  $X^2(4, N = 73) = 1.911, p = .752$ . Social

reasons were effected in an insignificant way by year in school with a chi-square test,  $X^2(4, N = 74) = 3.884, p = .422$ . However, year in school did have an impact on whether or not someone intended to attend a 4 year university,  $X^2(4, N = 75) = 10.035, p = .040$ . It also had an impact on someone's reason for not choosing an institution to attend,  $X^2(3, N = 34) = 8.056, p = .045$ . These results are also displayed in Table 11.

Table 11  
*Effects of Year in School on Various Characteristics*

Factor	Year in School		$X^2$	$p$	$N$
	Junior	Senior			
Plan on Attending a 4 Year University	3.09 (1.146)	3.19 (1.592)	10.035*	.040	75
Reason for Not Identifying School	2.00 (1.112)	2.53 (1.124)	8.056*	.045	34
Ag Majors/ Clubs	3.09 (1.422)	3.23 (1.541)	1.669	.796	75
Available Financial Aid	4.38 (.907)	4.00 (.963)	5.128	.274	74
Class Size	3.16 (1.139)	2.83 (1.124)	1.872	.759	74
Job Placement Stats	4.19 (.910)	3.81 (1.234)	4.013	.404	73
Pleasing Family	3.03 (1.402)	2.95 (1.268)	7.661	.105	73
Academic Reputation	3.78 (1.070)	3.90 (.958)	3.211	.523	74
Seeing similar people	3.19 (1.030)	3.39 (1.115)	1.911	.752	73
Social Reasons	3.00 (1.078)	3.14 (1.241)	3.884	.422	74

Note \* =  $p \leq .05$ , Standard Deviations appear in parentheses below the means

## Chapter Five: Discussion

It has recently been estimated that there is a significant shortage of agricultural scientists (McClure, 2014). This lack of agricultural scientists makes it incredibly important to recruit agriculture students and keep them in the field of agriculture. However, Illinois is one of the states with the lowest funding of education in the entire country. (National Educational Association, 2014). Therefore, it is incredibly important that recruitment money is spent wisely. The present study aims to add to the knowledge about the college choice process and improve recruitment.

This study examined the characteristics high school agriculture students in central Illinois find important in their college choice process. Its purpose was to gain insight into the minds of emerging adults and aid in the recruitment process. Some interesting findings were that parental levels of education, whether or not someone intended to continue their education in agriculture, and valuing available financial support highly seemed to influence a student's opinion about the characteristics considered important in a college. This section is organized by the research questions proposed earlier.

There were three major research questions in this study. The first research question sought to discover the demographics of the participants. It was hypothesized that the participants would mainly be Caucasian and have parents with some level of college education. This hypothesis was supported. The second research question sought to quantify how important various characteristics were in their college choice. The null hypothesis stated that all factors would be valued equally, while hypothesis one identified financial aid, social factors, and the academic characteristics of a school to be the most important. The researchers were forced to reject both hypotheses. The third research question sought to quantify a difference between juniors and seniors in how they valued various characteristics. The null hypothesis stated that they would factor the same characteristics highly. The researchers were not able to reject the null hypothesis.

The first research question was about the demographics of the participants. Findings supported the hypothesis, that participants would be mainly Caucasian with parents who had some college experience, in that the vast majority of participants were Caucasian and the majority of participants had a parent who had attended some level of higher education. This falls in line with the demographics in Rocca and Washburn's 2005 study and mirrors the demographics of the region. This is significant because it can help recruiters further understand who they are attempting to recruit. It is important to also evaluate how those not fitting into this narrow set of characteristics value items in their college choice process as well to further aid in recruitment of everyone.

The second research question focused on how the factors would be valued by participants. The null hypothesis for research question two was that all factors would be valued equally by participants. The majority of participants identified themselves as likely to seek some sort of formal education after high

school, hinting that the null hypothesis may not be correct. Additionally, there was a disparity in what participants found to be important in their college choice process. Specifically, available financial support and scholarships, job placement statistics, and the school's academic reputation proved to be the most highly valued by the population. This falls in line with Burns (2006), Dale (2010), and Hossler et al. (1999), who came across similar results. Social reasons, pleasing a parent/ family member, and class size were the least highly valued by the population. Class size was perhaps the least mentioned among the relevant literature; therefore this result seems to coincide with the literature. However, social reasons were often found to be one of the most important characteristics for students in choosing a college (Burns, 2006; Hossler et al., 1999). Perna's 2000 study, used as the framework for this study, also seems to value social factors more highly than the participants of this study. Therefore, the current research seems to clash with relevant literature over this topic. This could be due to having a vague definition of "social reasons" in the given survey or perhaps to the rise in technology allowing today's emerging adults to contact each other through more text, audio, and visual methods than ever before. Because of this differential in the value attributed to various characteristics, the researchers are forced to reject the null hypothesis that all factors would be valued equally. This parallels Schwartz's (2010) definition of values, which states that values are ranked in reference to other values. This is significant because this knowledge can help recruiters further focus their recruitment with what an individual would likely consider important.

