# Effects of factors and people of influence on college choice comparing general population and top academic students 

Winnie L. Callahan<br>University of Nebraska at Omaha

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# EFFECTS OF FACTORS AND PEOPLE OF INFLUENCE ON COLLEGE CHOICE COMPARING GENERAL POPULATION AND TOP ACADEMIC STUDENTS 

 byWinnie L. Callahan

## A DISSERTATION

Presented to the Faculty of The Graduate College at the University of Nebraska In Partial Fulfillment of Requirements For the Degree of Doctor of Education

Major: Educational Administration
Under the supervision of Dr. Jack A. McKay

Omaha, Nebraska
July 2003

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## Nebraska

Omaha

# EFFECTS OF FACTORS AND PEOPLE OF INFLUENCE ON COLLEGE CHOICE COMPARING GENERAL POPULATION AND TOP ACADEMIC STUDENTS 

Winnie L. Callahan, Ed.D.<br>University of Nebraska at Omaha, 2003

Advisor: Dr. Jack A. McKay

The purpose of this study was to determine if there were statistically significant differences in the factors or people who influenced general population students as compared to top academic students in their choice of college/university. Influences were delineated according to factors or people because recruitment strategies must differ based on these categories. These analyses determined the impact the demographic characteristics of students' gender, community type, high school size, high school type, and anticipated college/major had on higher education choice.

The student population surveyed was derived from two student types attending the University of Nebraska's Peter Kiewit Institute. The first student type was the 155 (86 returns) top academic students who were receiving the Walter Scott, Jr. Scholarships. The second student type, 155 ( 97 returns) general population students exclusive of Scott Scholarship winners, was randomly selected.

Using SPSS, two-way analyses of variance were run controlling for various demographic characteristics. Top academic students assigned a higher level of importance to the influence of scholarship components of full paid tuition, residence hall, books/fees and personal computer system on their choices than did general population students. For the factor of reputation, the component of personal interest shown in the student by faculty/staff indicated a statistically significant difference with female students
having a higher mean score than males. In the factor of proximity, being close enough to visit on holidays and far enough to gain independence showed statistically significant differences with higher mean scores for top academic students despite controlling for demographic characteristics.

For the people of influence, statistically significant differences between top academic and general population students were found regarding both parents/guardians, mother/female guardian and father/male guardian. In each case, top achieving students had a higher mean score.

Statistically significant differences were found between student types, generally without regard for demographic characteristics, other than gender and college. Conclusions suggest recruiting strategies should be academically focused and personalized according to student type.

## ACKNOWLEDGMENTS

I wish to express my deepest gratitude to my doctoral chair, Dr. Jack A. McKay. His guidance, support, encouragement and ability to "turn around" my many drafts in record time, were key to my ability to stay focused on the task at hand and to my maintaining the momentum needed to reach this educational pinnacle. Not only did he act as my chair, but he was a friend who understood life is not always as one might wish it to be, but rather a series of events that are measured not by their gravity, but the way in which one reacts to the hand that's been dealt.

Also, I wish to sincerely thank Dr. Marilyn L. Grady who often asked of my progress and expressed hope that someday I would achieve this dream. To Dr. John W. Hill, I express my sincere appreciation for his insistence that the research be more inclusive ... in so doing, he enabled me to produce a much more complex study than I would ever have felt capable of performing. Lastly, to Dr. Laura E. Schulte I would like to state my admiration of her understanding and control of statistical data. Not only did she take countless hours to help me with running tests and interpreting results, but she shared a special personal excitement with me as the study came to closure ... an excitement that clearly helped me go the last and hardest mile.

Appreciation is extended to my friends and colleagues with whom I work now and to those I've worked with in years past. The associations, the laughs, the tears and even the frustrations have helped me grow both personally and professionally. You have helped me become the person I am today. Without you, a page in my life's book would be missing. I am indeed lucky.

## DEDICATION

My dissertation is dedicated to those family members and friends without whom, my life and any accomplishments would mean little.

To my sons, John Brien and Clark Patrick, thank you so much for your steadfast love and unwavering belief in me. It was truly your pride and relentless encouragement that enabled me to complete so daunting a task. You willingly accepted the many sacrifices we had to make as a family in order for me to achieve this educational milestone. I've always loved you more than life itself, but in recent months, though I thought it impossible, we've grown even closer. A big part of the credit for this achievement goes to the two of you. Thank you so much for being there for me.

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To Dr. Theresa A. Norris, who through this process redefined, at least in my mind, any previous definition of the word "friend." You took time to help me when you did not have the time to give. You made stern demands on me to continue when I much preferred to quit, and you laughed and cried with me as new drafts or new tests had to be prepared or run. "Some friends are silver and others truly are gold." There is no doubt in my mind where you fit.

To Walter Scott, Jr. who provided me the chance of a lifetime. Your belief in me and your vision of what The Peter Kiewit Institute could become taught me a lot about
"living up to expectations." Not succeeding simply was never an option. I can only begin to imagine the impact this educational endeavor will have, not only on young people, but on our city, state and nation. You and Suzanne give so much to so many ... thank you for allowing me to have even a small part in the legacy you build.

Lastly, to my parents ... I only wish they were alive to share this with me.

I've always felt that if you give young people the opportunity to grow up with the right kind of education and ethics, they'll become productive citizens.

Walter Scott, Jr.

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## CHAPTER 1

## Introduction

The Peter Kiewit Institute of Information Science, Technology \& Engineering began as a concept in 1995 with the development of a Charter establishing what was called, at that time, The Omaha Institute. The Peter Kiewit Institute combined two colleges from two different campuses of the University of Nebraska system: the University of Nebraska - Lincoln's College of Engineering and Technology and the University of Nebraska at Omaha's College of Information Science and Technology in a collaborative partnership with business and industry. It was a unique model, from its Board of Policy Advisors consisting of 11 CEOs to its program design and public/private financial backing. This model built a new paradigm for the role of governance, curriculum development and funding in post-secondary education. It provided enhanced educational opportunities as well as creating a potential economic driver for the city of Omaha, the state of Nebraska, the Midwest region and the nation.

The intention of the Board of Policy Advisors was stated in the original Omaha Institute Charter (1995):

The Omaha Institute will provide an administrative structure that allows creation of synergy among these two Colleges in order to expand educational opportunities in information science and engineering at the undergraduate and graduate levels and continuing education programs for professionals in information science, technology, and engineering. The Institute and programs in the Institute will be authorized to contract with the private sector for the conduct of research or
educational programs. These interactions will lead to new developments of importance to business and industry. Enhanced economic development in Nebraska and the region, improved stature for the University of Nebraska and direct support for the business community are expected results from formation of the Institute. (p. 1)

The purposes of the Board of Policy Advisors specifically referred to "creating a center of excellence" in information science, technology and engineering, providing the Omaha metropolitan area and the State of Nebraska with "a unique resource for the education of their current and future employees, for the support of existing technologies, and for the creation of partnerships to develop new business opportunities through advancing technology". In addition, it was to exploit the advantages of "cooperative programming and the potential for mutually beneficial interactions with the private sector" and to create the achievement of common goals and a common environment for the success of the Institute (The Omaha Institute Charter, 1995, pp. 1,2).

In order to accomplish the stated purposes set forth by the Board of Policy Advisors, a plan was developed to recruit and retain students who clearly were among the top graduates in the state of Nebraska. The desired student profile of those selected for scholarship recruitment included scholars with ACT scores of 30 or above out of a possible 36 (ACT Assessment, 2003) or a comparable SAT score of 1340 or higher out of 1600 (College Board Online, 2003). In either case, this would identify the top $10 \%$ of all students taking the college entrance exams. Potential students were expected to have GPAs of at least a 3.5 on a 4.0 scale. Demonstrated leadership through participation in
school and/or civic activities was deemed very important to the overall success of the program and its graduates going forward.

Over The Peter Kiewit Institute's short 5-year history, success has been evident in a variety of ways. For example, according to the Enrollment Statistical Summary Fall 2002 (University of Nebraska at Omaha Office of Institutional Research, 2002), the student population grew $109 \%$ from 1,098 in the fall of 1997 to approximately 2,300 in the fall of 2002 (see Appendix A).

Other indicators of success in reaching The Peter Kiewit Institute's initiatives can be seen in the ACT scores of those receiving the Walter Scott, Jr. Scholarship. In the fall of 1997, 28 students received the Walter Scott, Jr. Scholarship. The ACT scores of these students had a median of 29.5 and a mode of 28 , slightly below the desired student profile. Of the 322 applications for the Walter Scott, Jr. Scholarship in 2002, 56 students were selected. These 56 students had a median ACT score of 34 and a mode of 34 , significantly above the desired student profile. In addition, the overall numbers of applications have increased each year with the number of "top" students (those with ACT test scores of 27 or above) growing from approximately $10 \%$ of the application pool to nearly $30 \%$. These numbers come from application records in the Administrative Office of The Peter Kiewit Institute.

The Board of Policy Advisors, as required by the original charter, consists of 11 leaders of business, government agencies, and industry (The Omaha Charter, 1995). This Board of Policy Advisors along with the university administrative team - the NU president, the two chancellors whose campuses are represented in The Peter Kiewit

Institute, their vice-chancellors for academic affairs, and the deans of the two colleges though pleased with the success, are mindful of the fact that the more academically gifted the students, the more noteworthy the competition is for these students. In other words, the young people recruited to receive the most financially lucrative scholarship offered through the university system, the Walter Scott, Jr. Scholarship, could attend any institution of higher learning in the nation and probably be given a "full-ride" scholarship to do so.

In an effort to keep the competitive edge in student recruitment, The Peter Kiewit Institute must understand as much as possible why exceptionally talented students make the choices they make as they select a college to attend. Previous studies point to factors such as academic reputation, cost, location and size (Murphy, 1981).

The study done by Litten, Sullivan and Brodigan (1983) determined that additional factors like fields of study, social atmosphere and careers had impact on selection of a school. Gender was also deemed a determiner of importance in weighing would-be advantages in studies provided through the works of Lewis and Morrison (1975) and Zemsky (1986). Phillips' ethnographic study (1986) supported the notion that differing constructions of the meaning of college attendance resulted in varying selections.

The Carnegie Foundation report of 1986 cited parents as the most influential determiner of school selection and choice. It further divided the parents by those who did not themselves graduate from college as carrying more pressure and influence than those
where the attendance in college is simply a family expectation that students grow up with as a "normal part of life" (p.31).

The study by Russick and Olsen (1976) supported this notion of parental influence. A study in Minnesota by Wilson (1997) also determined parents to be the most influential persons impacting a student's selection of a higher education institution. At the same time, a study by Sewell and Armer (1966) raised the issue of the potential influence of neighborhood impact and its impact on aspirations.

## Statement of the Problem

The Peter Kiewit Institute now faces a new test. As the academic level of student recruits increases, the number and prestige of institutions having an interest in them also increases. The challenge for The Peter Kiewit Institute is how to remain competitive in attracting these exceptional scholars. The Peter Kiewit Institute in its 5 short years of existence has had success in curbing the "brain-drain" out of the state of Nebraska and subsequently keeping the best and brightest in the state for their higher education experience. The concept of keeping young people in the state for college was to encourage these same students upon graduation to remain in the state for their career opportunities. This was one of the driving forces and primary mandates of the business leaders and government officials as they formulated a plan with the university administrative team. This mandate helped to guide the formation of The Peter Kiewit Institute dating back to 1995-96 (The Omaha Institute Charter, 1995).

The success of The Peter Kiewit Institute, while positive, requires on-going evaluation and diligence to capitalize on the existing momentum and to continue the
growth of the institute. Without this growth, many of Nebraska's talented young people may seek education and career opportunities outside the state.

Over the 5-year history, the academic standing of the recruitment class has seen an annual increase in ACT scores and the students' class rank. Within the last 2 years The Peter Kiewit Institute recruits have reached a point where some traditional reasons for acceptance of the Walter Scott, Jr. Scholarship offers have begun to fade (Midwest Survey and Research, 2001; Midwest Survey and Research, 2002). Initially, students and their families stated that the scholarship amount and computer system were among the very top reasons they chose to enter The Peter Kiewit Institute (Midwest Survey and Research, 1998; Midwest Survey and Research, 1999; Midwest Survey and Research, 2000). Within the last year, the scholarship students that The Peter Kiewit Institute has attracted are among the top $2 \%$ to $3 \%$ in the nation based on the National Ranks for ACT Scores (ACT Assessment, 2003). These students would get full funding regardless of the institution they selected and are aggressively recruited from among the nation's most renowned colleges and universities.

Knowing that scholarship dollars are only one factor in college choice, it is important to future success of recruitment efforts to clearly understand the other factors that might attract students to this young program. The fields of study provided through the colleges in The Peter Kiewit Institute do not tend to attract young women and minorities at the rates needed to fill business and industries' requirements, short-term or long-term (Congressional Commission on the Advancement of Women and Minorities in Science, Engineering and Technology Development, 2000). A well-educated pool of
professionals must include a broader population base to meet the current and projected needs of this highly desirable industry. This has been an on-going national and international challenge for post-secondary education and business (Congressional Commission on the Advancement of Women and Minorities in Science, Engineering and Technology Development, 2000).

The Peter Kiewit Institute's growth has presented a significant challenge going forward. Continuing to draw academically talented students is critical to fulfilling the mandates that led to the formation of The Peter Kiewit Institute. Understanding the factors that attract those young people is paramount to broadening the population base from which the programs must draw. This study was designed to help determine the multiplicity of factors and people that impact students in making their final decision and commitment.

## Purpose

The purpose of this study was to determine if there were statistically significant differences in the factors or people who influenced general population students as compared to top academic students in their decision on where to attend college/university. Influences were delineated according to factors or people because recruitment strategies must differ based on these categories. These analyses determined the impact the students' gender, community type, high school size and high school type had on their higher education expectations. In addition, distinction was made by anticipated college and major. The following research questions were posed in this study.

## Research Questions

1. Is there a statistically significant difference between general population students (control group) and top academic students (experimental group) with regard to the influence of the factors of scholarship, reputation of school and proximity to home when selecting a college or university?
a. Is there a statistically significant difference between general population students and top academic students with regard to the influence of factors when controlling for gender?
b. Is there a statistically significant difference between general population students and top academic students with regard to the influence of factors when controlling for high school size?
c. Is there a statistically significant difference between general population students and top academic students with regard to the influence of factors when controlling for high school type?
d. Is there a statistically significant difference between general population students and top academic students with regard to the influence of factors when controlling for community type?
e. Is there a statistically significant difference between general population students and top academic students with regard to the influence of factors when controlling for anticipated major/college?
2. Is there a statistically significant difference between general population students (control group) and top academic students (experimental group) with regard to the influence of people when selecting a college or university?
a. Is there a statistically significant difference between general population students and top academic students with regard to the influence of people when controlling for gender?
b. Is there a statistically significant difference between general population students and top academic students with regard to the influence of people when controlling for high school size?
c. Is there a statistically significant difference between general population students and top academic students with regard to the influence of people when controlling for high school type?
d. Is there a statistically significant difference between general population students and top academic students with regard to the influence of people when controlling for community type?
e. Is there a statistically significant difference between general population students and top academic students with regard to the influence of people when controlling for anticipated major/college?

## Assumptions

A preliminary longitudinal study, The Scott Scholars Survey Report administered by Midwest Survey and Research (1998 through 2002), provided a framework for the development of this study. The Scott Scholar surveys were adapted over the years from.
internal influences, such as quality of program, to external factors and people of influence. The surveys and their results served to guide the development of The Peter Kiewit Institute and its programs. In addition, the factors and influential people that were analyzed in this study were derived in part from responses to the Scott Scholar surveys over the past 5 years.

## Limitations

The survey for this study was administered to a total of 310 students currently attending The Peter Kiewit Institute. The survey pool included the 155 students currently receiving the Walter Scott, Jr. Scholarship (experimental group) and another 155 students randomly selected (control group) from the total population of approximately 2,300 students who attend The Peter Kiewit Institute.

These students ranged from freshmen to senior status and included a small number of graduate students. Because the time the decision-making process occurred varied from a few months ago to 4 or more years ago, students' perceptions of the impact factors and people had on their decision may have changed over time. With maturity these responses may provide an even better insight into their choice.

## Definition of Terms

General population students - for this study, "general population students" refers to the 155 students who were randomly selected from the student body of The Peter Kiewit Institute, exclusive of the Walter Scott, Jr. Scholarship recipients. This group constitutes the control group.

Top academic students - for this study, "top academic students" refers to the 155 Walter Scott, Ir. Scholarship recipients whose college entrance exams place them in the top $5 \%$ of high school graduates nationally. This group constitutes the experimental group.

Factors of influence - for this study, factors of influence refers to three items, scholarship, reputation of school, and proximity to home. Each factor consists of a number of defining components.

- Scholarship - refers to the financial costs covering four years of college tuition, residence hall/meals/maid service, campus life opportunities, assistance in costs of books/fees, the gifting of a personal computer system, and opportunities for networking and internships.
- Reputation of school - includes name recognition, cutting-edge facilities/technologies, academic excellence, quality of professors, academic offerings, accessibility of faculty/staff and personal interest shown in the student.
- Proximity to home - is a variable determined by the perception of each student regarding an acceptable distance from home. It includes the students' perceptions of whether or not they are close enough to visit family on holidays, close enough to visit family daily, close enough to drive home at will, and far enough to gain independence.

People of influence - for this study, people of influence refers to parents (both father and mother)/guardians, mother/female guardian, father/male guardian, teacher,
counselor, peers, and/or other people deemed by the student to be influential in their decision-making process.

Size of high school - for this study, size of high school is categorized as small, mid-sized or large school. A small school refers to a high school of 200 or less students. A mid-sized school refers to a high school of over 200 and less than 500 students. A large school refers to a high school of 500 or more students.

Type of high school - for this study, type of high school is categorized as public, private or home school.

Community type - for this study, community type is categorized as rural, township, small city, and urban/suburban. Rural refers to a community of 500 or less people. Township refers to a community of over 500 and less than 10,000 people. A small city reference calls to mind communities with populations ranging from 10,000 to 100,000 people. The urban/suburban label designates the largest population centers of over 100,000 residents. These metropolitan districts encompass a variety of smaller community-type clusters, directly in proximity to each other and influenced by the good and the bad of urban sprawl. These latter centers of urban and suburban configurations provide a commonality of diverse opportunities and a variety of diverse detractors such as crime, extreme poverty, and environmental challenges in magnified proportions.

## Significance of the Study

The findings of this study, when applied to the recruiting strategies of institutions of higher learning, should make the decision process less ambiguous for students, parents and the institutions. A better match between student and the selected university could
provide a more positive experience for all concerned. It may even reduce the numbers of transfers into and out of institutions as expectations more closely match true program offerings.

Numerous studies mention the stress of the higher education selection process (Festinger, 1964; Janis \& Mann, 1977). Zemsky and Oedel (1983) explain the extent to which the decision can, in some cases, dominate the student and the family for up to a full year prior to the decision requirement. Given the aptitude and potential of the students involved in this study, the numbers of institutions and the award packages offered are such that an already difficult decision is even more amplified.

By delineating and understanding the factors of influence and the people of influence identified in this investigation, it is possible that the stress level and the confusion created in weighing alternatives could be reduced. If this proves to be the case, it may also result in less withdrawals and transfers, as the students' selections should be more nearly compatible with the students' expectations and hoped-for outcomes.

## Overview of the Study

Chapter 2 contains a review of the literature relative to the decision-making process for students in post-secondary education. Chapter 3 outlines the design and methodology used. An analysis of the survey responses using two-way analyses of variance tests is provided in Chapter 4. Conclusions, discussions and recommendations for future actions and study are presented in Chapter 5.

## CHAPTER 2

## Literature Review

"Who goes where to college?" Alexander Astin first addressed this question in 1962. In this study, Astin identified characteristics of student bodies and some relationships between these characteristics and institutional characteristics of colleges. The 127,212 students surveyed entered 248 different colleges and universities.

Since the Astin study (1962), an array of researchers have worked and established models to account for the decision-making process employed by students and families in an effort to find their preferred institution of higher learning. Two general categories of models have resulted: a three-stage model (Hanson, 1982; Hossler \& Gallagher, 1987; Jackson, 1978) and a multistage model that includes five and seven stages (Chapman, 1981; Litten, 1982). A careful analysis of the two categories reveals overlap.

In the first phase, potential college students develop a predisposition to go to college. The second phase includes the investigation of potential schools, as the students decide where to make formal application. The final phase is the actual decision of where to attend (Hossler \& Gallagher, 1987).

Research on the three-stage model would suggest that it is an interactive model: attributes of the student and organizational factors at both the pre-college and college levels interact to cause or produce outcomes (Jackson, 1978). Studies also have looked at such variables of influence (parents, peers, counselors, college recruiters, marketing materials, handbooks, etc.) on potential students to determine the importance of different sources of information and how they vary with students in various stages (Butner,

Caldera, Herrera, Kennedy, Frame, \& Childers, 2001; Cabrera \& La Nasa, 2000; Clagett, 1999; Hossler, Schmit, \& Vesper, 1999). Different factors have also been weighed (cost, location, size, prestige, financial aid, academic offerings and outreach) to see the influence such factors have in the overall decision ("Analysis of the Gulf Coast Consortium", 2001; Hodges \& Barbuto, 2002; Hossler et al., 1999). As a result of these efforts, most colleges and universities are able to target marketing efforts according to student profiles and the student's position in the overall college choice process.

A study by the Carnegie Foundation for the Advancement of Teaching (1986) shows that many times students make such a decision without a rational approach to the decision-making process. In fact, the decision may be very subjective or based on information that, in the academic arena, simply does not meet expectations. The results of this study suggest there may be a mythology of college choice, but probably not a reliable method for college selection.

The same study (Carnegie Foundation, 1986) also found students ranked institutions carefully by a variety of standards such as number of students, number of faculty with a PhD , national ranking, number of professors, and price. Other students in the study indicated less obvious reasons for selection of college. One student in the study chose her school because she wanted a single room in her freshman year. Another chose his school based on the number of students from his high school who played football and were attending a given institution. "Being with people you like is extremely important" (p. 29). The researchers in the 1986 Carnegie Study conclude, "the most important thing
we learned is that students' searches for colleges are not as comprehensive as the mythology would lead one to believe" (p.33).