The research hypothesis for the second research question stated that the financial, social, and academic characteristics would be valued the most highly by participants. Indeed, financial support and the school's academic reputation proved to be two of the three factors considered most important by participants (Burns, 2006; Dale, 2010; Hossler et al., 1999). However, social reasons were not a high ranking value according to the participants. Again, this seems to differ from Perna (2000), who places social values as an important layer within her framework. Because social reasons were not valued as highly as was proposed, the researchers are forced to reject the specific hypothesis for the second research question. This is significant because it may lead to additional research where the researchers seek to discover how important social factors really are. Social was perhaps less important than in past studies because of the rise in technology. Today's teens are able to communicate with friends over a wide range of media, meaning they do not have to be in the same location to maintain their friendships and devaluing the importance of social values on college choice.

The results outlined that those who plan to continue their education within the field of agriculture statistically differ from those who do not. They differed in their gender, what they consider to be their top priority, in how important they find an available agriculture major to be, in number of parents who had attended some college, in number of agriculture classes taken, and in how important they find job

placement statistics to be. This is important because it can allow recruiters to focus on females who have taken more agriculture classes in their recruitment and also push job placement statistics. These results parallel Burn's (2006) study, which found that the availability of majors and the opportunities after graduation were two important characteristics leading students to enroll in a college of Agriculture, Food, and Natural Resources. The results also found that there is a link between valuing financial aid highly and some values. Those who value financial aid highly tend to value the school's academic reputation, job placement statistics, class size, seeing people similar to them, and who they turned to for advice more highly than those who were less concerned with financial aid. It seems that these individuals were highly concerned with getting the best experience for their money. These links could prove to be helpful in the recruitment process, as recruiters can try to point out the value of the education. The present study also found that the education level of one's parents also effects how the value some characteristics.

Having parents with some level of college experience is correlated with students becoming more concerned with job placement statistics and who they go to with help on difficult problems. These perceptions were likely caused by the parent's experiences in college and finding jobs after college. This is important because it allows recruiters to focus their recruitment differently for those who have had parents attend a college and those who have not. Results of this study show a link between having multiple parents with college experience and the type of school one's sibling attends. These individuals were more likely to attend a community college and less likely to attend a 4-year Illinois university. The results also found links between having similar choices for the second most important value in college choice and continuing formal education as well as having being accepted into a school at the time of the survey. This is important because it shows that those who plan on attending schools value different characteristics than those who do not.

The third research question focused on the differences between juniors and seniors in their ranking of values relative to the college choice process. The null hypothesis was that juniors and seniors will value the same characteristics the most. The current study was not able to find any statistically significant differences between the answers of juniors and seniors with how they value specific values of a college. This is in congruence with Hossler et al.'s (1999) study, which found that juniors and seniors had a better idea of what characteristics they found to be important than younger individuals. However, there was significance between year in school and planning to attend a 4 year university immediately after school, as seniors selected themselves as more likely. Additionally, juniors were more likely to differ from seniors in their reasoning for not having identified a school. Because little significance was found, the researchers cannot reject the null hypothesis. This is significant because it will allow recruiters to start their recruitment earlier than they traditionally have and potentially push the idea of attending a 4-year

university. This effort could begin before junior year, as students may value the same characteristics at this point as well.

### **Recommendations**

The researchers have a few recommendations for universities. Findings from objective one, that the majority of students were Caucasian and had parents with some college experience, should have high interest for university recruiters and high school counselors. Because this demographic was found, it is important to realize that the demographic being recruited is mainly Caucasian. The second objective found that certain factors were valued more highly by participants. Because of these results, the researchers recommend that recruiters focus their recruitment toward agriculture students around available financial aid, job placement statistics, and the school's academic reputation. Findings from the third objective should be of interest for recruiters and high school counselors. This objective found links between several factors, such as parental levels of education and job placement statistics. Because there is a link between valuing financial aid highly and several other factors, university recruiters could try to send out surveys to their targeted high schools for them to administer to juniors. These surveys would include a question about how concerned the students are with financial aid. If given in agriculture classes, they could also include a question about whether students plan to continue their education within the field of agriculture. After having this data, recruiters can target the recruitment more specifically to students who do and do not value financial aid highly. Additionally, recruiters should attempt to get parental education information, which will further allow universities to make their recruitment efforts more specific. University recruiters should also move to start recruitment earlier, as juniors and seniors seem to value the same characteristics in an institution (Hossler et al., 1999). Researchers should also move to target females, especially those who have taken several agriculture classes, to their agriculture programs. The researchers also have a recommendation for high schools. High school teachers and guidance counselors should attempt to prepare students for college in a more comprehensive manner. They should educate students on the importance of financial aid/ repayment and job placement statistics.