In The Structure of College Choice, Zemsky and Oedel (1983) also recognized students do not always look at all the college options open to them. Their research showed that students tend to limit their own choices by seeking a small number of college possibilities and hoping that one of that group will accept them. A later study by Zemsky reiterated this notion. "Precisely because the decision is so overwhelming, even the best and the brightest students seem to drift toward highly predictable choices" (Zemsky, 1986, p. 106). Both studies, the one in 1983 and the one in 1986, determined that college choice is largely a function of family and community circumstances, usually related to family income and parental education level. When ACT or SAT scores and future educational expectations are added to the previous variables of family income and parental education level, the results lead to a documented pattern of college choice nationally.

Zemsky and Oedel (1983), like many other researchers have attempted to uncover patterns of college attendance ("Analysis of the Gulf Coast Consortium", 2001; Butner et al., 2001; Cabrera \& La Nasa, 2000; Clagett, 1999; Hodges \& Barbuto, 2002; Hossler et al., 1999). Their collective findings vary according to institutional and individual student characteristics.

A very extensive and comprehensive analysis of college choice is a study of 3,000 high school seniors in six metropolitan areas, conducted by Litten et al. (1983). They asked students to rank 25 institutional characteristics according to their importance in
decisions of where to apply. The findings ranking highest were costs, fields of study, general academic reputation and standards, location, social atmosphere, and careers to which college might lead.

## Factors of Influence

Several factors hold significant importance to the decision a student makes with regard to higher education selection. They include, but are not limited to, scholarship, reputation of the school, and proximity to home.

Scholarship. One characteristic that is often used to determine appropriate college of choice is academic achievement as tested on the SAT or ACT or high school GPA and class rank (Cabrera \& La Nasa, 2000; Reisberg, 2000; Toutkoushian, 2001; Turner \& Bowen, 1999). In fact, another study by Toutkoushian (2001) indicated that students' academic ability influences their choice of college even more than does socio-economic status.

Gilmour, Dolich, and Spiro (1978) found that, in the process of forming choice sets, high achieving students begin thinking about college earlier, apply earlier and consider a larger number of schools. This is supported by Trusty, Robinson, Plata, and Ng (2000) who examined the academic performance of eighth-grade students and its effects on college choices. Similarly, Hossler et al. (1999) examined the differences in influences on the decision-making process of ninth-grade and twelfth-grade students.

Reputation of school. Renowned institutions with a history of excellence are attractive to a variety of students by name alone. While the name and reputation could be accurately the result of decades of excellence and distinguished alumni, studies indicate
that reputation alone may appeal to some students more than others. Broekemier and Seshadri (1999) concluded from their study that women are more concerned with academic issues than are their male counterparts.

A survey of students in Milwaukee high schools (Murphy, 1981) found the important attributes to be academic reputation, cost, location and size. Consistent with these findings are earlier studies (Gilmour et al., 1978; Leslie, Johnson, \& Carlson, 1977; Lewis \& Morrison, 1975). Together, this research determines that the most important institutional characteristics affecting students' choice sets are academic quality/reputation, program offerings, location and costs. Similar findings were reported from a study by Litten et al. (1983) and another study by Espinoza, Bradshaw, and Hausman (2000).

Proximity. Several studies examine the location of colleges and universities relative to the students' home and high school of attendance ("Analysis of the Gulf Coast Consortium", 2001; Clagett, 1999; Murphy, 1981). High achieving students also seem to have a broader geographic region of acceptance (Zemsky \& Oedel, 1983). The work of Litten (1982) supports these findings, adding that students who are high achieving are more concerned with academic standards, program offerings, and "net cost" rather than "price", and are less concerned with career outcomes and campus appearance.

Parental income and college costs. As referenced in the findings of Sevier (1986) and Hendricks (1981), research on parental influence often focuses on costs. Some evidence suggests that as costs increase so does parental influence, especially among lower income families (Sevier, 1986). Parents may also communicate (explicitly or implicitly) that there is a price limit to their children's college attendance, constraining
the consideration of schools to those within that limit. Zemsky and Oedel (1983) found evidence to support that students from higher income families tend to consider schools further away from home, as well as institutions that cost more, are more selective, and/or private. Hendricks (1981) found that parental concerns about cost determine the number of schools to which a student can apply, the number of campuses the student may visit and the colleges' distance from home to which the student may apply.

The effect of family income on sources of information used in searching for college options is consistent with the pattern found in the impact of parental education level. Leslie et al. (1977) found that lower income students depend more on their counselors while higher income students turn more to their parents. Students from lower incomes tend to rank cost as a more important determiner in the decision-making process than do students whose parental income is quite high.

Family income and selectivity are also related. Karen (1988) found that socioeconomic status exerts twice as much effect on selectivity of institutions in students' choice sets as ethnicity or gender. Controlling for ethnicity, gender, and academic ability, Hearn (1984) and Zemsky and Oedel (1983) found that higher income youth were more likely to enter highly selective institutions.

Despite the conclusions drawn in an array of research, Birmingham (1992) suggests some of the survey research on the impact of income and cost issues on college choice is flawed. He cites the self-contradictory findings of Sevier (1986) as an illustration of the problem: "Cost was assigned a low-influence rating by the students being surveyed, yet about three-fourths of the students in the survey said they may not
have been able to attend their college of choice without financial aid" (Birmingham, 1992, p. 272). An issue here may be that students do not relate to the issues of finance while in reality their parents see it as a major concern.

## People of Influence

It has long been known that high school seniors frequently rely on a variety of people to help them in the decision process related to where they will receive their postsecondary education. Many students indicate they themselves made the ultimate choice based on their expectations of future career interests, their academic abilities, and their confidence in themselves. However, their parents, a teacher, a school counselor, or a highly regarded peer may also have directly or indirectly influenced their choice. Studies have examined a variety of people thought to be in a position where their actions, words, or counsel directly or indirectly appeared to have been influential in helping students make the final decision (Butner et al., 2001; Cabrera \& La Nasa, 2000; Hossler et al., 1999).

Student expectations. A student's expectation of what he/she wants from college and the college experience may be the ultimate decision maker. Ash (1987) suggested that a student's expectations act as a filter through which all information passes. Each potential factor in the college choice is interpreted differently depending on the student's mindset and aspirations. The findings of Phillips' ethnographic study of college choice (1986) support this idea. "Each student sought out particular postsecondary institutions that fulfilled the expectations of his or her differing constructions of the meaning of college attendance" (p. 175).

Even considering that students' expectations may be somewhat idealized and imprecise, it is important to note how they filter information and its effect on college decisions. Phillips' findings (1986) also highlight the value of qualitative data in uncovering the different constructions of college attendance and how the image of a particular institution varies among students.

Parental influence and expectations. Parents can have a great deal of influence over a student's decision for college. Over a period of years, many parents mold a vision of college. From the early discussions of where to go, to the application process, to the final selection of a college to attend, parents tend to walk right beside many students and bring a great deal of pressure to the decision. Parental income, for example, sets one tone (Cabrera \& La Nasa, 2000; Reisberg, 2000; Spaulding, 2001; Trusty et al., 2000). However, based on a study by Toutkoushian (2001), it appears that academic ability may override the issue of restrictions based on family income in choice of college.

College costs may shape another family's decision. Parental level of education, parental occupation, and the community in which parents elect to raise their children have also been shown to be powerful influences on the choice process (Butner et al., 2001; Grayson, 1999; Reisberg, 2000).

Parents are almost unilaterally cited as the most influential in a student's selection process (Carnegie Foundation, 1986). Yet, attempts to quantify or track parental influence are difficult because it permeates the entire selection process, beginning long before consideration of specific colleges. Often, the influence is subtle and implicit, especially in families in which the children are expected to go to college. The findings of
the Carnegie Foundation study support this claim: "parents who did not themselves graduate from college exert the most direct influence on their children in making college choices, but parental persuasion may be more subtle in families where going to college is accepted as a normal part of life" (p. 31).

Parents were found to be the most powerful influences in a student's decision of college or university. Russick and Olsen (1976) and Child and Associates, as cited by Wilson (1997), found $52 \%$ and $77 \%$, respectively, of students surveyed chose their parents as the primary influence. By selecting parents, these students confirmed that teachers, counselors, friends and others, though having some impact, were not as directly responsible for their ultimate choice of a college or university as were their parents. Finances were also associated with the parents' impact. Sevier (1986) found that parental influence increases as the cost of attending the college increases, especially among lowincome families. Similarly, Hendricks (1981) found that parental influence increases as the expected parental contribution to college costs increases.

Few studies have simultaneously examined the opinions of both parents and their students regarding college choice. One such study by Bowers and Pugh (1973) showed entering first-year students at Indiana University in 1970 weighed the influence of parents more heavily than did the parents themselves. The same researchers concluded that students and parents placed different emphasis with regard to the institutional factors and their role in the decision-making process. For example, students are more prone to worry about living conditions, campus atmosphere, social climate and recreational
opportunities. Parents tend to concentrate on expenses, academic standing, cost of living and distance from home.

Murphy (1981) summarizes, "Early in the decision process, parents may force students to reject all schools that parents don't like. Therefore, students are stuck with the list parents recommend" (p. 148). In this summation, parents are seen as limit setters.

The research of Douran and Kaye (1962) indicates that parents defend their influence into this process on the basis of how the final choice appears to affect their own needs. Puffet (1983) summarizes the central argument of these researchers:

Parents may see the institution attended by their children as an extension of their own status role in society and, as a result, may influence their offspring to enroll at a prestigious institution to enhance their own feelings of self-worth. Or parents may not have or want to spend large amounts of money on their child's college education and so may encourage the child to enroll at an inexpensive college. (p. 9)

Counselor. Counselors are called upon by various groups of students for various reasons. Lewis and Morrison (1975) found in their study that men were more apt to seek the help and advice of their high school counselor than were women. Leslie et al., (1977) reported that lower income students rely more heavily on guidance from their high school counselor than students whose family is more affluent. In the more affluent family, students tend to seek the guidance of their parents more than the school counselor. This may have some connection to first generation college attendees or may be a result of the parents' career tracks and/or educational backgrounds.

Zemsky and Oedel (1983) found in their study that less mobile families request assistance of the school counselor and rely on recruitment materials from colleges and universities to get an indication of appropriateness of school. In this study, it was pointed out that families who travel frequently enjoy many on-site visits in a variety of locations before making the final college choice.

## Student Attributes

Several attributes of students have been shown to have an impact on school choice. Included in these independent variables are gender, size of high school and type of community from which the students come. Studies have examined these variables and delineated their effects on the selection.

Gender. There is some evidence to support the theory that male and female students look at college choice differently (Broekemier \& Seshadri, 1999; Lackland \& De Lisi, 2001; Lewis \& Morrison, 1975; Trusty et al., 2000; Zemsky, 1986). After interviewing a group of high school seniors every other week throughout their senior year, Lewis and Morrison (1975) found that women start and finish the search and application process earlier and apply to more institutions than do their male counterparts. Women ask other college students for their advice and to share their experiences. Men, on the other hand, rely more heavily on high school counselors than do women. Women tend to think residential life is more important than men. Men think academic standing and costs are more important considerations than women do (Lewis \& Morrison, 1975).

Zemsky (1986) re-analyzed his data from 1983 and found that men tend to go "away" more than women. Women tend to stay close to home. Geographic region can
and does influence gender choices. In examining individual markets and populations of applicants, his analysis reveals that gender has little impact in a market like Los Angeles, but a huge impact in a market such as Irving/Arlington, Texas. Zemsky's conclusion was that being female strongly discourages consideration of a highly selective institution.

Size of high school/Type of community. Fewer studies have examined the effects of high school size and type of community. Hodges and Barbuto (2002) found differences in the influencing factors between students from rural and urban areas. On a more global level, Sewell and Armer (1966) were some of the first to examine the impact of communities as a whole on college choice. In their article Neighborhood Context and College Plans, they pointed to the fact that presumably a neighborhood reflects the shared norms and aspirations of its members, and has an important effect on the educational aspirations of youth over and above that of the family socioeconomic status or individual ability" (p. 162). Sewell and Armer's research is limited in two ways: it only addresses students in the Milwaukee area and it looks only at the first stage of college choice ... whether or not to attend college (educational aspiration).

In The Structure of College Choice, Zemsky and Oedel (1983) identify a clear and predictable pattern of college choice. The researchers conclude that "high school juniors and seniors, whatever their personal unpredictability, collectively behave in a most predictable fashion when it comes time to select a college" (p. 9).

A student's family and community provide the foundation for this predictability. As Zemsky and Oedel (1983) explain:

Among the more affluent families in which higher education has become a tradition, the selection of a college has taken on a ritual air: attendance at school-sponsored meetings, participation in college nights, and travel to distant campuses. Less mobile families rely more on high-school counselors and recruiting mail to inform them of the range of college options. (p. 29) As implied in the statement above, the model suggests that the stratified pattern of college choice is "deeply stitched into the social and economic fabric of the nation" (p. 44).

## Decision Process

The entire process of college selection, for many families, becomes a completely consuming activity. It can tap everything from time to money. In other families, decisions regarding college may simply follow a natural and orderly plan with little time and resources from the family required.

The theory of cognitive dissonance offers a model of how decision-making in multi-objective choice situations proceeds. A basic assumption of cognitive dissonance theory is that attempting to hold two apparently contradictory (or dissonant) ideas creates anxiety. Janis and Mann (1977) explain:

When we speak of "decisional conflicts" we are referring to simultaneous opposing tendencies within the individual to accept and reject a given course of action. The most prominent symptoms of such conflicts are hesitation, vacillation, feelings of uncertainty, and signs of acute emotional stress whenever
the decision comes within the focus of attention. A major subjective characteristic of decisional conflicts is an unpleasant feeling of distress. (p. 46) According to Leon Festinger's original theory (1964), conceived dissonance frequently manifests itself in what he calls the post-decisional stage. He proposed that before a commitment to one option is made, gathering and evaluating information proceeds relatively rationally and objectively. At this point, the individual does experience conflict when positive and negative aspects of an alternative are perceived. Yet this conflict, while creating frustration and even anger, will not lead the individual to bias the evaluation in favor of one alternative (Festinger, 1964).

There are five ways in which individuals can alleviate the discomfort that often accompanies decision-making: (1) altering perceptions of each option or altering one's values and goals; (2) selectively exposing oneself to information, e.g. seeking information that supports the preferred or chosen alternative while avoiding information that supports other alternatives; (3) avoiding the decision; (4) committing to one course of action quickly and impulsively; and (5) minimizing the consequences of the decision or bolstering one's belief that the decision is reversible (Janis \& Mann, 1977). These five strategies typify some of the ways in which individuals cope with the anxiety that is often present when faced with multi-objective decisions.

The process of selecting a college most often involves students and their families seeking to satisfy numerous goals. It is possible therefore that one could research the decision process a select group of students and their parents went through to decide to attend a certain university. From such a study and the information gathered, one could
glean what about the institution led to the decision these students made to apply and ultimately attend, while also learning what "other" factors might have influenced the decision but are clearly outside the institution's sphere of influence.

## Conclusion

Based on the review of literature, people who have the opportunity to influence a student's decision on higher education choice tend to be predictable. The literature also is relatively consistent with regard to the factors that influence a student's final choice for post-secondary education.

Little research, however, is available to help determine if certain people or specific factors are germane to the recruitment of high-achieving students and their attendance at institutions of long-standing academic reputation as compared to schools early in the reputation-building process. Also, not readily available is information regarding size of high school, type of high school and type of community as related to their individual and collective impacts on the students' choice of a college/university. Even less information is available disaggregating the influence of factors and people on top academic students when compared to general population students. This study seeks to expand the body of knowledge on these crucial determiners of student choice for postsecondary educational opportunity.

## CHAPTER 3

## Methodology

The purpose of this study was to determine if there were statistically significant differences in the factors or people who influenced general population students as compared to top academic students in their decision on where to attend college/university. Influences were delineated according to factors or people because recruitment strategies must differ based on these categories. These analyses determined the impact the students' gender, community type, high school size and high school type had on their higher education expectations. In addition, distinction was made by anticipated college and major.

## Research Design

The purpose of this study was to determine those factors and people specific to certain demographic characteristics that influenced top academic students and a random sample of general population students to select The Peter Kiewit Institute for their higher education experience. This research study utilized a questionnaire to determine the people who influenced a student's ultimate choice of a higher education institution. It further revealed the factors students examined as they made this important lifetime decision. The data obtained from this survey was delineated on the lines of students' gender, high school size, high school type, and community type from which the students hail. Responses were also delineated on the basis of students' anticipated majors/colleges.

## Description of Population

The student population surveyed for the purpose of this study was derived from two distinct student types. The first student type was the top academic students. This group was made up of 155 students who were currently receiving the Walter Scott, Jr. Scholarship awards. The second student type, general population students, formed the control group of 155 students randomly selected from the total population of The Peter Kiewit Institute student body, exclusive of the Walter Scott, Jr. Scholarship award recipients. Both of these student types were made up primarily of young men and women pursuing fields of study in information science, technology, engineering or telecommunications. They were attending programs through either the University of Nebraska-Lincoln's College of Engineering and Technology or the University of Nebraska at Omaha's College of Information Science and Technology. These two colleges combine with business and industry to form The Peter Kiewit Institute.

In the pursuit of accurate information, the decision was made to survey the entire population of current recipients of the Walter Scott, Jr. Scholarship rather than utilize a sample approach. This decision was made because the population was readily accessible. In addition, the population size was small enough to make it feasible to pursue the entire group and yet large enough to render reliable data on behalf of the experimental group.

The control group consisted of 155 randomly selected Peter Kiewit Institute students excluding recipients of the Walter Scott Jr., Scholarship awards. They were chosen to serve as a baseline in determining any difference in influences on the selection of a post-secondary institution when comparing general population students to those top
academic students based on college board entrance exams, GPA, class rank and leadership/participation activities.

The Scott Scholars were ranked within the top 5\% nationally of high school seniors taking the SAT or ACT college admission exams. (Students had an SAT score of 1340 or higher and/or an ACT score of 30 or above.) In addition, these students ranked in the top $10 \%$ of their high school graduating classes and had a grade point average (GPA) of 3.5 or above on a 4.0 grading scale. (If GPA was based on a 100 point scale the student exhibited a 95 or above average.)

Students receiving the Walter Scott, Jr. Scholarships also must have demonstrated participation and leadership through school and/or civic activities. Having students who are academically gifted as well as socially aware and civically responsive is a priority of the selection process.

Currently the Scott Scholar population consists of 30 females and 125 males. This proportion is in line with national trends but not desirable nationally or locally (Congressional Commission on the Advancement of Women and Minorities in Science, Engineering and Technology Development, 2000). Having more females is a crucial part of expanding the potential workforce needed to advance these fields in the $21^{\text {st }}$ Century (Congressional Commission on the Advancement of Women and Minorities in Science, Engineering and Technology Development, 2000).

## Instrumentation

The survey instrument developed by this researcher for the study was the result of analyzing phone survey findings from previous longitudinal surveys and the review of
literature as presented in Chapter 2. The previous surveys were commissioned by the donor, Walter Scott, Jr., in collaboration with The Peter Kiewit Institute Board of Policy Advisors and administered through Midwest Survey and Research Corporation. Each of the 5 years since the inception of The Peter Kiewit Institute and the awarding of the Walter Scott, Jr. Scholarships, a concerted effort was made to study the success of the program through the eyes of these students and to determine those areas where educational opportunities might be enhanced and improved. This phone survey was developed in conjunction with the donor, this researcher and Midwest Survey and Research Corporation to identify the variables or combination of variables that played a role in the decisions made by individuals within each demographic group.

The survey written for this current study (see Appendix B) utilized findings from both past research studies highlighted in the review of literature and, in particular, the key elements identified in the Midwest Survey and Research Corporation longitudinal phone surveys. The intention of this researcher was to further discriminate those elements most directly impacting the college choice for top academic students and general population students entering fields of information science, technology and engineering.

The first sample test was given to 12 people with a variety of backgrounds. The group included three high school seniors, three undergraduate college students, three university graduate students and three university professors. Each participant was approached on an individual basis and asked to review the form and make suggestions as appropriate. The purpose for this initial test was to determine if there were wording or conceptual clarifications required before taking the instrument to a pilot sampling. As
such, no verbal directions were given in order to see if the written directions themselves had clarity.

This test for readability proved a worthwhile activity as several small, yet important, adjustments were incorporated in the final instrument draft. These changes included a simplification of the instructions, a clarification of the words "network" and "programmatic," the addition of a comma for reading clarity, and the reworking of sectional headings for parallel construction.

Following the first sample test for readability, a second sample test of the instrument was administered to get an estimate of reliability. This pilot test was given on March 2, 2003, to a group of 25 Scott Scholars participating in a weekend retreat held at The Peter Kiewit Institute. These students ranged from second semester freshmen through second semester seniors. All 25 surveys were appropriately completed and returned by March 3, 2003. The results of these test surveys in conjunction with the results of the final survey provided the data for testing reliability.

For this study, the dependent variables were factors of influence and people of influence. The values chosen for the variable "factors of influence" were scholarship, reputation of university, and proximity to home. Cronbach's alpha was computed for each of these three subscales from the final survey data in order to determine reliability. The components that created the category of scholarship had a relatively high Cronbach's alpha of .8691. The subtopics defining reputation had a Cronbach's alpha of .7761. The third factor of proximity had a Cronbach's alpha of .7165 (see Table 1).