This study makes a significant contribution to understanding the college choice process and helping recruitment, however there is still need for future research. The first research question found mostly Caucasian individuals; therefore, it may be beneficial to do a similar study with participants who have a greater amount of diversity. The second objective found the importance of various characteristics in the college choice process. This study had differing data on the importance of social factors when compared to the literature (Burns, 2006; Perna, 2000). Therefore, it may be beneficial to further research the importance of social factors in the college choice process. Additionally, it may be advantageous in future research to have students outline what their definition of things such as "social factors," "available financial aid," and "class size" to see if they attributed scores to these values as they intended. It may also

be beneficial to isolate the high achieving students because of the admissions requirements of schools such as the University of Illinois, similar to Dale's (2010) study. The third objective found that juniors and seniors have the same values in their college choice process. Because of this, it may be beneficial to start recruitment earlier. However, more research is required to figure out when students begin to have their current value set.

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## Appendix A: Questionnaire for the Participants

Q1 Welcome to the Choice of College Survey! The Department of Agricultural Education at the University of Illinois supports the practice of protection for human subjects participating in research. The following information is provided for you to decide whether you are willing to participate in the present study. The purpose of this study is to determine what high school seniors in agriculture classes find important in choosing a college. As part of this study, you will be asked to complete a survey which will take about thirty minutes. There are not anticipated to be any risks to participation beyond those that exist in daily life. Participants may benefit from clarifying their thoughts and institutions of higher education may benefit from understanding the thought process of people deciding on a college. This study is completely voluntary and confidential. You should be aware that even if you participate, you are free to refrain from answering certain questions or withdraw at any time. Accepting or declining to participate will in no way effect your grade in this course. If you are willing to participate, please click to the next slide. Doing so will give your assent to take the survey.

Q2 Please enter your demographic information in the spaces provided below. Please make sure to complete all questions. Select "Next Page" at the end of the demographic section to move on to the next section of questions.

Q3 Choose your grade level in high school below:

- 11--Junior (1)
- 12--Senior (2)

Q4 Indicate your gender

- Male (1)
- Female (2)
- Trans (3)

Q5 Which race/ethnicity do you identify with?

Q6 How many agriculture classes have you taken at the high school level?

Q7 Please select the HIGHEST level of education of your parent(s)/guardian(s). You can enter up to 4 parent(s)/guardian(s).

Q8 What is the highest level of education of Parent 1?

- Some High School (1)
- High School Diploma (2)
- Some College (3)
- 4-year Degree (Bachelor's) (4)
- Graduate Degree (Masters, PhD) (5)
- Do Not Know (6)

Q9 What is the highest level of education of Parent 2?

- Some High School (1)
- High School Diploma (2)
- Some College (3)
- 4-year Degree (Bachelor's) (4)
- Graduate Degree (Masters, PhD) (5)
- Do not know (6)
- No Parent 2 (7)
- Click to write Choice 8 (8)

Q10 What is the highest level of education of Parent 3?

- Some High School (1)
- High School Diploma (2)
- Some College (3)
- 4-year Degree (Bachelor's) (4)
- Graduate Degree (Masters, PhD) (5)
- Do Not Know (6)
- No Parent 3 (7)

Q11 What is the highest level of education of Parent 4?

- Some High School (1)
- High School Diploma (2)
- Some College (3)
- 4-year Degree (Bachelor's) (4)
- Graduate Degree (Masters, PhD) (5)
- Do Not Know (6)
- No Parent 4 (7)

Q12 Do you have any siblings attending higher education (going to school beyond high school)?

- Yes (1)
- No (2)

Q13 If you answered yes to the previous question, please indicate where:

Q14 Please answer the following questions about your college thought process in the spaces provided below. Please make sure to complete all questions.

Q15 Answer the following questions about continuing education from very unlikely to very likely:

	Very Unlikely (1)	Unlikely (2)	Undecided (3)	Likely (4)	Very Likely (5)
I plan on seeking some sort of formal education after high school (be it at a university, a community college, or technical school): (1)	<input type="radio"/>				
I plan on attending a 4 year university immediately after college: (2)	<input type="radio"/>				
I plan on continuing my education with an agriculture related major in college: (3)	<input type="radio"/>				

Q16 Have you been accepted into any colleges/ universities at this point?

- Yes (1)
- No (2)

Q17 Have you chosen where you will attend at this point?

- Yes (1)
- No (2)

Q18 If yes, please indicate what college/ university you plan on attending:

Q19 If not, what is the most significant reason you have not identified a school?

Q20 How important are the following characteristics to you in choosing a college/ university?

	Not important (1)	Unlikely to Be Important (2)	Somewhat important (3)	Important (4)	Very important (5)
Available ag-related majors/ clubs (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Available financial support and scholarships (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Class size (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Job placement statistics (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pleasing parent/ family member (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
School's academic reputation (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Seeing similar people to you at the institution (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social reasons (friends/ significant other attending, social atmosphere of school, etc.) (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q21 What are the other characteristics you find important in choosing a college/ university? (please list)

Q22 What would you consider the three most important characteristics of a college/ university as listed above (including your written in answers)?

Characteristic #1 (1)

Characteristic #2 (2)

Characteristic #3 (3)

Q23 Who do you generally go to for help with tough decisions (such as choosing a college)?