## Table 1

Reliability of Factors of Influence on Student Choice of College/University

| Factors of Influence | Cronbach's |
| :--- | :---: |
| Scholarship <br> 4-year tuition, residence hall/meals/maids, campus life, books/fees, |  |
| personal computer system, networking/internship opportunities | .8691 |
| Reputation |  |
| Name recognition, cutting edge facilities/technologies, academic |  |
| excellence, quality of professors, academic offerings, accessibility |  |
| of faculty/staff, personal interest in student |  |
| Proximity <br> Visit family on holidays, visit family daily, drive home at will, gain |  |

## Procedures

The survey written for this study (see Appendix B) along with a cover letter (see Appendix C) was placed in an envelope and addressed to each of the 310 students selected for this study. Each survey was accompanied by a separate card (see Appendix D) that the student returned at the same time they returned the survey. The card provided a place for the student to identify him/herself, but was not attached in any way to the survey. This method provided anonymity but allowed this researcher to know which students needed a reminder notification. The envelopes were delivered to the residence manager of the Scott Residence Hall for distribution in the student mailboxes within the dorm for those students living there. Those students who did not live in the dorm received their survey information via U.S. Mail. In a cover letter, all students were asked to take the 5 to 10 minutes required to complete the survey and then return the completed form and accompanying card to Room 301 in The Peter Kiewit Institute.

For the purpose of this study, an acceptable return rate was no less than $50 \%$ of the identified pool of students. Students who did not return the separate card were contacted by phone and/or e-mail and given a reminder.

## Description of Respondents

A total of 183 students participated in the study, including 86 who were recipients of the Walter Scott, Jr. Scholarship awards (Scott Scholars) and 97 students randomly selected from the general population attending one of the two colleges within The Peter

Kiewit Institute. The self-selected pool of respondents consisted of 35 female students and 148 male students (see Table 2).

Of the 183 students responding, 49 came from high schools with 200 or less students; 37 respondents came from mid-sized high schools of over 200, but less than 500 students; and 97 participants represented high schools of over 500 students. To further analyze the data, high schools were categorized by type to distinguish them as public, private or home school. Within the study, 140 of the responding students had attended public schools; 41 of the students had been educated in private high schools while the remaining 2 respondents had been home schooled (see Table 2).

Another distinguishing characteristic by which the respondents were subdivided was community type. Rural communities of 500 or less people were represented by 13 respondents. Forty of the responding students hailed from townships defined for the purpose of this study by a population between 500 and 10,000 . Small cities described with populations ranging from 10,000 to 100,000 consisted of a group of 34 students in this study. The largest group of respondents, 96 students, came from urban/suburban population centers of over 100,000 (see Table 2).

In an effort to discover any impact the college of attendance or the selected major might have on students' perceptions, an analysis looking at both categories was completed. The Peter Kiewit Institute consists of two colleges, the College of Engineering and Technology and the College of Information Science and Technology, together offering a total of nine majors. The responding pool of students consisted of 90 students from the College of Engineering and Technology and 93 students enrolled in the

Table 2
Frequencies and Percentages of Respondent Demographics

| Demographics | General Population | Top <br> Academic | Total |
| :---: | :---: | :---: | :---: |
|  | n (\%) | n (\%) | $\mathrm{n}(\%)$ |
| Gender |  |  |  |
| Female | 13 (13.4\%) | 22 (25.6\%) | 35 (19.1\%) |
| Male | 84 (86.6\%) | 64 (74.4\%) | 148 (80.9\%) |
| High School Size |  |  |  |
| Small ( $<200$ ) | 16 (16.5\%) | 33 (38.4\%) | 49 (26.8\%) |
| Mid-Sized ( $>200$ and $<500$ ) | 23 (23.7\%) | 14 (16.3\%) | 37 (20.2\%) |
| Large ( $>500$ ) | 58 (59.8\%) | 39 (45.3\%) | 97 (53.0\%) |
| High School Type |  |  |  |
| Public | 75 (77.3\%) | 65 (75.6\%) | 140 (76.5\%) |
| Private | 22 (22.7\%) | 19 (22.1\%) | 41 (22.4\%) |
| Home School | - | 2 (2.3\%) | 2 (1.1\%) |
| Community Type |  |  |  |
| Rural (<500) | 4 (4.1\%) | 9 (10.5\%) | 13 (7.1\%) |
| Township ( $>500$ and $<10,000$ ) | 16 (16.5\%) | 24 (27.9\%) | 40 (21.9\%) |
| Small City ( $>10,000$ and $<100,000$ ) | 20 (20.6\%) | 14 (16.3\%) | 34 (18.6\%) |
| Urban/Suburban (> 100,000) | 57 (58.8\%) | 39 (45.3\%) | 96 (52.5\%) |

College of Information Science and Technology. A breakdown of the numbers of students in each major can be seen in Table 3.

## Variables

Independent variables. Three independent variables were examined in this study. The binary variable of gender was self-declared on the questionnaire by the respondent. The tertiary variable of high school size was categorized within a specific range depicting small, mid-sized and large. For the purpose of this study, a small school referred to a high school of 200 or less students. A mid-sized school referred to a high school of over 200 and less than 500 students. A large school referred to a high school of 500 or more students. High school type, also a tertiary variable, was categorized as public high school, private high school, or home school.

Community type was categorized as rural, township, small city, or urban/suburban. Rural referred to a community of 500 or less people. Township referred to a community of over 500 and less than 10,000 people. A small city reference called to mind communities with populations ranging from 10,000 to 100,000 people. The urban/suburban label designated the largest population centers of over 100,000 people.

Dependent variables. The dependent variables were factors of influence and people of influence. The values chosen for the variable "factors of influence" were scholarship, reputation of university, and proximity to home. The defining components of scholarship included the monies supporting up to 4 years of college tuition (amount based on a student enrolled for 12 to 15 hours of study), coverage of residence hall/meals/maid service, campus life opportunities, assistance in costs of books/fees, the

Table 3
Frequencies and Percentages of Respondents' Anticipated Majors/Colleges

|  | General | Top | Total |
| :--- | :---: | :---: | :---: |
| College and Major Fields of Study | Population | Academic |  |
|  | $\mathrm{n}(\%)$ | $\mathrm{n}(\%)$ | $\mathrm{n}(\%)$ |
| College of Engineering and Technology |  |  |  |
| Architectural Engineering | $2(2.1 \%)$ | $16(18.6 \%)$ | $18(9.8 \%)$ |
| Civil Engineering | $3(3.1 \%)$ | $7(8.1 \%)$ | $10(5.5 \%)$ |
| Construction Engineering Technology | $3(3.1 \%)$ | - | $3(1.6 \%)$ |
| Computer Engineering | $10(10.3 \%)$ | $17(19.8 \%)$ | $27(14.8 \%)$ |
| Electronics Engineering | $9(9.3 \%)$ | $6(7.0 \%)$ | $15(8.2 \%)$ |
| Industrial Engineering Technology | $3(3.1 \%)$ | $1(1.2 \%)$ | $4(2.2 \%)$ |
| Manufacturing Engineering Technology | $10(10.3 \%)$ | $3(3.5 \%)$ | $13(7.1 \%)$ |
| Total | $40(41.2 \%)$ | $50(58.1 \%)$ | $90(49.2 \%)$ |
| College of Information Science and Technology |  |  |  |
| Computer Science | $33(34.0 \%)$ | $21(24.4 \%)$ | $54(29.5 \%)$ |
| Management Information Systems | $24(24.7 \%)$ | $15(17.4 \%)$ | $39(21.3 \%)$ |
| Total | $57(58.7 \%)$ | $36(41.8 \%)$ | $93(50.8 \%)$ |

gifting of a personal computer system, and networking and internship opportunities. Reputation of university included the components of name recognition, cutting edge facilities/technologies, academic excellence, quality of professors, academic offerings, accessibility of faculty/staff and personal interest shown in the student. Proximity was a variable factor determined by the perception of each student regarding an acceptable distance from home. It included the students' perceptions of whether or not they were close enough to visit family on holidays, close enough to visit family daily, close enough to drive home at will, and far enough to gain independence.

In the survey conducted for this study, students quantified the degree to which these factors influenced their college choice. Subcategories of each of the three factors were measured using a 5 -point Likert scale. In addition, the three factors of influence were also ranked in priority order to determine their relative influence in the decisionmaking process to select a post-secondary school. The means of these factor components were calculated for the group as a whole (see Appendix E).

The values chosen for the variable "people of influence" were parents (both father and mother)/guardians, mother/female guardian, father/male guardian, teacher, counselor, peers or other person. In the survey conducted for this study, students quantified the degree to which these people independently influenced their college choice as based on a 5-point Likert scale. In addition, the top three people of influence were ranked in priority order to determine their relative influence in the decision-making process. The means of these people of influence were calculated for the group as a whole (see Appendix F).

## Data Analysis

The following questions and methods of analyses were presented for this study.

1. Is there a statistically significant difference between general population students (control group) and top academic students (experimental group) with regard to the influence of the factors of scholarship, reputation of school and proximity to home when selecting a college or university?
a. Is there a statistically significant difference between general population students and top academic students with regard to the influence of factors when controlling for gender? Two-way analyses of variance were run to determine if there were significant differences between male and female general population students and top academic students with regard to the factors that influenced them in making their choice of post-secondary education.
b. Is there a statistically significant difference between general population students and top academic students with regard to the influence of factors when controlling for high school size? Two-way analyses of variance were run to determine if there were significant differences between general population students and top academic students from small, mid-sized or large high schools with regard to the factors that influenced them in making their choice of post-secondary education.
c. Is there a statistically significant difference between general population students and top academic students with regard to the influence of factors when controlling for high school type? Two-way analyses of variance
were run to determine if there were significant differences between general population students and top academic students from public schools, private schools or home school settings with regard to the factors that influenced them in making their choice of post-secondary education.
d. Is there a statistically significant difference between general population students and top academic students with regard to the influence of factors when controlling for community type? Two-way analyses of variance were run to determine if there were significant differences between general population students and top academic students from rural, township, small city, or urban/suburban settings with regard to the factors that influenced them in making their choice of post-secondary education.
e. Is there a statistically significant difference between general population students and top academic students with regard to the influence of factors when controlling for anticipated major/college? Two-way analyses of variance were run to determine if there were significant differences between general population students and top academic students based on students' choices of the College of Engineering and Technology or the College of Information Science and Technology within The Peter Kiewit Institute with regard to the factors that influenced them in making their choice of post-secondary education.
2. Is there a statistically significant difference between general population students (control group) and top academic students (experimental group) with regard to the influence of people when selecting a college or university?
a. Is there a statistically significant difference between general population students and top academic students with regard to the influence of people when controlling for gender? Two-way analyses of variance were run to determine if there were significant differences between male and female general population students and top academic students with regard to the people that influenced them in making their choice of post-secondary education.
b. Is there a statistically significant difference between general population students and top academic students with regard to the influence of people when controlling for high school size? Two-way analyses of variance were run to determine if there were significant differences between general population students and top academic students from small, mid-sized or large high schools with regard to the people that influenced them in making their choice of post-secondary education.
c. Is there a statistically significant difference between general population students and top academic students with regard to the influence of people when controlling for high school type? Two-way analyses of variance were run to determine if there were significant differences between general population students and top academic students from public schools, private schools or home school settings with regard to the people that influenced them in making their choice of post-secondary education.
d. Is there a statistically significant difference between general population students and top academic students with regard to the influence of
people when controlling for community type? Two-way analyses of variance were run to determine if there were significant differences between general population students and top academic students from rural, township, small city, or urban/suburban settings with regard to the people that influenced them in making their choice of post-secondary education.
e. Is there a statistically significant difference between general population students and top academic students with regard to the influence of people when controlling for anticipated major/college? Two-way analyses of variance were run to determine if there were significant differences between general population students and top academic students based on the students' choices of the College of Engineering and Technology or the College of Information Science and Technology within The Peter Kiewit Institute with regard to the people that influenced them in making their choice of postsecondary education.

## Summary

Each year since the 2000-01 school year, the academic level of students applying to The Peter Kiewit Institute has risen. The higher the students' scores on ACT/SAT college entrance exams, the more prestigious the universities with whom The Peter Kiewit Institute must compete. In the case of top academic students, all competing universities are capable of lucrative financial award packages, thus minimizing the impact of money, as the decision is made on where to pursue higher education. The Peter Kiewit Institute needs to have an even clearer understanding of the college selection
process in order to design effective recruiting strategies for top academic scholars. These strategies should assist The Peter Kiewit Institute in continuing to compete nationally with more renowned and well-established institutions.

## CHAPTER 4

## Data Analysis

The purpose of this study was to determine if there were statistically significant differences in the factors or people who influenced general population students as compared to top academic students in their decision on where to attend college/university. Influences were delineated according to factors or people because recruitment strategies must differ based on these categories. These analyses determined the impact the students' gender, community type, high school size and high school type had on their higher education expectations. In addition, distinction was made by anticipated college and major. A summary of results is presented in this chapter for each of the questions that guided the investigation.

## Research Questions

1. Is there a statistically significant difference between general population students (control group) and top academic students (experimental group) with regard to the influence of the factors of scholarship, reputation of school and proximity to home when selecting a college or university?
a. Is there a statistically significant difference between general population students and top academic students with regard to the influence of factors when controlling for gender?
b. Is there a statistically significant difference between general population students and top academic students with regard to the influence of factors when controlling for high school size?
c. Is there a statistically significant difference between general population students and top academic students with regard to the influence of factors when controlling for high school type?
d. Is there a statistically significant difference between general population students and top academic students with regard to the influence of factors when controlling for community type?
e. Is there a statistically significant difference between general population students and top academic students with regard to the influence of factors when controlling for anticipated major/college?
2. Is there a statistically significant difference between general population students (control group) and top academic students (experimental group) with regard to the influence of people when selecting a college or university?
a. Is there a statistically significant difference between general population students and top academic students with regard to the influence of people when controlling for gender?
b. Is there a statistically significant difference between general population students and top academic students with regard to the influence of people when controlling for high school size?
c. Is there a statistically significant difference between general population students and top academic students with regard to the influence of people when controlling for high school type?
d. Is there a statistically significant difference between general population students and top academic students with regard to the influence of people when controlling for community type?
e. Is there a statistically significant difference between general population students and top academic students with regard to the influence of people when controlling for anticipated major/college?

Findings of the Study
To clarify the results of the responses to the questionnaires the data were disaggregated, analyzed and presented with respect to the two research questions and the associated component questions.

## Research Question 1 a

Is there a statistically significant difference between general population students and top academic students with regard to the influence of the factors of scholarship, reputation of school and proximity to home when controlling for gender?

Scholarship. In order to ascertain the difference in the perspectives of the two student types, general population and top academic students, as it relates to the factor of scholarship when controlling for gender, two-way analyses of variance were run on each of the defining components of the factor of scholarship. Statistically significant differences $(p<.01)$ were found on the main effects between general population students and top academic students with regard to the influence of full 4-year college tuition $(F(1,179)=72.756, p<.0005)$ (see Table 4), residence hall/meals $/$ maids $(F(1,179)=$ $84.613, p<.0005)$ (see Table 5), costs of books/fees $(F(1,179)=7.529, p=.007)$

Table 4
Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for Gender Regarding the Influence of Full 4Year College Tuition on College Choice

| Student Type | Gender | Mean | Std. Deviation | n |
| :--- | :--- | :--- | :--- | :--- |
| General Population | Female | 2.6154 | 1.70970 | 13 |
|  | Male | 2.9167 | 1.62961 | 84 |
|  | Total | 2.8763 | 1.63464 | 97 |
| Top Academic | Female | 4.7727 | 0.52841 | 22 |
|  | Male | 4.8437 | 0.44432 | 64 |
|  | Total | 4.8256 | 0.46506 | 86 |
| Total | Female | 3.9714 | 1.52404 | 35 |
|  | Male | 3.7500 | 1.58168 | 148 |
|  | Total | 3.7923 | 1.56912 | 183 |
| Tests of Between-Subjects Effects |  |  |  |  |
| Source |  | df | Mean Square | $F$ |
| STUDENT TYPE |  | 1 | 111.286 | 72.756 |
| GENDER |  | 1 | 0.925 | 0.605 |
| STUDENT TYPE * GENDER | 1 | 0.354 | 0.231 | .631 |
| Error | 179 | 1.530 |  |  |

## Table 5

Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for Gender Regarding the Influence of Residence Hall/Meals/Maids on College Choice

| Student Type | Gender | Mean | Std. Deviation | n |
| :---: | :---: | :---: | :---: | :---: |
| General Population | Female | 1.9231 | 1.32045 | 13 |
|  | Male | 1.9643 | 1.33034 | 84 |
|  | Total | 1.9588 | 1.32223 | 97 |
| Top Academic | Female | 4.4091 | 0.95912 | 22 |
|  | Male | 3.8594 | 1.15287 | 64 |
|  | Total | 4.0000 | 1.12720 | 86 |
| Total | Female | 3.4857 | 1.63368 | 35 |
|  | Male | 2.7838 | 1.56727 | 148 |
|  | Total | 2.9180 | 1.59974 | 183 |
| Tests of Between-Subjects Effects |  |  |  |  |
| Source | df | Mean Square | F | Sig. |
| STUDENT TYPE | 1 | 128.039 | 84.613 | <. 0005 |
| GENDER | 1 | 1.725 | 1.140 | . 287 |
| STUDENT TYPE * GENDER |  | + 2.329 | 1.539 | . 216 |
| Error | 179 | 1.513 |  |  |

(see Table 6), and a personal computer system $(F(1,179)=28.652, p<.0005)$ (see Table 7) on college choice.

For the component of full 4-year college tuition, the mean score of the general population students was $2.88(\underline{S D}=1.63)$ while the mean score of the top academic students was $4.83(\underline{S D}=0.47)$. For the component of residence hall/meals/maids, the mean score of the general population students was $1.96(\underline{S D}=1.32)$ while the mean score of the top academic students was $4.00(\underline{S D}=1.13)$. For the component of costs of books/fees, the mean score of the general population students was $2.45(\underline{S D}=1.49)$ while the mean score of the top academic scholars was $3.27(\underline{S D}=1.15)$. Finally, for the component of the gift of a personal computer system, the mean score of the general population student was $1.97(\underline{S D}=1.33)$ while the top academic students had a mean score of $3.31(\underline{S D}=1.20)$. For each of these components, no statistically significant differences were found for either the main effect of gender or for the interactions between gender and student type.

For the scholarship components of campus life opportunities and opportunities for networking/internships, no statistically significant differences were found for the main effects of student type or gender, or for the interaction between student type and gender (see Tables G1, G2)

Reputation. To determine the difference in the perspectives of the two student types, general population and top academic students, as it relates to the factor of reputation when controlling for gender, two-way analyses of variance were run on each of the defining components of the factor of reputation. A statistically significant

Table 6
Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Gender Regarding the Influence of Costs of Books/Fees on College Choice

| Student Type | Gender | Mean | Std. Deviation | n |
| :--- | :--- | :--- | :--- | :--- |
| General Population | Female | 2.6923 | 1.43670 | 13 |
|  | Male | 2.4167 | 1.49866 | 84 |
|  | Total | 2.4536 | 1.48619 | 97 |
| Top Academic | Female | 3.2727 | 1.31590 | 22 |
|  | Male | 3.2656 | 1.10183 | 64 |
|  | Total | 3.2674 | 1.15223 | 86 |
| Total | Male | 3.0571 | 1.37076 | 35 |
|  | Total | 2.7838 | 1.40233 | 148 |
|  |  | 2.8361 | 1.39678 | 183 |
| Tests of Between-Subjects Effects |  |  |  |  |
| Source |  | 1 | 13.629 | 7.529 |
| STUDENT TYPE |  | Mean Square | $F$ | Sig. |
| GENDER | 1 | 0.533 | 0.295 | .588 |
| STUDENT TYPE * GENDER | 1 | 0.481 | 0.266 | .607 |
| Error | 179 | 1.810 |  |  |

## Table 7

Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for Gender Regarding the Influence of Personal Computer System on College Choice

| Student Type | Gender | Mean | Std. Deviation | n |
| :---: | :---: | :---: | :---: | :---: |
| General Population | Female | 1.9231 | 1.38212 | 13 |
|  | Male | 1.9762 | 1.32607 | 84 |
|  | Total | 1.9691 | 1.32644 | 97 |
| Top Academic | Female | 3.1818 | 1.29601 | 22 |
|  | Male | 3.3594 | 1.17334 | 64 |
|  | Total | 3.3140 | 1.20060 | 86 |
| Total | Female | 2.7143 | 1.44653 | 35 |
|  | Male | 2.5743 | 1.43376 | 148 |
|  | Total | 2.6011 | 1.43328 | 183 |
| Tests of Between-Subjects Effects |  |  |  |  |
| Source | df | Mean Square | F | Sig. |
| STUDENT TYPE | 1 | 46.561 | 28.652 | <. 0005 |
| GENDER | 1 | 0.355 | 0.218 | . 641 |
| STUDENT TYPE * GENDER |  | 0.103 | 0.064 | . 801 |
| Error 17 |  | 1.625 |  |  |

difference $(p<.01)$ was found on the main effect of gender with regard to the influence of personal interest shown in the student $(F(1,179)=7.922, p=.005)$ (see Table 8). In this case, the mean score of the female students was $4.11(\underline{S D}=1.05)$, significantly higher than the mean of the male students, $3.40(\mathrm{SD}=1.29)$. No statistically significant differences were found for either the main effect of student type or for the interaction between gender and student type.

For the reputation components of name recognition, cutting edge facilities/technologies, academic excellence, quality of professors, academic offerings and accessibility of faculty/staff, no statistically significant differences were found for the main effects of student type or gender, or for the interaction between student type and gender (see Tables G3-G8).

Proximity. To discover the difference in the perspectives of the two student types, general population and top academic students, as it relates to the factor of proximity to home when controlling for gender, two-way analyses of variance were run on each of the defining components of the factor of proximity. A statistically significant difference ( $p<$ .01) was found on the main effect of student type with regard to the influence of both being close enough to visit family on holidays $(F(1,179)=18.131, p<.0005)$ (see Table 9 ) and being far enough to gain independence $(F(1,179)=32.673, p<.0005)$ (see Table 10).

For the component of being close enough to visit family on holidays, the mean score of the general population students was $2.73(\mathrm{SD}=1.57)$ on a 5-point Likert scale

## Table 8

Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for Gender Regarding the Influence of Personal Interest Shown in the Student on College Choice

| Student Type | Gender | Mean | Std. Deviation | n |
| :--- | :--- | :--- | :--- | :--- |
| General Population | Female | 4.0769 | 1.03775 | 13 |
|  | Male | 3.0952 | 1.35876 | 84 |
|  | Total | 3.2268 | 1.35789 | 97 |
| Top Academic | Female | 4.1364 | 1.08213 | 22 |
|  | Male | 3.7969 | 1.07171 | 64 |
|  | Total | 3.8837 | 1.07833 | 86 |
| Total | Memale | 4.1143 | 1.05081 | 35 |
|  | Total | 3.3986 | 1.28698 | 148 |
| Tests of Between-Subjects Effects | 3.5355 | 1.27426 | 183 |  |
| Source |  |  |  |  |
| STUDENT TYPE |  | 1 | 3.864 | 2.629 |
| GENDER |  | 1 | 11.644 | 7.922 |
| STUDENT TYPE * GENDER | 1 | 2.751 | 1.872 | .173 |
| Error | 179 | 1.470 |  | Square |

Table 9
Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for Gender Regarding the Influence of Being Close Enough to Visit
Family on Holidays on College Choice

| Student Type | Gender | Mean | Std. Deviation | n |
| :--- | :--- | :--- | :--- | :--- |
| General Population | Female | 2.0000 | 1.63299 | 13 |
|  | Male | 2.8452 | 1.54057 | 84 |
|  | Total | 2.7320 | 1.57133 | 97 |
| Top Academic | Female | 3.6364 | 1.29267 | 22 |
|  | Male | 3.5781 | 1.29474 | 64 |
|  | Total | 3.5930 | 1.28684 | 86 |
| Total | Female | 3.0286 | 1.61765 | 35 |
|  | Male | 3.1622 | 1.48027 | 148 |
| Testal | 3.1366 | 1.50381 | 183 |  |
| Source Between-Subjects Effects |  |  |  |  |
| STUDENT TYPE |  | 1 | 37.445 | 18.131 |
| GENDER | 1 | 4.132 | 2.001 | .0005 |
| STUDENT TYPE * GENDER | 1 | 5.445 | 2.637 | .106 |
| Error | 179 | 2.065 |  |  |

Table 10
Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for Gender Regarding the Influence of Being Far Enough to Gain Independence on College Choice

| Student Type | Gender | Mean | Std. Deviation | n |
| :--- | :--- | :--- | :--- | :--- |
| General Population | Female | 1.5385 | 0.87706 | 13 |
|  | Male | 2.2381 | 1.28587 | 84 |
|  | Total | 2.1443 | 1.25822 | 97 |
| Top Academic | Female | 3.1818 | 1.29601 | 22 |
|  | Male | 3.3437 | 1.22434 | 64 |
|  | Total | Female | 3.3023 | 1.23736 |
| Total | Male | 2.5714 | 1.39928 | 86 |
|  | Total | 2.7162 | 1.37044 | 148 |
| Tests of Between-Subjects Effects | 2.6885 | 1.37330 | 183 |  |
| Source |  |  |  |  |
| STUDENT TYPE | Mean Square | $F$ | Sig. |  |
| GENDER | 1 | 50.412 | 32.673 | $<.0005$ |
| STUDENT TYPE * GENDER | 1 | 1.929 | 1.250 | .265 |
| Error |  | 179 | 1.543 |  |

while the top academic students had a significantly higher mean of $3.59(\underline{S D}=1.29)$ on a 5-point Likert scale. For the component of being far enough to gain independence, the general population student mean score was $2.14(\underline{S D}=1.26)$ while the top academic student mean was significantly higher at $3.30(\underline{S D}=1.24)$. No statistically significant differences were found for either component for the main effect of gender or for the interaction between gender and student type.

For the proximity components of being close enough to visit family daily and being close enough to drive home at will, no statistically significant differences were found for the main effects of student type or gender, or for the interaction between student type and gender (see Tables G9, G10).

## Research Question $1 b$

Is there a statistically significant difference between general population students and top academic students with regard to the influence of the factors of scholarship, reputation of school and proximity to home when controlling for size of high school?

Scholarship. In order to ascertain the difference in the perspectives of the two student types, general population and top academic students, as it relates to the factor of scholarship when controlling for size of high school of attendance, two way analyses of variance were run on each of the defining components of the factors of scholarship. Statistically significant differences $(p<.01)$ were found on the main effects between general population students and top academic students with regard to the influence of full 4-year college tuition $(F(1,177)=89.566, p<.0005)$ (see Table 11), residence hall/meals $/$ maids $(F(1,177)=96.348, p<.0005)$ (see Table 12), costs of books/fees

Table 11
Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Size of High School Regarding the Influence of Full 4 Year College Tuition on College Choice


Table 12
Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Size of High School Regarding the Influence of Residence

Hall/Meals/Maids on College Choice

| Student Type | Size of High School | Mean | Std. Deviation | n |
| :--- | :--- | :--- | :--- | :--- |
| General Population | Small $(<200)$ | 2.3750 | 1.20416 | 16 |
|  | Mid-Sized $(>200$ and $<500)$ | 2.0000 | 1.47710 | 23 |
|  | Large $(>500)$ | 1.8276 | 1.28606 | 58 |
|  | Total | 1.9588 | 1.32223 | 97 |
| Top Academic | Small $(<200)$ | 4.3333 | 1.05079 | 33 |
|  | Mid-Sized $(>200$ and $<500)$ | 4.2143 | 0.89258 | 14 |
|  | Large $(>500)$ | 3.6410 | 1.18070 | 39 |
|  | Total | 4.0000 | 1.12720 | 86 |
| Total | Small $(<200)$ | 3.6939 | 1.43184 | 49 |
|  | Mid-Sized $(>200$ and $<500)$ | 2.8378 | 1.67520 | 37 |
|  | Large $(>500)$ | 2.5567 | 1.52731 | 97 |
|  | Total | 2.9180 | 1.59974 | 183 |
| Tests of Between-Subjects Effects |  |  |  |  |
| Source | df | Mean Square | $F$ | Sig. |
| STUDENT TYPE |  | 142.993 | 96.348 | $<.0005$ |
| SIZE | 2 | 6.098 | 4.109 | .018 |
| STUDENT TYPE $*$ SIZE | 2 | 0.514 | 0.347 | .708 |
| Error | 177 | 1.484 |  |  |

$(F(1,177)=17.090, p<.0005)$ (see Table 13), and a personal computer system $(F(1,177)$ $=48.834, p<.0005$ ) (see Table 14) on college choice. In each case, the mean score of top academic students was significantly higher than the mean of the general population group. No statistically significant differences were found for either the main effect of size of high school or for the interactions between size of high school and student type.

For the scholarship components of campus life opportunities and opportunities for networking/internships, no statistically significant differences were found for the main effects of student type or size of high school, or for the interaction between student type and size of high school (see Tables G11, G12).

Reputation. To determine the difference in the perspectives of the two student types, general population and top academic students, as it relates to the factor of reputation when controlling for size of high school, two-way analyses of variance were run on each of the defining components of the factor of reputation. A statistically significant difference ( $p<.01$ ) was found on the main effect of student type with regard to the influence of personal interest shown in the student $(F(1,177)=15.708, p<.0005)$ (see Table 15). In this case, the mean score of the top academic students was significantly higher than the mean score of the general population. No statistically significant differences were found for either the main effect of size of high school or for the interaction between size of high school and student type.

For the reputation components of name recognition, cutting edge facilities/technologies, academic excellence, quality of professors, academic offerings

Table 13
Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for Size of High School Regarding the Influence of Costs of Books/Fees on College Choice

| Student Type | Size | Scho |  | Mean | Std. | Deviation | n |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| General Population | Small (<200) |  |  | 2.1875 |  | . 32759 | 16 |
|  | Mid-Sized ( $>200$ and $<500$ ) |  |  | 2.3913 |  | . 52968 | 23 |
|  | Large ( $>500$ ) |  |  | 2.5517 |  | . 52376 | 58 |
|  | Total |  |  | 2.4536 |  | . 48619 | 97 |
| Top Academic | Small (<200) |  |  | 3.3636 |  | 1.16775 | 33 |
|  | Mid-Sized ( $>200$ and $<500$ ) |  |  | 3.4286 |  | 0.85163 | 14 |
|  | Large ( $>500$ ) |  |  | 3.1282 |  | 1.23926 | 39 |
|  | Total |  |  | 3.2674 |  | . 15223 | 86 |
| Total | Small ( $<200$ ) |  |  | 2.9796 |  | . 33057 | 49 |
|  | Mid-Sized ( $>200$ and $<500$ ) |  |  | 2.7838 |  | . 39712 | 37 |
|  | Large ( $>500$ ) |  |  | 2.7835 |  | . 43778 | 97 |
|  | Total |  |  | 2.8361 |  | . 39678 | 183 |
| Tests of Between-Subjects Effects |  |  |  |  |  |  |  |
| Source |  | df | Mean Square |  | $F$ |  | Sig. |
| STUDENT TYPE |  | 1 | 31.060 |  | 17.09 |  | $<.0005$ |
| SIZE |  | 2 | 0.174 |  | 0.09 |  | . 909 |
| STUDENT TYPE * SIZE |  | 2 | 1.580 |  | 0.86 |  | . 421 |
| Error |  | 177 | 1.8 |  |  |  |  |

Table 14
Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for Size of High School Regarding the Influence of Personal
Computer System on College Choice

| Student Type | Size of High School | Mean | Std. Deviation | n |
| :--- | :--- | :--- | :--- | :--- |
| General Population | Small $(<200)$ | 1.6875 | 1.13835 | 16 |
|  | Mid-Sized $(>200$ and $<500)$ | 1.8261 | 1.15413 | 23 |
|  | Large $(>500)$ | 2.1034 | 1.43502 | 58 |
|  | Total | 1.9691 | 1.32644 | 97 |
| Top Academic | Small (<200) | 3.3939 | 1.19738 | 33 |
|  | Mid-Sized $(>200$ and $<500)$ | 3.5000 | 1.34450 | 14 |
|  | Large $(>500)$ | 3.1795 | 1.16691 | 39 |
|  | Total | 3.3140 | 1.20060 | 86 |
| Total | Small $(<200)$ | 2.8367 | 1.41932 | 49 |
|  | Mid-Sized $(>200$ and $<500)$ | 2.4595 | 1.46429 | 37 |
|  | Large $(>500)$ | 2.5361 | 1.42932 | 97 |
|  | Total | 2.6011 | 1.43328 | 183 |
| Tests of Between-Subjects Effects |  |  |  |  |
| Source | df | Mean Square | $F$ | Sig. |
| STUDENT TYPE |  | 1 | 79.250 | 48.834 |
| SIZE | 2 | 0.189 | 0.117 | .890 |
| STUDENT TYPE * SIZE | 2 | 2.015 | 1.242 | .291 |
| Error | 177 | 1.623 |  |  |

## Table 15

Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for Size of High School Regarding the Influence of Personal Interest Shown in the Student on College Choice

and accessibility of faculty/staff, no statistically significant differences were found for the main effects of student type or size of high school, or for the interaction between student type and size of high school (see Tables G13-G18).

Proximity. To discover the difference in the perspectives of the two student types, general population and top academic students, as it relates to the factor of proximity when controlling for size of high school, two-way analyses of variance were run on each of the defining components of the factor of proximity. A statistically significant difference ( $p<.01$ ) was found on the main effect of student type with regard to the influence of both being close enough to visit family on holidays $(F(1,177)=$ $13.190, p<.0005)$ (see Table 16) and being far enough to gain independence $(F(1,177)=$ $31.118, p<.0005$ ) (see Table 17). In addition, a statistically significant difference was found on the main effect of size of high school with regard to the influence of being close enough to visit family daily $(F(2,177)=5.143, p=.007)$ (see Table 18).

For the components of being close enough to visit family on holidays and being far enough to gain independence, the mean score of the top academic students was significantly higher than the mean of the general population group. No statistically significant differences were found for either component for the main effect of size of high school or for the interaction between size of high school and student type.

For the component of being close enough to visit family daily, the mean score of the small high school was $1.69(S D=1.18)$, the mid-sized high school had a mean score of $1.86(\underline{S D}=1.0)$ and the large high school had a mean score of $2.48(\underline{S D}=1.5)$

Table 16
Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Size of High School Regarding the Influence of Being Close Enough to Visit Family on Holidays on College Choice

| Student Type | Size | Sch |  | Mean | Std. Deviation |  | n |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| General Population | Small |  |  | 2.8750 |  | . 45488 |  | 16 |
|  | Mid | $>20$ | $\mathrm{d}<500$ ) | 2.3913 |  | . 37309 |  | 23 |
|  | Lar |  |  | 2.8276 |  | . 67686 |  | 58 |
|  | Tota |  |  | 2.7320 |  | . 57133 |  | 97 |
| Top Academic | Sma |  |  | 3.6970 |  | . 26206 |  | 33 |
|  | Mid | - | $\mathrm{d}<500$ ) | 3.5000 |  | . 16024 |  | 14 |
|  | Lar |  |  | 3.5385 |  | . 37355 |  | 39 |
|  | Tota |  |  | 3.5930 |  | . 28684 |  | 86 |
| Total | Sma |  |  | 3.4286 |  | . 36931 |  | 49 |
|  | Mid | > 200 | d<500) | 2.8108 |  | . 39120 |  | 37 |
|  | Larg |  |  | 3.1134 |  | . 59345 |  | 97 |
|  | Tota |  |  | 3.1366 |  | . 50381 |  | 183 |
| Tests of Between-Subjects Effects |  |  |  |  |  |  |  |  |
| Source |  | df | Mean Square |  | $F$ |  | Si | g. |
| STUDENT TYPE |  | 1 | 27.845 |  | 13.19 |  | <. 00 | 005 |
| SIZE |  | 2 | 1.166 |  | 0.55 |  | . 57 | 76 |
| STUDENT TYPE * SIZE |  | 2 | 0.502 |  | 0.23 |  | . 78 | 89 |
| Error |  | 177 | 2.111 |  |  |  |  |  |

## Table 17

Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Size of High School Regarding the Influence of Being Far Enough to Gain Independence on College Choice


Table 18
Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for Size of High School Regarding the Influence of Being Close
Enough to Visit Family Daily on College Choice

| Student Type | Size | Schoo |  | Mean | Std. | Deviation | n |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| General Population | Smal |  |  | 2.0000 |  | . 41421 | 16 |
|  | Mid | 20 | d < 500) | 2.0000 |  | . 20605 | 23 |
|  | Large |  |  | 2.5862 |  | . 60082 | 58 |
|  | Total |  |  | 2.3505 |  | . 50029 | 97 |
| Top Academic | Smal |  |  | 1.5455 |  | . 03353 | 33 |
|  | Mid- | - | d < 500) | 1.6429 |  | . 49725 | 14 |
|  | Large |  |  | 2.3333 |  | . 43881 | 39 |
|  | Total |  |  | 1.9186 |  | . 22920 | 86 |
| Total | Smal |  |  | 1.6939 |  | . 17622 | 49 |
|  | Mid- | > 200 | d<500) | 1.8649 |  | . 00449 | 37 |
|  | Large |  |  | 2.4845 |  | . 53510 | 97 |
|  | Total |  |  | 2.1475 |  | . 39271 | 183 |
| Tests of Between-Subjects Effects |  |  |  |  |  |  |  |
| Source |  | df | Mean Square |  | F |  | Sig. |
| STUDENT TYPE |  | 1 | 4.522 |  | 2.47 |  | . 118 |
| SIZE |  | 2 | 9.418 |  | 5.14 |  | . 007 |
| STUDENT TYPE * SIZE |  | 2 | $0.156$ |  | 0.08 |  | . 919 |
| Error |  | 177 | 1.831 |  |  |  |  |

Test 18 (continued)
Tukey HSD Post Hoc Test of Multiple Comparisons of Size of High School Regarding the Influence of Being Close Enough to Visit Family Daily on College Choice

| Size of High School | Size of High School | Mean <br> Differ | Std. <br> Error | Sig. |
| :--- | :--- | :--- | :--- | :--- |
| Small $(<200)$ | Mid-Sized | -0.1710 | .29473 | .831 |
|  | Large | $-0.7907^{*}$ | .23717 | .003 |
| Mid-Sized $(>200$ and $<500)$ | Small | 0.1710 | .29473 | .831 |
|  | Large | -0.6197 | .26148 | .049 |
| Large $(>500)$ | Small | $0.7907^{*}$ | .23717 | .003 |
|  | Mid-Sized | 0.6197 | .26148 | .049 |

Based on observed means.

* The mean difference is significant at the .01 level.
resulting in a statistically significant difference with a significance level of .007. A post hoc Tukey HSD test indicated a statistically significant difference between the means of students from small high schools (under 200 students) and large high schools (over 500 students) ( $p=.003$ ).

For the proximity component of being close enough to drive home at will, no statistically significant differences were found for the main effects of student type or size of high school, or for the interaction between student type and size of high school (see Table G19).

## Research Question Ic

Is there a statistically significant difference between general population students and top academic students with regard to the influence of the factors of scholarship, reputation of school and proximity to home when controlling for type of high school?

Scholarship. In order to ascertain the difference in the perspectives of the two student types, general population and top academic students, as it relates to the factor of scholarship when controlling for type of high school, two-way analyses of variance were run on each of the defining components of the factor of scholarship. Statistically significant differences ( $p<.01$ ) were found on the main effects between general population students and top academic students with regard to the influence of full 4-year college tuition $(F(1,178)=72.135, p<.0005)$ (see Table 19), residence hall $/$ meals $/$ maids $\operatorname{see}(F(1,178)=78.582, p<.0005)($ Table 20$)$, costs of books/fees $(F(1,178)=7.589, p=$ .006) (see Table 21) and a personal computer system $(F(1,178)=27.226, p<.0005)$ (see Table 22) on college choice. In each case, the mean score of the top academic students

## Table 19

Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Type of High School Regarding the Influence of Full 4-Year

College Tuition on College Choice

| Student Type | Type of High School |  | Mean | Std. Deviation | n |
| :---: | :---: | :---: | :---: | :---: | :---: |
| General Population | Public |  | 2.7733 | 1.63222 | 75 |
|  | Private |  | 3.2273 | 1.63100 | 22 |
|  | Total |  | 2.8763 | 1.63464 | 97 |
| Top Academic | Public |  | 4.7846 | 0.51515 | 65 |
|  | Private |  | 4.9474 | 0.22942 | 19 |
|  | Home School |  | 5.0000 | 0.00000 | 2 |
|  | Total |  | 4.8256 | 0.46506 | 86 |
| Total | Public |  | 3.7071 | 1.59809 | 140 |
|  | Private |  | 4.0244 | 1.47458 | 41 |
|  | Home School |  | 5.0000 | 0.00000 | 2 |
|  | Total |  | 3.7923 | 1.56912 | 183 |
| Tests of Between-Subjects Effects |  |  |  |  |  |
| Source | df | Mean Squar |  | F | Sig. |
| STUDENT TYPE | 1 | 109.801 |  | $72.135<$ | <. 0005 |
| TYPE | 2 | 1.549 |  | 1.017 | . 364 |
| STUDENT TYPE * TYPE | YPE 1 | 0.669 |  | 0.439 | . 508 |
| Error | 178 | 1.522 |  |  |  |

Table 20
Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for Type of High School Regarding the Influence of Residence
Hall/Meals/Maids on College Choice

| Student Type | Type of High School | Mean | Std. Deviation | n |
| :--- | :--- | :--- | :--- | :--- |
| General Population | Public | 1.8800 | 1.30446 | 75 |
|  | Private | 2.2273 | 1.37778 | 22 |
|  | Total | 1.9588 | 1.32223 | 97 |
| Top Academic | Public | 3.9538 | 1.16499 | 65 |
|  | Private | 4.0526 | 1.02598 | 19 |
|  | Home School | 5.0000 | 0.00000 | 2 |
|  | Total | Public | 4.0000 | 1.12720 |
|  | Private | 2.8429 | 1.61500 | 140 |
| Total | Home School | 3.0732 | 1.52299 | 41 |
|  | Total |  | 5.0000 | 0.00000 |

## Table 21

Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for Type of High School Regarding the Influence of Costs of Books/Fees on College Choice

| Student Type | Type of High School | Mean | Std. Deviation | n |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| General Population | Public | 2.4133 | 1.49859 | 75 |  |
|  | Private | 2.5909 | 1.46902 | 22 |  |
|  | Total | 2.4536 | 1.48619 | 97 |  |
| Top Academic | Public | 3.3231 | 1.18727 | 65 |  |
|  | Private | 3.0000 | 1.00000 | 19 |  |
|  | Home School | 4.0000 | 1.41421 | 2 |  |
|  | Total | 3.2674 | 1.15223 | 86 |  |
| Total | Public | 2.8357 | 1.43246 | 140 |  |
|  | Home School |  | 2.7805 | 1.27499 | 41 |
|  | Total |  | 4.0000 | 1.41421 | 2 |
|  |  | 2.8361 | 1.39678 | 183 |  |
| Tests of Between-Subjects Effects |  |  |  |  |  |
| Source | df | Mean Square | $F$ | Sig. |  |
| STUDENT TYPE |  | 1 | 13.717 |  | 7.589 |
| TYPE | 2 | 0.733 |  | 0.405 | .667 |
| STUDENT TYPE * TYPE | 1 | 1.977 |  | 1.094 | .297 |
| Error | 178 | 1.807 |  |  |  |

Table 22
Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for Type of High School Regarding the Influence of Personal
Computer System on College Choice

| Student Type | Type of High School | Mean | Std. Deviation | n |
| :--- | :--- | :--- | :--- | :--- |
| General Population | Public | 1.9067 | 1.31697 | 75 |
|  | Private | 2.1818 | 1.36753 | 22 |
|  | Total | 1.9691 | 1.32644 | 97 |
| Top Academic | Public | 3.4000 | 1.19635 | 65 |
|  | Private | 3.0526 | 1.07877 | 19 |
|  | Home School | 3.0000 | 2.82843 | 2 |
|  | Total | 3.3140 | 1.20060 | 86 |
| Total | Public | 2.6000 | 1.46322 | 140 |
|  | Home School | 2.5854 | 1.30337 | 41 |
|  | Total |  | 3.0000 | 2.82843 |
| Tests of Between-Subjects Effects | 2.6011 | 1.43328 | 183 |  |
| Source |  |  |  | 2 |
| STUDENT TYPE |  | 1 | 44.077 |  |
| TYPE | 2 | 0.075 | 27.226 | $<.0005$ |
| STUDENT TYPE * TYPE | 1 | 3.056 | 0.046 | .955 |
| Error | 178 | 1.619 | 1.888 | .171 |

was significantly higher than the mean of the general population group. No statistically significant differences were found for either the main effect of high school type or for the interactions between high school type and student type.

For the scholarship components of campus life opportunities and opportunities for networking/internships, no statistically significant differences were found for the main effects of student type or high school type, or for the interaction between student type and high school type (see Tables G20, G21).

Reputation. To determine the difference in the perspectives of the two student types, general population and top academic students, as it relates to the factor of reputation when controlling for high school type, two-way analyses of variance were run on each of the defining components of the factor of reputation. A statistically significant difference ( $p<.01$ ) was found on the main effect of student type with regard to the influence of personal interest shown in the student $(F(1,178)=9.616, p=.002)$ (see Table 23). In this case, the mean score of top academic students was significantly higher than the mean score of the general population. No statistically significant differences were found for either the main effect of high school type or for the interaction between type of high school and student type.

For the reputation components of name recognition, cutting edge facilities/technologies, academic excellence, quality of professors, academic offerings and accessibility of faculty/staff, no statistically significant differences were found for the

## Table 23

Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Type of High School Regarding the Influence of Personal Interest Shown in the Student on College Choice

| Student Type | Type of High School | Mean | Std. Deviation | n |
| :--- | :--- | :--- | :--- | ---: |
| General Population | Public | 3.2800 | 1.37113 | 75 |
|  | Private | 3.0455 | 1.32655 | 22 |
|  | Total | 3.2268 | 1.35789 | 97 |
| Top Academic | Public | 3.9077 | 1.05657 | 65 |
|  | Private | 3.7895 | 1.18223 | 19 |
|  | Home School | 4.0000 | 1.41421 | 2 |
|  | Total | 3.8837 | 1.07833 | 86 |
| Total | Public | 3.5714 | 1.27026 | 140 |
|  | Home School |  | 3.3902 | 1.30150 |
|  | Total |  | 4.0000 | 1.41421 |

main effects of student type or type of high school, or for the interaction between student type and high school type (see Tables G22-G27).

Proximity. To discover the difference in the perspectives of the two student types, general population and top academic students, as it relates to the factor of proximity when controlling for type of high school, two-way analyses of variance were run on each of the defining components of the factor of proximity. A statistically significant difference ( $p<.01$ ) was found on the main effect of student type with regard to the influence of both being close enough to visit family on holidays $(F(1,178)=15.746$, $p<.0005$ ) (see Table 24) and being far enough to gain independence $(F(1,178)=21.748$, $p<.0005$ ) (see Table 25).

For both the component of being close enough to visit family on holidays and for being far enough to gain independence, the mean score of the top academic students was significantly higher than the mean score of the general population students. No statistically significant differences were found for either component for the main effect of type of high school or for the interaction between type of high school and student type.

For the proximity components of being close enough to visit family daily and being close enough to drive home at will, no statistically significant differences were found for the main effects of student type or type of high school, or for the interaction between student type and type of high school (see Tables G28, G29).

Table 24
Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for Type of High School Regarding the Influence of Being Close
Enough to Visit Family on Holidays on College Choice

| Student Type | Type of High School | Mean | Std. Deviation | n |
| :--- | :--- | :--- | :--- | :--- |
| General Population | Public | 2.8667 | 1.61357 | 75 |
|  | Private | 2.2727 | 1.35161 | 22 |
|  | Total | 2.7320 | 1.57133 | 97 |
| Top Academic | Public | 3.5385 | 1.29996 | 65 |
|  | Private | 3.6316 | 1.25656 | 19 |
|  | Home School | 5.0000 | 0.00000 | 2 |
|  | Total | 3.5930 | 1.28684 | 86 |
| Total | Public | 3.1786 | 1.50905 | 140 |
|  | Home School | 2.9024 | 1.46296 | 41 |
|  | Total |  | 5.0000 | 0.00000 |
|  |  | 3.1366 | 1.50381 | 183 |
| Tests of Between-Subjects Effects |  |  |  | 2 |
| Source |  | df | Mean Square | $F$ |
| STUDENT TYPE |  | 1 | 32.519 |  |
| TYPE | 2 | 2.739 |  | 15.746 |
| STUDENT TYPE * TYPE | 1 | 3.723 | 1.326 | .268 |
| Error | 178 | 2.065 |  |  |

## Table 25

Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Type of High School Regarding the Influence of Being Far Enough to Gain Independence on College Choice

| Student Type | Type of High School |  | Mean | Std. Deviation | n |
| :---: | :---: | :---: | :---: | :---: | :---: |
| General Population | Public |  | 2.1200 | 1.29406 | 75 |
|  | Private |  | 2.2273 | 1.15189 | 22 |
|  | Total |  | 2.1443 | 1.25822 | 97 |
| Top Academic | Public |  | 3.3077 | 1.15816 | 65 |
|  | Private |  | 3.1053 | 1.44894 | 19 |
|  | Home School |  | 5.0000 | 0.00000 | 2 |
|  | Total |  | 3.3023 | 1.23736 | 86 |
| Total | Public |  | 2.6714 | 1.36473 | 140 |
|  | Private |  | 2.6341 | 1.35566 | 41 |
|  | Home School |  | 5.0000 | 0.00000 | 2 |
|  | Total |  | 2.6885 | 1.37330 | 183 |
| Tests of Between-Subjects Effects |  |  |  |  |  |
| Source | df | Mean Squar |  | F | Sig. |
| STUDENT TYPE | 1 | 33.651 |  | 21.748 < | <. 0005 |
| TYPE | 2 | 3.115 |  | 2.013 | . 137 |
| STUDENT TYPE * TYPE | $\begin{array}{ll} \text { YPE } & 1 \\ \hline \end{array}$ | 0.756 |  | 0.489 | . 485 |
| Error | 178 | 1.547 |  |  |  |

## Research Question 1d

Is there a statistically significant difference between general population students and top academic students with regard to the influence of the factors of scholarship, reputation of school and proximity to home when controlling for type of community?

Scholarship. In order to ascertain the difference in the perspectives of the two student types, general population and top academic students, as it relates to the factor of scholarship when controlling for type of community from which the student originates, two-way analyses of variance were run on each of the defining components of the factor of scholarship. Statistically significant differences ( $p<.01$ ) were found on the main effects between general population students and top academic students with regard to the influence of full 4-year college tuition $(F(1,175)=72.899, p<.0005)$ (see Table 26), residence hall/meals/maids $(F(1,175)=69.982, p<.0005)$ (see Table 27), costs of books/fees $(F(1,175)=9.998, p=.002)$ (see Table 28), and a personal computer system $(F(1,175)=34.251, p<.0005)$ (see Table 29) on college choice. In each case, the mean score of the top academic students was significantly higher than the mean of the general population group. No statistically significant differences were found for either the main effect of community type or for the interactions between community type and student type.

For the scholarship components of campus life opportunities and opportunities for networking/internships, no statistically significant differences were found for the main effects of student type or community type, or for the interaction between student type and community type (see Table G30, G31).

Table 26
Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for Type of Community Regarding the Influence of Full 4 Year
College Tuition on College Choice

| Student Type | Type of Comn |  | Mean | Std. Deviation | n |
| :---: | :---: | :---: | :---: | :---: | :---: |
| General Population | Rural (<500) |  | 2.5000 | 1.29099 | 4 |
|  | Township (500 | 0,000) | 2.6250 | 1.58640 | 16 |
|  | Small City ( | -100,000) | 2.7000 | 1.83819 | 20 |
|  | Urban/Subu | 100,000) | 3.0351 | 1.61428 | 57 |
|  | Total |  | 2.8763 | 1.63464 | 97 |
| Top Academic | Rural ( $<500$ ) |  | 5.0000 | 0.00000 | 9 |
|  | Township (500 | 0,000) | 4.7083 | 0.62409 | 24 |
|  | Small City ( | -00-100,000) | 4.6429 | 0.49725 | 14 |
|  | Urban/Subur | - 100,000) | 4.9231 | 0.35427 | 39 |
|  | Total |  | 4.8256 | 0.46506 | 86 |
| Total | Rural (<500) |  | 4.2308 | 1.36344 | 13 |
|  | Township (5 | 0,000) | 3.8750 | 1.50533 | 40 |
|  | Small City ( | 00-100,000) | 3.5000 | 1.72767 | 34 |
|  | Urban/Subur | ( $>100,000$ ) | 3.8021 | 1.56689 | 96 |
|  | Total |  | 3.7923 | 1.56912 | 183 |
| Tests of Between-Subjects Effects |  |  |  |  |  |
| Source |  | df Mea | Square | F | Sig. |
| STUDENT TYPE |  | 1 | 2.398 | $72.899<$ | <. 0005 |
| COMMUNITY |  | 3 | 1.324 | 0.858 | . 464 |
| STUDENT TYPE * COMMUNITY |  | 3 | 0.353 | 0.229 | . 876 |
| Error |  | 175 | 1.542 |  |  |

Table 27
Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for Type of Community Regarding the Influence of Residence
Hall/Meals/Maids on College Choice

| Student Type | Type of Community |  | Mean | Std. Deviation | n |
| :---: | :---: | :---: | :---: | :---: | :---: |
| General Population | Rural (<500) |  | 1.2500 | 0.50000 | 4 |
|  | Township (500-10,000) |  | 2.2500 | 1.29099 | 16 |
|  | Small City ( $10,000-100,000$ ) |  | 2.2000 | 1.79473 | 20 |
|  | Urban/Suburban (>100,000) |  | 1.8421 | 1.16173 | 57 |
|  | Total |  | 1.9588 | 1.32223 | 97 |
| Top Academic | Rural (<500) |  | 3.7778 | 1.64148 | 9 |
|  | Township (500-10,000) |  | 4.3750 | 0.76967 | 24 |
|  | Small City ( $10,000-100,000$ ) |  | 3.5714 | 0.85163 | 14 |
|  | Urban/Suburban ( $>100,000$ ) |  | 3.9744 | 1.22447 | 39 |
|  | Total |  | 4.0000 | 1.12720 | 86 |
| Total | Rural (<500) |  | 3.0000 | 1.82574 | 13 |
|  | Township (500-10,000) |  | 3.5250 | 1.44980 | 40 |
|  | Small City (10,000-100,000) |  | 2.7647 | 1.61543 | 34 |
|  | Urban/Suburban ( $>100,000$ ) |  | 2.7083 | 1.58225 | 96 |
|  | Total |  | 2.9180 | 1.59974 | 183 |
| Tests of Between-Subjects Effects |  |  |  |  |  |
| Source |  | df M | Mean Square | $F$ | Sig. |
| STUDENT TYPE |  | $1 \quad 1$ | 105.618 | $69.982<$ | <. 0005 |
| COMMUNITY |  | 3 | 2.465 | 1.633 | . 183 |
| STUDENT TYPE * COMMUNITY |  | 3 | 524 | 1.010 | . 390 |
| Error |  | 175 | 509 |  |  |

Table 28
Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for Type of Community Regarding the Influence of Costs of
Books/Fees on College Choice

| Student Type | Type of Community | Mean | Std. Deviation | n |
| :--- | :--- | :--- | :--- | ---: |
| General Population | Rural (<500) | 2.5000 | 1.29099 | 4 |
|  | Township (500-10,000) | 2.0000 | 1.46059 | 16 |
|  | Small City (10,000-100,000) | 2.5000 | 1.76218 | 20 |
|  | Urban/Suburban (>100,000) | 2.5614 | 1.41444 | 57 |
|  | Total | 2.4536 | 1.48619 | 97 |
| Top Academic | Rural (<500) | 3.4444 | 1.23603 | 9 |
|  | Township (500-10,000) | 3.3750 | 1.01350 | 24 |
|  | Small City (10,000-100,000) | 2.7857 | 1.25137 | 14 |
|  | Urban/Suburban (> 100,000) | 3.3333 | 1.17727 | 39 |
|  | Total | 3.2674 | 1.15223 | 86 |
| Total | Rural (<500) | 3.1538 | 1.28103 | 13 |
|  | Township (500-10,000) | 2.8250 | 1.37538 | 40 |
|  | Small City (10,000-100,000) | 2.6176 | 1.55728 | 34 |
|  | Urban/Suburban $(>100,000)$ | 2.8750 | 1.37075 | 96 |
| Tests of Between-Subjects Effects | 2.8361 | 1.39678 | 183 |  |
| Source |  |  |  |  |
| STUDENT TYPE |  | 1 | 18.106 | 9.998 |
| COMMUNITY |  | 1.143 | 0.631 | .596 |
| STUDENT TYPE * COMMUNITY | 3 | 1.801 | 0.995 | .397 |
| Error | 175 | 1.811 |  |  |

Table 29
Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for Type of Community Regarding the Influence of a Personal
Computer System on College Choice

| Student Type | Type of Community | Mean | Std. Deviation | n |
| :--- | :--- | :--- | :--- | ---: |
| General Population | Rural (<500) | 1.5000 | 1.00000 | 4 |
|  | Township (500-10,000) | 1.6250 | 1.14746 | 16 |
|  | Small City (10,000-100,000) | 2.0000 | 1.52177 | 20 |
|  | Urban/Suburban (>100,000) | 2.0877 | 1.32666 | 57 |
|  | Total | 1.9691 | 1.32644 | 97 |
| Top Academic | Rural (<500) | 3.1111 | 1.05409 | 9 |
|  | Township (500-10,000) | 3.6667 | 1.20386 | 24 |
|  | Small City (10,000-100,000) | 3.1429 | 1.23146 | 14 |
|  | Urban/Suburban $(>100,000)$ | 3.2051 | 1.21784 | 39 |
|  | Total | 3.3140 | 1.20060 | 86 |
| Total | Rural (<500) | 2.6154 | 1.26085 | 13 |
|  | Township (500-10,000) | 2.8500 | 1.54505 | 40 |
|  | Small City (10,000-100,000) | 2.4706 | 1.50223 | 34 |
|  | Urban/Suburban $(>100,000)$ | 2.5417 | 1.39107 | 96 |
|  | Total | 2.6011 | 1.43328 | 183 |
| Tests of Between-Subjects Effects |  |  |  |  |
| Source |  | 1 | 55.508 | 34.251 |
| STUDENT TYPE |  | 0.416 | 0.257 | .857 |
| COMMUNITY |  | 2.129 | 1.313 | .272 |
| STUDENT TYPE * COMMUNITY | 3 | 1.621 |  |  |
| Error |  |  |  |  |

Reputation. To determine the difference in the perspectives of the two student types, general population and top academic students, as it relates to the factor of reputation when controlling for community type, two-way analyses of variance were run on each of the defining components of the factor of reputation. A statistically significant difference ( $p<.01$ ) was found on the main effect of community type with regard to the influence of name recognition $(F(3,175)=4.801, p=.003)$ (see Table 30) and quality of professors $(F(3,175)=4.103, p=.008)$ (see Table 31).

In addition, the component of personal interest shown in the student showed a statistically significant difference ( $p<.01$ ) when analyzed for the main effects of both student type $(F(1,175)=16.540, p<.0005)$ and community type $(F(3,175)=4.208, p=$ .007) (see Table 32). For student type, the mean score of the top academic student was $3.88(\underline{S D}=1.08)$ while the mean score of the general population student was $3.23(\mathrm{SD}=$ 1.36). For the community type the mean score of the students from rural areas was 2.85 ( $\mathrm{SD}=1.41$ ), the mean score of the students from townships was $3.93(\underline{S D}=1.14)$, the mean score of the students from small cities was $3.74(\underline{S D}=1.46)$ and the mean score of students from urban/suburban centers was $3.40(\underline{S D}=1.19)$. A post hoc Tukey HSD test indicated a statistically significant difference in the means of the students from rural areas and townships $(p=.028)$. There was no statistically significant interaction between student type and community type.

For the reputation components of cutting edge facilities/technologies, academic excellence, academic offerings and accessibility of faculty/staff, no statistically significant differences were found for the main effects of student type or community

Table 30
Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for Type of Community Regarding the Influence of Name
Recognition on College Choice

| Student Type | Type of Community | Mean | Std. Deviation | n |
| :---: | :---: | :---: | :---: | :---: |
| General Population | Rural (<500) | 1.5000 | 1.00000 | 4 |
|  | Township (500-10,000) | 3.3125 | 1.07819 | 16 |
|  | Small City ( $10,000-100,000$ ) | 3.2500 | 1.11803 | 20 |
|  | Urban/Suburban (>100,000) | 2.8947 | 1.20541 | 57 |
|  | Total | 2.9794 | 1.19878 | 97 |
| Top Academic | Rural (<500) | 2.6667 | 1.22474 | 9 |
|  | Township (500-10,000) | 3.1250 | 0.74089 | 24 |
|  | Small City ( $10,000-100,000$ ) | ) 3.0714 | 0.99725 | 14 |
|  | Urban/Suburban ( $>100,000$ ) | ) 2.5128 | 1.04810 | 39 |
|  | Total | 2.7907 | 1.00722 | 86 |
| Total | Rural (<500) | 2.3077 | 1.25064 | 13 |
|  | Township (500-10,000) | 3.2000 | 0.88289 | 40 |
|  | Small City ( $10,000-100,000$ ) | 3.1765 | 1.05803 | 34 |
|  | Urban/Suburban (> 100,000) | 2.7396 | 1.15389 | 96 |
|  | Total | 2.8907 | 1.11388 | 183 |
| Tests of Between-Subjects Effects |  |  |  |  |
| Source | df | Mean Square | F | Sig. |
| STUDENT TYPE | 1 | 0.278 | 0.238 | . 626 |
| COMMUNITY | 3 | 5.620 | 4.801 | . 003 |
| STUDENT TYPE * COMMUNITY |  | 1.981 | 1.692 | . 170 |
| Error | 175 | 1.171 |  |  |

Test 30 (continued)
Tukey HSD Post Hoc Test of Multiple Comparisons of Type of Community Regarding the Influence of Name Recognition on College Choice

| Type of Community | Type of <br> Community | Mean <br> Differ | Std. Error | Sig. |
| :--- | :--- | :--- | :--- | :--- |
| Rural $(<500)$ | Township | -0.8923 | .34541 | .051 |
|  | Small City | -0.8688 | .35281 | .070 |
|  | Urban/Suburban | -0.4319 | .31975 | .532 |
| Township (500-10,000) | Rural | 0.8923 | .34541 | .051 |
|  | Small City | 0.0235 | .25238 | 1.000 |
|  | Urban/Suburban | 0.4604 | .20361 | .111 |
| Small City $(10,000-100,000)$ | Rural | 0.8688 | .35281 | .070 |
|  | Township | -0.0235 | .25238 | 1.000 |
|  | Urban/Suburban | 0.4369 | .21592 | .183 |
| Urban/Suburban $(>100,000)$ | Rural | 0.4319 | .31975 | .532 |
|  | Township | -0.4604 | .20361 | .111 |
|  | Small City | -0.4369 | .21592 | .183 |

Based on observed means.

## Table 31

Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for Type of Community Regarding the Influence of Quality of
Professors on College Choice

| Student Type | Type of Community | Mean | Std. Deviation | n |
| :--- | :--- | :--- | :--- | :--- |
| General Population | Rural (<500) | 2.2500 | 1.50000 | 4 |
|  | Township (500-10,000) | 4.1875 | 0.83417 | 16 |
|  | Small City (10,000-100,000) | 3.9500 | 1.05006 | 20 |
|  | Urban/Suburban (> 100,000) | 3.7895 | 1.14544 | 57 |
|  | Total | 3.8247 | 1.13661 | 97 |
| Top Academic | Rural (<500) | 3.3333 | 1.22474 | 9 |
|  | Township (500-10,000) | 3.5417 | 0.97709 | 24 |
|  | Small City (10,000-100,000) | 4.0000 | 0.67937 | 14 |
|  | Urban/Suburban (> 100,000) | 3.4615 | 0.96916 | 39 |
|  | Total | 3.5581 | 0.96534 | 86 |
| Total | Rural (<500) | 3.0000 | 1.35401 | 13 |
|  | Township (500-10,000) | 3.8000 | 0.96609 | 40 |
|  | Small City (10,000-100,000) | 3.9706 | 0.90404 | 34 |
|  | Urban/Suburban (> 100,000) | 3.6562 | 1.08413 | 96 |
|  | Total | 3.6995 | 1.06511 | 183 |

Tests of Between-Subjects Effects

| Source | df | Mean Square | $F$ | Sig. |
| :--- | ---: | :---: | :---: | :---: |
| STUDENT TYPE | 1 | 0.040 | 0.038 | .846 |
| COMMUNITY | 3 | 4.390 | 4.103 | .008 |
| STUDENT TYPE * COMMUNITY | 3 | 2.434 | 2.275 | .082 |
| Error | 175 | 1.070 |  |  |

Test 31 (continued)
Tukey HSD Post Hoc Test of Multiple Comparisons of Type of Community Regarding the Influence of Quality of Professors on College Choice

| Type of Community | Type of <br> Community | Mean <br> Differ | Std. Error | Sig. |
| :--- | :--- | :--- | :---: | :---: |
| Rural (<500) | Township | -.8000 | .33025 | .077 |
|  | Small City | $-.9706^{*}$ | .33732 | .023 |
|  | Urban/Suburban | -.6562 | .30571 | .143 |
| Township (500-10,000) | Rural | .8000 | .33025 | .077 |
|  | Small City | -.1706 | .24130 | .894 |
|  | Urban/Suburban | .1438 | .19467 | .881 |
| Small City (10,000-100,000) | Rural | $.9706^{*}$ | .33732 | .023 |
|  | Township | .1706 | .24130 | .894 |
|  | Urban/Suburban | .3143 | .20644 | .426 |
| Urban/Suburban $(>100,000)$ | Rural | .6562 | .30571 | .143 |
|  | Township | -.1438 | .19467 | .881 |
|  | Small City | -.3143 | .20644 | .426 |

Based on observed means.

Table 32
Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for Type of Community Regarding the Influence of Personal Interest Shown in the Student on College Choice

| Student Type | Type of Community | Mean | Std. Deviation | n |
| :---: | :---: | :---: | :---: | :---: |
| General Population | Rural (<500) | 1.7500 | 1.50000 | 4 |
|  | Township (500-10,000) | 3.3750 | 1.45488 | 16 |
|  | Small City ( $10,000-100,000$ ) | ) 3.3000 | 1.65752 | 20 |
|  | Urban/Suburban (>100,000) | ) 3.2632 | 1.17300 | 57 |
|  | Total | 3.2268 | 1.35789 | 97 |
| Top Academic | Rural (<500) | 3.3333 | 1.11803 | 9 |
|  | Township (500-10,000) | 4.2917 | 0.69025 | 24 |
|  | Small City ( $10,000-100,000$ ) | ) 4.3571 | 0.84190 | 14 |
|  | Urban/Suburban ( $>100,000$ ) | ) 3.5897 | 1.20782 | 39 |
|  | Total | 3.8837 | 1.07833 | 86 |
| Total | Rural ( $<500$ ) | 2.8462 | 1.40512 | 13 |
|  | Township (500-10,000) | 3.9250 | 1.14102 | 40 |
|  | Small City ( $10,000-100,000$ ) | ) 3.7353 | 1.46285 | 34 |
|  | Urban/Suburban (> 100,000) | ) 3.3958 | 1.19190 | 96 |
|  | Total | 3.5355 | 1.27426 | 183 |
| Tests of Between-Subjects Effects |  |  |  |  |
| Source | df M | Mean Square | $F$ | Sig. |
| STUDENT TYPE | 1 | 23.946 | 16.540 < | <. 0005 |
| COMMUNITY | 3 | 6.093 | 4.208 | . 007 |
| STUDENT TYPE * COMMUNITY |  | 2.286 | 1.579 | . 196 |
| Error | 175 | 1.448 |  |  |

Test 32 (continued)
Tukey HSD Post Hoc Test of Multiple Comparisons of Type of Community Regarding the Influence of Personal Interest Shown in the Student on College Choice

| Type of Community | Type of <br> Community | Mean <br> Differ | Std. <br> Error | Sig. |
| :--- | :--- | :--- | :--- | :--- |
| Rural (<500) | Township | $-1.0788^{*}$ | .38414 | .028 |
|  | Small City | -0.8891 | .39236 | .110 |
|  | Urban/Suburban | -0.5497 | .35560 | .413 |
| Township (500-10,000) | Rural | $1.0788^{*}$ | .38414 | .028 |
|  | Small City | 0.1897 | .28067 | .906 |
|  | Urban/Suburban | 0.5292 | .22644 | .094 |
| Small City $(10,000-100,000)$ | Rural | 0.8891 | .39236 | .110 |
|  | Township | -0.1897 | .28067 | .906 |
|  | Urban/Suburban | 0.3395 | .24013 | .493 |
| Urban/Suburban $(>100,000)$ | Rural | 0.5497 | .35560 | .413 |
|  | Township | -0.5292 | .22644 | .094 |
|  | Small City | -0.3395 | .24013 | .493 |

Based on observed means.

* The mean difference is significant at the .05 level.
type, or for the interaction between student type and community type (see Tables G32Q35).

Proximity. To discover the difference in the perspectives of the two student types, general population and top academic students, as it relates to the factor of proximity when controlling for community type, two-way analyses of variance were run on each of the defining components of the factor of proximity. A statistically significant difference ( $p<.01$ ) was found on the main effect of student type with regard to both the influence of being close enough to visit family daily $(F(1,175)=7.672, p=.006)$ (see Table 33) and the influence of being far enough to gain independence $(F(1,175)=24.553, p<.0005)$ (see Table 34).

For the component of being close enough to visit family daily, the mean score of the general population students was $2.35(\mathrm{SD}=1.50)$ on a 5 -point Likert scale while the top academic students had a mean score of $1.92(\mathrm{SD}=1.23)$ on a 5-point Likert scale. For the component of being far enough to gain independence, the general population student mean score was $2.14(\underline{S D}=1.26)$ while the top academic student mean was significantly higher at $3.30(\underline{S D}=1.24)$. No statistically significant differences were found for either component for the main effect of community type or for the interaction between community type and student type.

For the proximity components of being close enough to visit family on holidays and being close enough to drive home at will, no statistically significant differences were found for the main effects of student type or community type, or for the interaction. between student type and community type (see Tables G36, G37).

Table 33
Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Type of Community Regarding the Influence of Being Close Enough to Visit Family Daily on College Choice

| Student Type | Type of Community | Mean | Std. Deviation | n |
| :---: | :---: | :---: | :---: | :---: |
| General Population | Rural (<500) | 2.7500 | 2.06155 | 4 |
|  | Township (500-10,000) | 2.2500 | 1.57056 | 16 |
|  | Small City (10,000-100,000) | 2.4500 | 1.63755 | 20 |
|  | Urban/Suburban (> 100,000) | 2.3158 | 1.42876 | 57 |
|  | Total | 2.3505 | 1.50029 | 97 |
| Top Academic | Rural ( $<500$ ) | 1.2222 | 0.44096 | 9 |
|  | Township (500-10,000) | 1.3750 | 0.49454 | 24 |
|  | Small City ( $10,000-100,000$ ) | 1.7143 | 1.13873 | 14 |
|  | Urban/Suburban (>100,000) | 2.4872 | 1.44863 | 39 |
|  | Total | 1.9186 | 1.22920 | 86 |
| Total | Rural ( $<500$ ) | 1.6923 | 1.31559 | 13 |
|  | Township (500-10,000) | 1.7250 | 1.13199 | 40 |
|  | Small City (10,000-100,000) | 2.1471 | 1.47981 | 34 |
|  | Urban/Suburban (> 100,000) | 2.3854 | 1.43174 | 96 |
|  | Total | 2.1475 | 1.39271 | 183 |
| Tests of Between-Subjects Effects |  |  |  |  |
| Source | df | Mean Square | F | Sig. |
| STUDENT TYPE | 1 | 13.977 | 7.672 | . 006 |
| COMMUNITY | 3 | 3.485 | 1.913 | . 129 |
| STUDENT TYPE * COMMUNITY |  | 4.666 | 2.562 | . 056 |
| Error | 175 | 1.822 |  |  |

Table 34
Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for Type of Community Regarding the Influence of Being Far
Enough to Gain Independence on College Choice

| Student Type | Type of Community | Mean | Std. Deviation | n |
| :---: | :---: | :---: | :---: | :---: |
| General Population | Rural (<500) | 2.0000 | 1.15470 | 4 |
|  | Township (500-10,000) | 2.4375 | 0.96393 | 16 |
|  | Small City ( $10,000-100,000$ ) | 2.3500 | 1.59852 | 20 |
|  | Urban/Suburban (> 100,000) | 2.0000 | 1.21008 | 57 |
|  | Total | 2.1443 | 1.25822 | 97 |
| Top Academic | Rural ( $<500$ ) | 3.3333 | 1.00000 | 9 |
|  | Township (500-10,000) | 3.5000 | 0.88465 | 24 |
|  | Small City ( $10,000-100,000$ ) | 3.8571 | 1.29241 | 14 |
|  | Urban/Suburban (> 100,000) | 2.9744 | 1.38578 | 39 |
|  | Total | 3.3023 | 1.23736 | 86 |
| Total | Rural (<500) | 2.9231 | 1.18754 | 13 |
|  | Township (500-10,000) | 3.0750 | 1.04728 | 40 |
|  | Small City ( $10,000-100,000$ ) | 2.9706 | 1.64197 | 34 |
|  | Urban/Suburban (> 100,000) | 2.3958 | 1.36481 | 96 |
|  | Total | 2.6885 | 1.37330 | 183 |
| Tests of Between-Subjects Effects |  |  |  |  |
| Source | df | Mean Square | F | Sig. |
| STUDENT TYPE | 1 | 37.766 | $24.553<$ | <. 0005 |
| COMMUNITY | + 3 | 4.092 | 2.660 | . 050 |
| STUDENT TYPE * COMMUNITY |  | 0.628 | 0.408 | . 747 |
| Error | 175 | 1.538 |  |  |

## Research Question le

Is there a statistically significant difference between general population students and top academic students with regard to the influence of the factors of scholarship, reputation of school and proximity to home when controlling for college type?

Scholarship. After subdividing the respondents into the nine majors, the resulting group sizes were too small to determine statistical significance. Therefore, for this research question, data were subdivided only into the two categories of college of attendance, the College of Engineering and Technology and the College of Information Science and Technology.

In order to ascertain the difference in the perspectives of the two student types, general population and top academic students, as it relates to the factor of scholarship when controlling for students' choices of either the College of Engineering and Technology or the College of Information Science and Technology, two-way analyses of variance were run on each of the defining components of the factor of scholarship. Statistically significant differences $(p<.01)$ were found on the main effect of student type between general population students and top academic students with regard to the influence of full 4-year college tuition $(F(1,179)=112.452, p<.0005)$ (see Table 35), residence hall/meals/maids $(F(1,179)=121.426, p<.0005)$ (see Table 36), campus life opportunities $(F(1,179)=6.760, p=.010)($ see Table 37), costs of books/fees $(F(1,179)=$ $17.927, p<.0005$ ) (see Table 38) and a personal computer system $(F(1,179)=51.621$, $p<.0005$ ) (see Table 39) on college choice. In each case, the mean score of the top academic students was significantly higher than the mean of the general population

## Table 35

Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for College Regarding the Influence of Full 4Year College Tuition on College Choice

| Student Type | College | Mean | Std. <br> Deviation | n |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| General Population | Engineering and Technology | 2.7250 | 1.72445 | 40 |  |
|  | Information Science and Tech | 2.9825 | 1.57538 | 57 |  |
|  | Total | 2.8763 | 1.63464 | 97 |  |
| Top Academic | Engineering and Technology | 4.8400 | 0.46773 | 50 |  |
|  | Information Science and Tech | 4.8056 | 0.46718 | 36 |  |
|  | Total | Engineering and Technology | 3.9000 | 1.59388 | 90 |
| Total | Information Science and Tech | 3.6882 | 1.54623 | 93 |  |
|  | Total |  | 3.7923 | 1.56912 | 183 |
| Tests of Between-Subjects Effects |  |  |  |  |  |
| Source |  | df | Mean Square |  | $F$ |
| STUDENT TYPE |  | 1 | 171.704 |  | 112.452 |
| COLLEGE |  | 1 | 0.551 |  | 0.361 |
| STUDENT TYPE * COLLEGE | 1 | 0.943 |  | 0.618 | .435 |
| Error |  | 179 | 1.527 |  |  |

Table 36
Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for College Regarding the Influence of Residence Hall/Meals/Maids on College Choice

| Student Type | College | Mean | Std. <br> Deviation | n |
| :--- | :--- | :--- | :--- | :--- |
| General Population | Engineering and Technology | 1.8750 | 1.36227 | 40 |
|  | Information Science and Tech | 2.0175 | 1.30235 | 57 |
|  | Total | 1.9588 | 1.32223 | 97 |
| Top Academic | Engineering and Technology | 4.0000 | 1.06904 | 50 |
|  | Information Science and Tech | 4.0000 | 1.21890 | 36 |
|  | Total | 4.0000 | 1.12720 | 86 |
| Total | Engineering and Technology | 3.0556 | 1.60309 | 90 |
|  | Information Science and Tech | 2.7849 | 1.59380 | 93 |
|  | Total | 2.9180 | 1.59974 | 183 |

Tests of Between-Subjects Effects

| Source | df | Mean Square | $F$ | Sig. |
| :--- | :---: | :---: | :---: | :---: |
| STUDENT TYPE | 1 | 186.790 | 121.426 | $<.0005$ |
| COLLEGE | 1 | 0.225 | 0.146 | .703 |
| STUDENT TYPE * COLLEGE | 1 | 0.225 | 0.146 | .703 |
| Error | 179 | 1.538 |  |  |

## Table 37

Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for College Regarding the Influence of Campus Life Opportnities on College Choice

| Student Type | College | Mean | Std. <br> Deviation | n |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| General Population | Engineering and Technology | 1.9750 | 1.25038 | 40 |  |
|  | Information Science and Tech | 2.4211 | 1.20930 | 57 |  |
|  | Total | 2.2371 | 1.23973 | 97 |  |
| Top Academic | Engineering and Technology | 2.6800 | 0.95704 | 50 |  |
|  | Information Science and Tech | 2.5833 | 0.96732 | 36 |  |
|  | Total | 2.6395 | 0.95687 | 86 |  |
| Total | Engineering and Technology | 2.3667 | 1.14607 | 90 |  |
|  | Information Science and Tech | 2.4839 | 1.11913 | 93 |  |
| Total |  | 2.4262 | 1.13087 | 183 |  |
| Tests of Between-Subjects Effects |  |  |  |  |  |
| Source |  | df | Mean Square |  | $F$ |
| STUDENT TYPE |  | 1 | 8.328 |  | 6.760 |
| COLLEGE |  | 1 | 1.352 |  | 1.097 |
| STUDENT TYPE * COLLEGE | 1 | 3.261 |  | 2.647 | .105 |
| Error | 179 | 1.232 |  |  |  |

## Table 38

Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for College Regarding the Influence of Costs of Books/Fees on College Choice

| Student Type | College |  |  | Mean | Std. Deviation | n |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| General Population | Engineering and Technology |  |  | 2.2750 | 1.48475 | 40 |
|  | Information Science and Tech |  |  | 2.5789 | 1.48742 | 57 |
|  | Total |  |  | 2.4536 | 1.48619 | 97 |
| Top Academic | Engineering and Technology |  |  | 3.2000 | 1.10657 | 50 |
|  | Information Science and Tech |  |  | 3.3611 | 1.22247 | 36 |
|  | Total |  |  | 3.2674 | 1.15223 | 86 |
| Total | Engineering and Technology |  |  | 2.7889 | 1.36155 | 90 |
|  | Information Science and Tech |  |  | 2.8817 | 1.43595 | 93 |
|  | Total |  |  | 2.8361 | 1.39678 | 183 |
| Tests of Between-Subjects Effects |  |  |  |  |  |  |
| Source |  | df | Mean Square |  | F | Sig. |
| STUDENT TYPE |  | 1 | 32.267 |  | $17.927<$ | <. 0005 |
| COLLEGE |  | 1 | 2.395 |  | 1.330 | . 250 |
| STUDENT TYPE * COLLEGE |  | 1 | 0.226 |  | 0.126 | . 724 |
| Error | $\cdots$ | 179 | 1.800 |  |  |  |

Table 39
Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for College Regarding the Influence of aPersonal Computer System on College Choice

| Student Type | College | Mean | Std. <br> Deviation | n |
| :--- | :--- | :---: | :---: | :---: |
| General Population | Engineering and Technology | 1.9250 | 1.40306 | 40 |
|  | Information Science and Tech | 2.0000 | 1.28174 | 57 |
|  | Total | 1.9691 | 1.32644 | 97 |
| Top Academic | Engineering and Technology | 3.2000 | 1.12486 | 50 |
|  | Information Science and Tech | 3.4722 | 1.29804 | 36 |
|  | Total | 3.3140 | 1.20060 | 86 |
| Total | Engineering and Technology | 2.6333 | 1.40184 | 90 |
|  | Information Science and Tech | 2.5699 | 1.46997 | 93 |
|  | Total | 2.6011 | 1.43328 | 183 |


| Tests of Between-Subjects Effects |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Source | df | Mean Square | $F$ | Sig. |
| STUDENT TYPE | 1 | 83.559 | 51.621 | $<.0005$ |
| COLLEGE | 1 | 1.335 | 0.825 | .365 |
| STUDENT TYPE * COLLEGE | 1 | 0.431 | 0.266 | .607 |
| Error | 179 | 1.619 |  |  |

group. No statistically significant differences were found for either the main effect of college or for the interactions between college and student type.

In addition, there are statistically significant differences $(p<.01)$ in the mean scores of the dependent variable of opportunities for networking/internships in the main effects of both student type $(F(1,179)=10.273, p=.002)$ and college $(F(1,179)=14.648$, $p<.0005$ ) (see Table 40). The mean score of the top academic students was $3.77(\mathrm{SD}=$ 1.11) while the mean score of the general population students was significantly lower at $3.26(\underline{S D}=1.56)$. There is also a statistically significant difference between the students who chose the two different colleges. The mean score of the students who chose the College of Engineering and Technology was $3.17(\underline{S D}=1.41)$. The mean score of the students who chose the College of Information Science and Technology was significantly higher at $3.82(\underline{S D}=1.30)$.

Reputation. To determine the difference in the perspectives of the two student types, general population and top academic students, as it relates to the factor of reputation when controlling for students' choices of either the College of Engineering and Technology or the College of Information Science and Technology, two-way analyses of variance were run on each of the defining components of the factor of reputation. A statistically significant difference ( $p<.01$ ) was found on the main effect of student type with regard to the influence of personal interest shown in the student $(F(1,179)=15.378$, $p<.0005$ ) (see Table 41). In this case, the mean score of the top academic students was significantly higher than the mean score of the general population students. No

Table 40
Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for College Regarding the Influence of Opportunities for
Networking/Internships on College Choice

| Student Type | College | Mean | Std. <br> Deviation | n |
| :--- | :--- | :--- | :--- | :--- |
| General Population | Engineering and Technology | 2.8500 | 1.64161 | 40 |
|  | Information Science and Tech | 3.5439 | 1.45246 | 57 |
|  | Total | 3.2577 | 1.56311 | 97 |
| Top Academic | Engineering and Technology | 3.4200 | 1.14446 | 50 |
|  | Information Science and Tech | 4.2500 | 0.87423 | 36 |
|  | Total | 3.7674 | 1.11328 | 86 |
| Total | Engineering and Technology | 3.1667 | 1.40824 | 90 |
|  | Information Science and Tech | 3.8172 | 1.30172 | 93 |
|  | Total | 3.4973 | 1.39021 | 183 |

Tests of Between-Subjects Effects

| Source | df | Mean Square | $F$ | Sig. |
| :--- | :---: | :---: | :---: | :---: |
| STUDENT TYPE | 1 | 18.030 | 10.273 | .002 |
| COLLEGE | 1 | 25.710 | 14.648 | $<.0005$ |
| STUDENT TYPE * COLLEGE | 1 | 0.205 | 0.117 | .733 |
| Error | 179 | 1.755 |  |  |

Table 41
Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for College Regarding the Influence of Personal Interest Shownin the Student on College Choice

| Student Type | College |  |  | Mean |  | Std. <br> Deviation | n |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| General Population | Engineer | and T | hnology | 3.0000 |  | 1.43223 | 40 |
|  | Informati | Scien | and Tech | 3.3860 |  | 1.29221 | 57 |
|  | Total |  |  | 3.2268 |  | 1.35789 | 97 |
| Top Academic | Engineer | and | hnology | 3.7200 |  | 1.10730 | 50 |
|  | Informa | Scien | and Tech | 4.1111 |  | 1.00791 | 36 |
|  | Total |  |  | 3.8837 |  | 1.07833 | 86 |
| Total | Enginee | and | hnology | 3.4000 |  | 1.30513 | 90 |
|  | Informati | Scien | and Tech | 3.6667 |  | 1.23652 | 93 |
|  | Total |  |  | 3.5355 |  | 1.27426 | 183 |
| Tests of Between-Subjects Effects |  |  |  |  |  |  |  |
| Source | df |  | Mean Square | $F$ |  |  | Sig. |
| STUDENT TYPE |  | 1 | 23.12 |  | 15.378 |  | <. 0005 |
| COLLEGE |  | 1 | 6.68 |  | 4.446 |  | . 036 |
| STUDENT TYPE * COLLEGE |  | 1 | 0.000 |  | 0.000 | 00 | . 989 |
| Error |  | 179 | 1.50 |  |  |  |  |

statistically significant differences were found for either the main effect of college of attendance or for the interaction between the college of attendance and student type.

A statistically significant difference was also found on the main effect of college of attendance with regard to the dependent variable of influence of cutting edge facilities/technologies $(F(1,179)=15.971, p<.0005)$ (see Table 42). The students in the College of Information Science and Technology had a significantly higher mean score at $4.24(\underline{S D}=0.74)$ than did the students attending the College of Engineering and Technology whose mean score was $3.68(\underline{S D}=1.20)$.

For the reputation components of name recognition, academic excellence, quality of professors, academic offerings and accessibility of faculty/staff, no statistically significant differences were found for the main effects of student type or college of attendance, or for the interaction between student type and college (see Tables G38-G42).

Proximity. To discover the difference in the perspectives of the two student types, general population and top academic students, as it relates to the factor of proximity when controlling for college of attendance, two-way analyses of variance were run on each of the defining components of the factor of proximity. A statistically significant difference $(p<.01)$ was found on the main effect of student type with regard to both the influence of being close enough to visit family on holidays $(F(1,179)=16.109$, $p<.0005$ ) (see Table 43) and the influence of being far enough to gain independence $(F(1,179)=39.103, p<.0005)$ (see Table 44).

Table 42
Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for College Regarding the Influence of Cutting Edge
Facilities/Technologies on College Choice

| Student Type | College | Mean | Std. <br> Deviation | n |
| :--- | :--- | :--- | :--- | :--- |
| General Population | Engineering and Technology | 3.4250 | 1.44803 | 40 |
|  | Information Science and Tech | 4.2105 | 0.72548 | 57 |
|  | Total | 3.8866 | 1.14452 | 97 |
| Top Academic | Engineering and Technology | 3.8800 | 0.91785 | 50 |
|  | Information Science and Tech | 4.2778 | 0.77868 | 36 |
|  | Total |  | 4.0465 | 0.87993 |

Table 43
Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for College Regarding the Influence ofBeing Close Enough to Visit Family on Holidays on College Choice

| Student Type | College | Mean | Std. <br> Deviation | n |
| :--- | :--- | :--- | :--- | :--- |
| General Population | Engineering and Technology | 2.8250 | 1.64687 | 40 |
|  | Information Science and Tech | 2.6667 | 1.52753 | 57 |
|  | Total | 2.7320 | 1.57133 | 97 |
| Top Academic | Engineering and Technology | 3.4600 | 1.32803 | 50 |
|  | Information Science and Tech | 3.7778 | 1.22150 | 36 |
|  | Total | 3.5930 | 1.28684 | 86 |
| Total | Engineering and Technology | 3.1778 | 1.50339 | 90 |
|  | Information Science and Tech | 3.0968 | 1.51129 | 93 |
|  | Total |  | 3.1366 | 1.50381 |
| Tests of Between-Subjects Effects |  |  |  | 183 |
| Source |  | df | Mean Square |  |
| STUDENT TYPE |  | 1 | 33.756 |  |
| COLLEGE |  | 1 | 0.281 |  |
| STUDENT TYPE * COLLEGE | 1 | 2.510 |  | 1.198 |
| Error |  | 179 | 2.095 |  |

Table 44
Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for College Regarding the Influence of Being Far Enough to Gain Independence on College Choice

| Student Type | College |  |  | Mean | Std. <br> Deviation | n |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| General Population | Engineering and Technology |  |  | 2.1500 | 1.36907 | 40 |
|  | Information Science and Tech |  |  | 2.1404 | 1.18681 | 57 |
|  | Total |  |  | 2.1443 | 1.25822 | 97 |
| Top Academic | Engineering and Technology |  |  | 3.2000 | 1.08797 | 50 |
|  | Information Science and Tech |  |  | 3.4444 | 1.42316 | 36 |
|  | Total |  |  | 3.3023 | 1.23736 | 86 |
| Total | Engineering and Technology |  |  | 2.7333 | 1.32224 | 90 |
|  | Information Science and Tech |  |  | 2.6452 | 1.42680 | 93 |
|  | Total |  |  | 2.6885 | 1.37330 | 183 |
| Tests of Between-Subjects Effects |  |  |  |  |  |  |
| Source |  | Df | Mean Square |  | $F$ | Sig. |
| STUDENT TYPE |  | 1 | 61.356 |  | 39.103 | <. 0005 |
| COLLEGE |  | 1 | 0.610 |  | 0.389 | . 534 |
| STUDENT TYPE * COLLEGE |  | 1 | 0.715 |  | 0.456 | . 501 |
| Error |  | 179 | 1.569 |  |  |  |

For the component of being close enough to visit family on holidays, the mean score of the general population students was $2.73(\underline{S D}=1.57)$ on a 5 -point Likert scale while the top academic students had a mean score of $3.59(\underline{S D}=1.29)$ on a 5-point Likert scale. For the component of being far enough to gain independence, the general population student mean score was $2.14(S D=1.26)$ while the top academic student mean was significantly higher at $3.30(\underline{S D}=1.24)$. No statistically significant differences were found for either component for the main effect of college of attendance or for the interaction between college of attendance and student type.

For the proximity components of being close enough to visit family daily and being close enough to drive home at will, no statistically significant differences were found for the main effects of student type or college, or for the interaction between student type and college (see Tables G43, G44).

## Research Question $2 a$

Is there a statistically significant difference between general population students and top academic students with regard to the influence of people when controlling for gender?

In order to ascertain the difference in the perspectives of the two student types, general population and top academic students, as it relates to the influence of people when controlling for gender, two-way analyses of variance were run on each of the people of influence. Statistically significant differences ( $p<.01$ ) were found on the main effects between general population students and top academic students with regard to the influence of both parents/guardians together $(F(1,179)=24.592, p<.0005)$
(see Table 45), mother/female guardian $(F(1,179)=34.192, p<.0005)$ (see Table 46), and father/male guardian $(F(1,179)=25.949, p<.0005)$ (see Table 47) on college choice. In each case, the mean score of the top academic students was significantly higher than the mean of the general population group. No statistically significant differences were found for either the main effect of gender or for the interactions between gender and student type.

The mean score of the top academic students was $3.60(\underline{S D}=1.11)$ for the influence of both parents/guardians together, while the mean score of the general population was $2.56(\underline{S D}=1.31)$. For the influence of mother/female guardian, the mean score of the top academic students was $3.59(\underline{S D}=1.12)$, while the mean score of the general population was significantly lower at $2.42(\mathrm{SD}=1.28)$. Finally, for the influence of father/male guardian, the mean score of the top academic students was $3.52(\underline{\mathrm{SD}}=$ 1.21), while the mean score for the general population was $2.40(\underline{S D}=1.35)$.

No statistically significant differences were found in the influence of counselors, teachers, or peers in either the main effects of student type or gender, or for the interaction between student type and gender (see Tables G45-G47).

## Research Question $2 b$

Is there a statistically significant difference between general population students and top academic students with regard to the influence of people when controlling for size of high school?

In order to ascertain the difference in the perspectives of the two student types, general population and top academic students, as it relates to the influence of people

Table 45
Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for Gender Regarding the Influence of Both Parents/Guardians on College Choice

| Student Type | Gender | Mean | Std. Deviation | n |
| :--- | :--- | :--- | :--- | :--- |
| General Population | Female | 2.1538 | 1.62512 | 13 |
|  | Male | 2.6190 | 1.25059 | 84 |
|  | Total | 2.5567 | 1.30679 | 97 |
| Top Academic | Female | 3.4545 | 0.91168 | 22 |
|  | Male | 3.6563 | 1.17133 | 64 |
|  | Total | 3.6047 | 1.10910 | 86 |
| Total | Female | 2.9714 | 1.36092 | 35 |
|  | Male | 3.0676 | 1.31792 | 148 |
| Tests of Between-Subjects Effects | 3.0492 | 1.32299 | 183 |  |
| Source |  |  |  |  |
| STUDENT TYPE |  | 1 | 36.461 | 24.592 |
| GENDER |  | 1 | 2.967 | 2.001 |
| STUDENT TYPE $*$ GENDER | 1 | 0.463 | 0.312 | .577 |
| Error | 179 | 1.483 |  |  |

Table 46
Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Gender Regarding the Influence of Mother/Female Guardian on College Choice

| Student Type | Gender | Mean | Std. Deviation | n |
| :--- | :--- | :--- | :--- | :--- |
| General Population | Female | 1.9231 | 1.55250 | 13 |
|  | Male | 2.5000 | 1.22720 | 84 |
|  | Total | 2.4227 | 1.28156 | 97 |
| Top Academic | Female | 3.5455 | 0.85786 | 22 |
|  | Male | 3.6094 | 1.20340 | 64 |
|  | Total | 3.5930 | 1.12069 | 86 |
| Total | Memale | 2.9429 | 1.39205 | 35 |
|  | Total | 2.9797 | 1.33233 | 148 |
| Tests of Between-Subjects Effects | 2.9727 | 1.34013 | 183 |  |
| Source |  |  |  |  |
| STUDENT TYPE |  | 1 | 49.781 | 34.192 |
| GENDER | 1 | 2.740 | 1.882 | .172 |
| STUDENT TYPE * GENDER | 1 | 1.756 | 1.206 | .274 |
| Error |  | 179 | 1.456 |  |

Table 47
Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Gender Regarding the Influence of Father/Male Guardian on College Choice

| Student Type | Gender | Mean | Std. Deviation | n |
| :--- | :--- | :--- | :--- | :--- |
| General Population | Female | 2.0000 | 1.52753 | 13 |
|  | Male | 2.4643 | 1.32125 | 84 |
|  | Total | 2.4021 | 1.35139 | 97 |
| Top Academic | Female | 3.4545 | 1.14340 | 22 |
|  | Male | 3.5469 | 1.23352 | 64 |
|  | Total | 3.5233 | 1.20515 | 86 |
| Total | Female | 2.9143 | 1.46270 | 35 |
|  | Male | 2.9324 | 1.38830 | 148 |
|  | Total | 2.9290 | 1.39874 | 183 |
| Tests of Between-Subjects Effects |  |  |  |  |
| Source |  | df | Mean Square | $F$ |
| STUDENT TYPE |  | 1 | 42.940 | 25.949 |
| GENDER | 1 | 2.067 | 1.249 | .265 |
| STUDENT TYPE * GENDER | 1 | 0.923 | 0.558 | .456 |
| Error | 179 | 1.655 |  |  |

when controlling for size of high school, two-way analyses of variance were run on each of the people of influence. Statistically significant differences $(p<.01)$ were found on the main effects between general population students and top academic students with regard to the influence of both parents/guardians together $(F(1,177)=30.170, p<.0005)$ (see Table 48), mother/female guardian $(F(1,177)=34.890, p<.0005)$ (see Table 49), father/male guardian $(F(1,177)=34.724, p<.0005)$ (see Table 50), and counselor $(F(1,177)=7.783, p=.006)$ (see Table 51) on college choice. In each case, the mean score of the top academic students was significantly higher than the mean of the general population group. No statistically significant differences were found for either the main effect of size of high school or for the interactions between size of high school and student type.

The mean score of the top academic students was $3.60(\mathrm{SD}=1.11)$ for the influence of both parents/guardians together, while the mean score of the general population was $2.56(\underline{S D}=1.31)$. For the influence of mother/female guardian, the mean score of the top academic students was $3.60(\underline{S D}=1.12)$, while the mean score of the general population was significantly lower at $2.42(\underline{S D}=1.28)$. For the influence of father/male guardian, the mean score of the top academic students was $3.52(\underline{S D}=1.21)$, while the mean score for the general population was $2.40(\mathrm{SD}=1.35)$. Finally, for the influence of counselor, the mean score of the top academic students was $2.36(\mathrm{SD}=$ 1.22), while the mean score for the general population was $1.93(\underline{\mathrm{SD}}=1.08)$.

Table 48
Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for Size of High School Regarding the Influence of Both
Parents/Guardians on College Choice

| Student Type | Size of High School | Mean | Std. Deviation | n |
| :--- | :--- | :--- | :--- | :--- |
| General Population | Small $(<200)$ | 2.6250 | 1.45488 | 16 |
|  | Mid-Sized $(>200$ and $<500)$ | 2.5217 | 1.41001 | 23 |
|  | Large $(>500)$ | 2.5517 | 1.24495 | 58 |
|  | Total | 2.5567 | 1.30679 | 97 |
| Top Academic | Small $(<200)$ | 3.7879 | 1.11124 | 33 |
|  | Mid-Sized $(>200$ and $<500)$ | 3.9286 | 0.91687 | 14 |
|  | Large $(>500)$ | 3.3333 | 1.13168 | 39 |
|  | Total | 3.6047 | 1.10910 | 86 |
| Total | Small $(<200)$ | 3.4082 | 1.33726 | 49 |
|  | Mid-Sized $(>200$ and $<500)$ | 3.0541 | 1.41315 | 37 |
|  | Large $(>500)$ | 2.8660 | 1.25523 | 97 |
|  | Total | 3.0492 | 1.32299 | 183 |
| Tests of Between-Subjects Effects |  |  |  |  |
| Source | df | Mean Square | $F$ | Sig. |
| STUDENT TYPE |  | 1 | 44.819 | 30.170 |
| SIZE | 1.577 | 1.062 | .348 |  |
| STUDENT TYPE $*$ SIZE | 2 | 1.419 | 0.955 | .387 |
| Error | 177 | 1.486 |  |  |

## Table 49

Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Size of High School Regarding the Influence of Mother/Female Guardian on College Choice


Table 50
Two-way Analysis of Variance for General Population Compared to Top Academic Siudents Controlling for Size of High School Regarding the Influence of Father/Male Guardian on College Choice


Table 51
Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for Size of High School Regarding the Influence of Counselor on College Choice

| Student Type | Size of High School | Mean | Std. Deviation | n |
| :--- | :--- | :--- | :--- | :--- |
| General Population | Small $(<200)$ | 1.7500 | 0.85635 | 16 |
|  | Mid-Sized $(>200$ and $<500)$ | 2.0435 | 1.22394 | 23 |
|  | Large $(>500)$ | 1.9310 | 1.09002 | 58 |
|  | Total | 1.9278 | 1.08251 | 97 |
| Top Academic | Small $(<200)$ | 2.4848 | 1.14895 | 33 |
|  | Mid-Sized $(>200$ and $<500)$ | 2.7143 | 1.26665 | 14 |
|  | Large $(>500)$ | 2.1282 | 1.23926 | 39 |
|  | Total | 2.3605 | 1.21668 | 86 |
| Total | Small $(<200)$ | 2.2449 | 1.10925 | 49 |
|  | Mid-Sized $(>200$ and $<500)$ | 2.2973 | 1.26633 | 37 |
|  | Large $(>500)$ | 2.0103 | 1.15013 | 97 |
|  | Total | 2.1311 | 1.16462 | 183 |
| Tests of Between-Subjects Effects |  |  |  |  |
| Source |  | df | Mean Square | $F$ |
| STUDENT TYPE |  | 1 | 10.252 | 7.783 |
| SIZE | 1.547 | 1.174 | .311 |  |
| STUDENT TYPE * SIZE | 2 | 1.385 | 1.052 | .352 |
| Error | 177 | 1.317 |  |  |

No statistically significant differences were found in the influence of teachers or peers in either the main effects of student type or size of high school, or for the interaction between student type and size of high school (see Tables G48, G49).

## Research Question $2 c$

Is there a statistically significant difference between general population students and top academic students with regard to the influence of people when controlling for type of high school?

In order to ascertain the difference in the perspectives of the two student types, general population and top academic students, as it relates to the influence of people when controlling for type of high school, two-way analyses of variance were run on each of the people of influence. Statistically significant differences ( $p<.01$ ) were found on the main effects between general population students and top academic students with regard to the influence of both parents/guardians together $(F(1,178)=18.410, p<.0005)$ (see Table 52), mother/female guardian $(F(1,178)=25.089, p<.0005)$ (see Table 53) and father/male guardian $(F(1,178)=22.869, p<.0005)$ (see Table 54) on college choice. In each case, the mean score of the top academic students was significantly higher than the mean of the general population group. No statistically significant differences were found for either the main effect of type of high school or for the interactions between type of high school and student type.

No statistically significant differences were found in the influence of counselors, teachers or peers in either the main effects of student type or type of high school, or for the interaction between student type and type of high school (see Tables G50-G52).

Table 52
Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Type of High School Regarding the Influence of Both Parents/Guardians on College Choice

| Student Type | Type of High School |  | Mean | Std. Deviation | n n |
| :---: | :---: | :---: | :---: | :---: | :---: |
| General Population | Public |  | 2.4400 | 1.26534 | 75 |
|  | Private |  | 2.9545 | 1.39650 | 22 |
|  | Total |  | 2.5567 | 1.30679 | 97 |
| Top Academic | Public |  | 3.5692 | 1.13150 | 65 |
|  | Private |  | 3.6842 | 1.05686 | 19 |
|  | Home School |  | 4.0000 | 1.41421 | 2 |
|  | Total |  | 3.6047 | 1.10910 | 86 |
| Total | Public |  | 2.9643 | 1.32714 | 140 |
|  | Private |  | 3.2927 | 1.28926 | 41 |
|  | Home School |  | 4.0000 | 1.41421 | 2 |
|  | Total |  | 3.0492 | 1.32299 | 183 |
| Tests of Between-Subjects Effects |  |  |  |  |  |
| Source | df | Mean Squar |  | $F$ | Sig. |
| STUDENT TYPE | 1 | 27.251 |  | $18.410<.0$ | <. 0005 |
| TYPE | 2 | 1.774 |  | 1.198 . 304 | . 304 |
| STUDENT TYPE * TYPE | YPE 1 | 1.259 |  | 0.851 . 35 | . 358 |
| Error | 178 | 1.480 |  |  |  |

Table 53
Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for Type of High School Regarding the Influence of Mother/Female Guardian on College Choice

| Student Type | Type of High School |  | Mean | Std. Deviation | n n |
| :---: | :---: | :---: | :---: | :---: | :---: |
| General Population | Public |  | 2.3600 | 1.24813 | 75 |
|  | Private |  | 2.6364 | 1.39882 | 22 |
|  | Total |  | 2.4227 | 1.28156 | 97 |
| Top Academic | Public |  | 3.5846 | 1.13044 | 65 |
|  | Private |  | 3.5789 | 1.12130 | 19 |
|  | Home School |  | 4.0000 | 1.41421 | 2 |
|  | Total |  | 3.5930 | 1.12069 | 86 |
| Total | Public |  | 2.9286 | 1.33919 | 140 |
|  | Private |  | 3.0732 | 1.34889 | 41 |
|  | Home School |  | 4.0000 | 1.41421 | 2 |
|  | Total |  | 2.9727 | 1.34013 | 183 |
| Tests of Between-Subjects Effects |  |  |  |  |  |
| Source | df | Mean Squar |  | $F$ | Sig. |
| STUDENT TYPE | 1 | 37.039 |  | $25.089<$ | <. 0005 |
| TYPE | 2 | 0.493 |  | 0.334 | . 717 |
| STUDENT TYPE * TYPE | TYPE 1 | 0.627 |  | 0.425 | . 515 |
| Error | 178 | 1.476 |  |  |  |

Table 54
Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for Type of High School Regarding the Influence of Father/Male Guardian on College Choice

| Student Type | Type of High School |  | Mean | Std. Deviation | n |
| :---: | :---: | :---: | :---: | :---: | :---: |
| General Population | Public |  | 2.3067 | 1.29420 | 75 |
|  | Private |  | 2.7273 | 1.51757 | 22 |
|  | Total |  | 2.4021 | 1.35139 | 97 |
| Top Academic | Public |  | 3.4308 | 1.24962 | 65 |
|  | Private |  | 3.7895 | 1.03166 | 19 |
|  | Home School |  | 4.0000 | 1.41421 | 2 |
|  | Total |  | 3.5233 | 1.20515 | 86 |
| Total | Public |  | 2.8286 | 1.38825 | 140 |
|  | Private |  | 3.2195 | 1.40556 | 41 |
|  | Home School |  | 4.0000 | 1.41421 | 2 |
|  | Total |  | 2.9290 | 1.39874 | 183 |
| Tests of Between-Subjects Effects |  |  |  |  |  |
| Source | df | Mean Squar |  | F | Sig. |
| STUDENT TYPE | 1 | 37.695 |  | $22.869<$ | <. 0005 |
| TYPE | 2 | 2.642 |  | 1.603 . 20 | . 204 |
| STUDENT TYPE * TYPE | $\begin{array}{ll} \text { TYPE } & 1 \end{array}$ | 0.030 |  | 0.018 . 8 | . 892 |
| Error | 178 | 1.648 |  |  |  |

## Research Question 2d

Is there a statistically significant difference between general population students and top academic students with regard to the influence of people when controlling for community type?

In order to ascertain the difference in the perspectives of the two student types, general population and top academic students, as it relates to the influence of people when controlling for community type, two-way analyses of variance were run on each of the people of influence. Statistically significant differences ( $p<.01$ ) were found on the main effect of student type between general population students and top academic students with regard to the influence of both parents/guardians together $(F(1,175)=$ $30.212, p<.0005$ ) (see Table 55), mother/female guardian $(F(1,175)=35.543$, $p<.0005$ ) (see Table 56), father/male guardian $(F(1,175)=32.183, p<.0005)$ (see Table $57)$, teacher $(F(1,175)=8.389, p=.004)($ see Table 58$)$ and counselor $(F(1,175)=$ 11.983, $p=.001$ ) (see Table 59) on college choice. In each case, the mean score of the top academic students was significantly higher than the mean of the general population group.

The mean score of the top academic students was $3.60(\underline{S D}=1.11)$ for the influence of both parents together, while the mean score of the general population was $2.56(\underline{S D}=1.31)$. For the influence of mother/female guardian, the mean score of the top academic students was $3.59(\underline{S D}=1.12)$, while the mean score of the general population was significantly lower at $2.42(\mathrm{SD}=1.28)$. For the influence of father/male guardian,

Table 55
Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for Type of Community Regarding the Influence of Both
Parents/Guardians on College Choice

| Student Type | Type of Community |  | Mean | Std. Deviation | n |
| :---: | :---: | :---: | :---: | :---: | :---: |
| General Population | Rural (<500) |  | 1.2500 | 0.50000 | 4 |
|  | Township (500-10,000) |  | 2.8125 | 1.55858 | 16 |
|  | Small City ( $10,000-100,000$ ) |  | 2.4500 | 1.57196 | 20 |
|  | Urban/Suburban (>100,000) |  | 2.6140 | 1.13002 | 57 |
|  | Total |  | 2.5567 | 1.30679 | 97 |
| Top Academic | Rural (<500) |  | 3.7778 | 1.20185 | 9 |
|  | Township (500-10,000) |  | 3.7917 | 1.02062 | 24 |
|  | Small City ( $10,000-100,000$ ) |  | 3.2857 | 1.20439 | 14 |
|  | Urban/Suburban (> 100,000) |  | 3.5641 | 1.11909 | 39 |
|  | Total |  | 3.6047 | 1.10910 | 86 |
| Total | Rural (<500) |  | 3.0000 | 1.58114 | 13 |
|  | Township (500-10,000) |  | 3.4000 | 1.33589 | 40 |
|  | Small City (10,000-100,000) |  | 2.7941 | 1.47257 | 34 |
|  | Urban/Suburban (>100,000) |  | 3.0000 | 1.21395 | 96 |
|  | Total |  | 3.0492 | 1.32299 | 183 |
| Tests of Between-Subjects Effects |  |  |  |  |  |
| Source |  | df M | n Square | F | Sig. |
| STUDENT TYPE |  | 1 | 4.473 | $30.212<$ | <. 0005 |
| COMMUNITY |  | 3 | 2.283 | 1.551 | . 203 |
| STUDENT TYPE * COMMUNITY |  | 3 | 2.232 | 1.516 | . 212 |
| Error |  | 175 | 1.472 |  |  |

Table 56
Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for Type of Community Regarding the Influence of Mother/Female Guardian on College Choice

| Student Type | Type of Community | Mean | Std. Deviation | n n |
| :---: | :---: | :---: | :---: | :---: |
| General Population | Rural (<500) | 1.0000 | 0.00000 | 4 |
|  | Township (500-10,000) | 2.7500 | 1.52753 | 16 |
|  | Small City ( $10,000-100,000$ ) | ) 2.3000 | 1.34164 | 20 |
|  | Urban/Suburban (> 100,000) | ) 2.4737 | 1.18179 | 57 |
|  | Total | 2.4227 | 1.28156 | 97 |
| Top Academic | Rural (<500) | 3.6667 | 1.22474 | 9 |
|  | Township (500-10,000) | 3.6250 | 1.17260 | 24 |
|  | Small City (10,000-100,000) | ) 3.2143 | 1.18831 | 14 |
|  | Urban/Suburban ( $>100,000$ ) | ) 3.6923 | 1.05516 | 39 |
|  | Total | 3.5930 | 1.12069 | 86 |
| Total | Rural (<500) | 2.8462 | 1.62512 | 13 |
|  | Township (500-10,000) | 3.2750 | 1.37724 | 40 |
|  | Small City ( $10,000-100,000$ ) | ) 2.6765 | 1.34211 | 34 |
|  | Urban/Suburban (>100,000) | ) 2.9688 | 1.27695 | 96 |
|  | Total | 2.9727 | 1.34013 | 183 |
| Tests of Between-Subjects Effects |  |  |  |  |
| Source | df $\quad$ M | Mean Square | $F$ | Sig. |
| STUDENT TYPE | 1 | 51.121 | $35.543<$ | <. 0005 |
| COMMUNITY | 3 | 2.951 | 2.052 | . 108 |
| STUDENT TYPE * COMMUNITY |  | 2.543 | 1.768 | . 155 |
| Error | 175 | 1.438 |  |  |

Table 57
Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for Type of Community Regarding the Influence of Father/Male Guardian on College Choice

| Student Type | Type of Community |  | Mean | Std. Deviation | n |
| :---: | :---: | :---: | :---: | :---: | :---: |
| General Population | Rural (<500) |  | 1.0000 | 0.00000 | 4 |
|  | Township (500-10,000) |  | 2.5000 | 1.50555 | 16 |
|  | Small City (10,000-100,000) |  | ) 2.4000 | 1.56945 | 20 |
|  | Urban/Suburban (> 100,000) |  | ) 2.4737 | 1.24076 | 57 |
|  | Total |  | 2.4021 | 1.35139 | 97 |
| Top Academic | Rural (<500) |  | 3.7778 | 1.30171 | 9 |
|  | Township (500-10,000) |  | 3.5833 | 1.24819 | 24 |
|  | Small City (10,000-100,000) |  | ) 3.2857 | 1.26665 | 14 |
|  | Urban/Suburban (>100,000) |  | ) 3.5128 | 1.16691 | 39 |
|  | Total |  | 3.5233 | 1.20515 | 86 |
| Total | Rural ( $<500$ ) |  | 2.9231 | 1.70595 | 13 |
|  | Township (500-10,000) |  | 3.1500 | 1.44204 | 40 |
|  | Small City ( $10,000-100,000$ ) |  | ) 2.7647 | 1.49866 | 34 |
|  | Urban/Suburban ( $>100,000$ ) |  | ) 2.8958 | 1.30971 | 96 |
|  | Total |  | 2.9290 | 1.39874 | 183 |
| Tests of Between-Subjects Effects |  |  |  |  |  |
| Source | df M |  | Mean Square | $F$ | Sig. |
| STUDENT TYPE |  | 1 | 53.148 | $32.183<$ | <. 0005 |
| COMMUNITY |  | 3 | 1.445 | 0.875 | . 455 |
| STUDENT TYPE * COMMUNITY |  | 3 | 2.741 | 1.660 | . 177 |
| Error |  | 175 | 1.651 |  |  |

Table 58
Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Type of Community Regarding the Influence of Teacher on

College Choice

| Student Type | Type of Community | Mean | Std. Deviation | n |
| :---: | :---: | :---: | :---: | :---: |
| General Population | Rural (<500) | 1.0000 | . 00000 | 4 |
|  | Township (500-10,000) | 2.5000 | 1.63299 | 16 |
|  | Small City ( $10,000-100,000$ ) | 2.0500 | 1.23438 | 20 |
|  | Urban/Suburban (> 100,000) | 2.2456 | 1.16926 | 57 |
|  | Total | 2.1959 | 1.26359 | 97 |
| Top Academic | Rural (<500) | 3.1111 | 1.16667 | 9 |
|  | Township (500-10,000) | 2.2917 | . 85867 | 24 |
|  | Small City ( $10,000-100,000$ ) | 2.5714 | 1.28388 | 14 |
|  | Urban/Suburban (> 100,000) | 2.5385 | 1.14354 | 39 |
|  | Total | 2.5349 | 1.10291 | 86 |
| Total | Rural (<500) | 2.4615 | 1.39137 | 13 |
|  | Township (500-10,000) | 2.3750 | 1.21291 | 40 |
|  | Small City ( $10,000-100,000$ ) | 2.2647 | 1.26272 | 34 |
|  | Urban/Suburban (>100,000) | 2.3646 | 1.16185 | 96 |
|  | Total | 2.3552 | 1.19962 | 183 |
| Tests of Between-Subjects Effects |  |  |  |  |
| Source | df $\quad$ M | Mean Square | $F$ | Sig. |
| STUDENT TYPE |  | 11.720 | 8.389 | . 004 |
| COMMUNITY | 3 | 0.416 | 0.298 | . 827 |
| STUDENT TYPE * COMMUNITY |  | 3.965 | 2.838 | . 040 |
| Error | 175 | 1.397 |  |  |

Table 59
Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for Type of Community Regarding the Influence of Counselor on
College Choice

| Student Type | Type of Community |  | Mean | Std. Deviation | n |
| :---: | :---: | :---: | :---: | :---: | :---: |
| General Population | Rural (<500) |  | 1.0000 | 0.00000 | 4 |
|  | Township (500-10,000) |  | 1.8750 | 1.02470 | 16 |
|  | Small City ( $10,000-100,000$ ) |  | ) 1.7500 | 1.16416 | 20 |
|  | Urban/Suburban ( $>100,000$ ) |  | ) 2.0702 | 1.08331 | 57 |
|  | Total |  | 1.9278 | 1.08251 | 97 |
| Top Academic | Rural ( $<500$ ) |  | 2.7778 | 1.20185 | 9 |
|  | Township (500-10,000) |  | 2.4583 | 0.97709 | 24 |
|  | Small City ( $10,000-100,000$ ) |  | ) 2.4286 | 1.39859 | 14 |
|  | Urban/Suburban (>100,000) |  | ) 2.1795 | 1.29517 | 39 |
|  | Total |  | 2.3605 | 1.21668 | 86 |
| Total | Rural (<500) |  | 2.2308 | 1.30089 | 13 |
|  | Township (500-10,000) |  | 2.2250 | 1.02501 | 40 |
|  | Small City ( $10,000-100,000$ ) |  | ) 2.0294 | 1.29065 | 34 |
|  | Urban/Suburban ( $>100,000$ ) |  | ) 2.1146 | 1.16862 | 96 |
|  | Total |  | 2.1311 | 1.16462 | 183 |
| Tests of Between-Subjects Effects |  |  |  |  |  |
| Source |  | df M | Mean Square | $F$ | Sig. |
| STUDENT TYPE |  | 1 | 15.743 | 11.983 | . 001 |
| COMMUNITY |  | 3 | 0.233 | 0.177 | . 912 |
| STUDENT TYPE * COMMUNITY |  | 3 | 2.715 | 2.067 | . 106 |
| Error |  | 175 | 1.314 |  |  |

the mean score of the top academic students was $3.52(\mathrm{SD}=1.21)$, while the mean score for the general population was $2.40(\underline{S D}=1.35)$. For teachers, the mean score of the top academic students was $2.53(\underline{S D}=1.10)$, while the mean score of the general population was $2.20(\underline{S D}=1.26)$. For the influence of counselors, the mean score of the top academic students was $2.36(\underline{S D}=1.22)$, while the mean score for the general population was $1.93(\underline{S D}=1.08)$.

No statistically significant differences were found for the influence of peers in either the main effects of student type or type of community, or for the interaction between student type and type of community (see Table G53).

## Research Question $2 e$

Is there a statistically significant difference between general population students and top academic students with regard to the influence of people when controlling for anticipated major/college?

After subdividing the respondents into the nine majors, the resulting group sizes were too small to determine statistical significance. Therefore, for this research question, data were subdivided only into the two categories of college of attendance, the College of Engineering and Technology and the College of Information Science and Technology.

In order to ascertain the difference in the perspectives of the two student types, general population and top academic students, as it relates to the influence of people when controlling for college of attendance, two-way analyses of variance were run on each of the people of influence. Statistically significant differences $(p<.01)$ were found on the main effect of student type between general population students and top academic
students with regard to the influence of both parents/guardians together $(F(1,179)=$ $32.825, p<.0005$ ) (see Table 60), mother/female guardian $(F(1,179)=40.677$, $p<.0005$ ) (see Table 61) and father/male guardian $(F(1,179)=32.681, p<.0005)$ (see Table 62). In each case, the mean score of the top academic students was significantly higher than the mean of the general population group. No statistically significant differences were found for either the main effect of college of attendance or for the interactions between college of attendance and student type.

No statistically significant differences were found in the influence of teachers or peers for either the main effects of student type or college of attendance, or for the interaction between student type and college of attendance (see Tables G54, G55). Summary

This chapter presented the results of a survey of factors and people of influence impacting choice of college/university. Chapter 5 will interpret these findings, draw and discuss conclusions, and make recommendations for future research.

Table 60
Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for College Regarding the Influence of Both Parents/Guardians on College Choice

| Student Type | College |  |  | Mean | Std. Deviation | n $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| General Population | Engineering and Technology |  |  | 2.5750 | 1.33757 | 740 |
|  | Information Science and Tech |  |  | 2.5439 | 1.29656 | $6 \quad 57$ |
|  | Total |  |  | 2.5567 | 1.30679 | 9. 97 |
| Top Academic | Engineering and Technology |  |  | 3.5600 | 1.03332 | 250 |
|  | Information Science and Tech |  |  | 3.6667 | 1.21890 | 036 |
|  | Total |  |  | 3.6047 | 1.10910 | 086 |
| Total | Engineering and Technology |  |  | 3.1222 | 1.27048 | $8 \quad 90$ |
|  | Information Science and Tech |  |  | 2.9785 | 1.37508 | 893 |
|  | Total |  |  | 3.0492 | 1.32299 | 9183 |
| Tests of Between-Subjects Effects |  |  |  |  |  |  |
| Source |  | df | Mean Square |  | $F$ | Sig. |
| STUDENT TYPE |  | 1 | 49.189 |  | $32.825<$ | <. 0005 |
| COLLEGE |  | 1 | 0.063 |  | 0.042 | . 838 |
| STUDENT TYPE * COLLEGE |  | 1 | 0.210 |  | 0.140 | . 708 |
| Error |  | 179 | 1.499 |  |  |  |

Table 61
Two-way Analysis of Variance for General Population Compared to Top Academic
Students Controlling for College Regarding the Influence of Mother/Female Guardian on
College Choice

| Student Type | College | Mean | Std. <br> Deviation | n |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| General Population | Engineering and Technology | 2.5500 | 1.29990 | 40 |  |
|  | Information Science and Tech | 2.3333 | 1.27242 | 57 |  |
|  | Total | 2.4227 | 1.28156 | 97 |  |
| Top Academic | Engineering and Technology | 3.5400 | 1.05386 | 50 |  |
|  | Information Science and Tech | 3.6667 | 1.21890 | 36 |  |
|  | Total |  | 3.5930 | 1.12069 | 86 |
| Total | Engincering and Technology | 3.1000 | 1.26358 | 90 |  |
|  | Information Science and Tech | 2.8495 | 1.40609 | 93 |  |
| Tests of Between-Subjects Effects |  | 2.9727 | 1.34013 | 183 |  |
| Source |  |  |  |  |  |
| STUDENT TYPE |  | 1 | 59.763 |  | 40.677 |
| COLLEGE |  | 1 | 0.090 |  | 0.061 |
| STUDENT TYPE * COLLEGE | 1 | 1.305 |  | 0.888 | .347 |
| Error |  | 179 | 1.469 |  |  |

Table 62
Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for College Regarding the Influence of Father/Male Guardian on College Choice


## CHAPTER 5

Summary, Conclusions and Discussion

## Summary

The Peter Kiewit Institute of Information Science, Technology \& Engineering began as a concept in 1995. The Institute combined two colleges from two different campuses of the University of Nebraska system: the University of Nebraska - Lincoln's College of Engineering and Technology and the University of Nebraska at Omaha's College of Information Science and Technology in a collaborative partnership with business and industry. This unique model built a new paradigm for the role of governance, curriculum development and funding in post-secondary education.

One of the driving forces and principle mandates that helped to guide the formation of The Peter Kiewit Institute was to offer the best and brightest students a top educational opportunity in fields critical to the economic well-being of the city, state, and region. This, in turn, would help discourage the loss of top students to other states for school and career opportunities. In order to accomplish the stated purposes set forth by the Board of Policy Advisors, a supporting plan was developed to recruit and retain students who clearly were among the top $10 \%$ of high school graduates in the nation (The Omaha Institute Charter, 1995). Potential students having ACT scores of 30 or above or a comparable SAT score of 1340 or higher along with grade point average above 3.5 match the desired student profile.

In an effort to keep the competitive edge in student recruitment, The Peter Kiewit Institute faculty and staff must understand as much as possible why exceptionally
talented students make the choices they make as they select a college to attend. In reviewing the literature, several studies such as Murphy (1981) point to the following factors: academic reputation, cost, location and size. Others, such as the Carnegie Foundation report of 1986, Russick and Olsen (1976), and Wilson (1997) cited parents as the most influential determiner of school selection and choice. At the same time, a study by Sewell and Armer (1966) raised the issue of the potential influence of neighborhood impact and its impact on aspirations.

Little research, however, is available to help determine if certain people or specific factors are germane to the recruitment of high-achieving students and their attendance at institutions of long-standing academic reputation as compared to schools early in the reputation-building process. Also, not readily available is information regarding size of high school, type of high school and type of community as related to their individual and collective impacts on the students' choice of a college/university. Even less information is available disaggregating the influence of factors and people on top academic students when compared to general population students. This study seeks to expand the body of knowledge on these crucial determiners of student choice for postsecondary educational opportunity.

As the academic level of student recruits increases, the number and prestige of institutions having an interest in these students also increase. Understanding the factors that attract exceptional scholars is paramount to broadening the population base from which the programs must draw. This study was designed to help determine the
multiplicity of factors and people that impact students in making their final decision and commitment to attend a given institute of higher education.

## Purpose

The purpose of this study was to determine if there were statistically significant differences in the factors or people who influenced general population students as compared to top academic students in their decision on where to attend college/university. Influences were delineated according to factors or people because recruitment strategies must differ based on these categories. These analyses determined the impact the students' gender, community type, high school size and high school type had on their higher education expectations. In addition, distinction was made by anticipated college and major. The following research questions were posed in this study.

## Research Questions

1. Is there a statistically significant difference between general population students (control group) and top academic students (experimental group) with regard to the influence of the factors of scholarship, reputation of school and proximity to home when selecting a college or university?
a. Is there a statistically significant difference between general population students and top academic students with regard to the influence of factors when controlling for gender?
b. Is there a statistically significant difference between general population students and top academic students with regard to the influence of factors when controlling for high school size?
c. Is there a statistically significant difference between general population students and top academic students with regard to the influence of factors when controlling for high school type?
d. Is there a statistically significant difference between general population students and top academic students with regard to the influence of factors when controlling for community type?
e. Is there a statistically significant difference between general population students and top academic students with regard to the influence of factors when controlling for anticipated major/college?
2. Is there a statistically significant difference between general population students (control group) and top academic students (experimental group) with regard to the influence of the factors of scholarship, reputation of school and proximity to home when selecting a college or university?
a. Is there a statistically significant difference between general population students and top academic students with regard to the influence of people when controlling for gender?
b. Is there a statistically significant difference between general population students and top academic students with regard to the influence of people when controlling for high school size?
c. Is there a statistically significant difference between general population students and top academic students with regard to the influence of people when controlling for high school type?
d. Is there a statistically significant difference between general population students and top academic students with regard to the influence of people when controlling for community type?
e. Is there a statistically significant difference between general population students and top academic students with regard to the influence of people when controlling for anticipated major/college?

## Methodology

The student population surveyed for the purpose of this study was derived from two distinct student types. The first student type was the top academic students. This group was made up of 155 students who were currently receiving the Walter Scott, Jr. Scholarship awards. The second student type, general population students, consisted of 155 students randomly selected from the total population of The Peter Kiewit Institute student body, exclusive of the Walter Scott, Jr. Scholarship award recipients. They were chosen to serve as the control group in determining any difference in influences on the selection of a post-secondary institution when comparing general population students to top academic students.

A survey was administered to determine the factors and people of influence the students in the general population and top scholar groups referenced or consulted in making their final decision to attend The Peter Kiewit Institute. Responses to the survey
attempted to ascertain the importance each of these students personally assigned to such factors and people with whom they interfaced.

## Conclusions and Discussion

The tables from Chapter 4 helped to formulate the following conclusions and discussion on the factors and people of influence in a student's choice of college/university.

## Factors of Influence

Scholarship. When analyzing the six components of the factor of scholarship, and controlling for gender, size of high school, type of high school, community type and college of attendance, a statistically significant difference was present in the main effect of student type in five of the components. In each case, full 4-year tuition, residence hall/meals/maids, campus life opportunities, costs of books/fees and personal computer system, the top academic students had a higher mean score than did the students from the general population (see Table 63).

The higher mean score for the top academic students indicates they viewed the scholarship and the defining components as influential determiners in their decision to attend The Peter Kiewit Institute. The general population students did not find these components to be as important in the decision-making process as to where they would attend school.

A statistically significant difference ( $p<.01$ ) was also noted in one of the scholarship components, networking/internship opportunities, in both of the main

Table 63

Statistically Significant Differences for Components of Scholarship
$\left.\begin{array}{lccccc}\hline & \begin{array}{c}\text { Full 4-Year } \\ \text { College } \\ \text { Tuition }\end{array} & \begin{array}{c}\text { Residence } \\ \text { Hal/Meals/ } \\ \text { Maids }\end{array} & \begin{array}{c}\text { Campus Life } \\ \text { Opportunities }\end{array} & \begin{array}{c}\text { Cost of } \\ \text { Books/Fees }\end{array} & \begin{array}{c}\text { Personal } \\ \text { Computer } \\ \text { Internship }\end{array} \\ \text { Sysportunities }\end{array}\right]$
effects of student type and college of attendance. For the main effect of student type, the top academic students had a higher mean score than did the general population students (see Table 63). The difference between the mean scores of top academic students and general population students as related to influence of networking/internship opportunities on the choice of university indicates differing levels of motivation in which the higher achieving students appear to be more receptive to additional opportunities.

Also related to the influence of networking/internship opportunities on choice of university, the students attending the College of Information Science and Technology had a higher mean score than did the students attending the College of Engineering and Technology. This indicates that the students enrolled in the College of Information Science and Technology find networking/internship opportunities to be more important in their choice of university than do students in the College of Engineering and Technology.

In summary, the top academic students assigned a higher level of importance to the influence of the scholarship components of full 4-year college tuition, residence hall/meals/maids, costs of books/fees and personal computer system on college choice than did the general population students. The results of this portion of the study appear to indicate that top academic students desire, and perhaps expect, scholarship benefits commensurate with their level of achievement and recognition. In each case, the identified component was a material benefit.

The two components that did not show statistically significant differences between top academic students and general population students were conceptual rather
than material in nature. These components were campus life opportunities and networking/internship opportunities. Based on the findings, the top academic students and the general population students view campus life opportunities and networking/internship opportunities in much the same way.

One exception is noted when controlling for college of attendance (see Table 63). In this case, the top academic students had a higher mean score than did the general population students on the component of networking/internship opportunities. There was also a statistically significant difference in the main effect of college of attendance, with students in the College of Information Science and Technology having a higher mean score than students attending the College of Engineering and Technology.

Also, controlling for gender, size of high school, type of high school, community type or college of attendance showed statistically significant differences between top academic and general population students. There were no statistically significant differences related to the other demographic characteristics. These findings imply that when recruiting students into the programs associated with the Institute, no marketable strategies related to scholarship components are required beyond the division of top academic students and general population students. Thus, in order to attract and retain the brightest students, marketing strategies should appeal to students at their appropriate academic level.

Based on the findings of this study, those strategies that should be aimed at top academic students could include the use of more extensive print materials to share opportunities, earlier invitations for campus visits, and informational sessions with high
school guidance counselors to heighten the counselors' awareness of the scope of top scholarship benefits. These strategies are all aimed at ensuring students and their families receive needed information early enough in the process of college selection to make an informed and satisfactory decision with regard to their higher education choice.

Reputation. The factor of reputation of school, for the purpose of this study, had seven components: name recognition, cutting-edge facilities/technologies; academic excellence, quality of professors, academic offerings, accessibility of staff/faculty, and personal interest shown in the student. When controlling for gender, size of high school, type of high school, community type and college of attendance, only three statistically significant differences were found with the first six components (see Table 64).

For example, the influence of name recognition and quality of professors showed a statistically significant difference when controlling for type of community. In addition, with regard to the component of cutting-edge facilities and technologies, the main effect of college of attendance showed a statistically significant difference. The student respondents attending the College of Information Science and Technology had a higher mean score for these modern facilities as a factor of influence than did students attending the College of Engineering and Technology (see Table 64). This difference may be attributable to the fact that state-of-the-art building design and equipment are more important to the up-to-date technology fields directly impacting the College of Information Science and Technology. The program offerings within the College of Engineering and Technology tend to be more traditional in nature due to rigid accreditation requirements and have a more established body of knowledge required for

Table 64

Statistically Significant Differences for Components of Reputation

|  | Name Recognition | Cutting Edge Facilities/ Technology | Academic Excellence | Quality of Professors | Academic Offerings | Accessibility of Staff/ Faculty | Personal Interest Shown in the Student |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gender |  |  |  |  |  |  |  |
| Main Effect: Student Type |  |  |  |  |  |  |  |
| Main Effect: Gender |  |  |  |  |  |  | $\checkmark * * *$ |
| Interaction |  |  |  |  |  |  |  |
| Size of High School |  |  |  |  |  |  |  |
| Main Effect: Student Type |  |  |  |  |  |  | $\checkmark$ |
| Main Effect: Size |  |  |  |  |  |  |  |
| Interaction |  |  |  |  |  |  |  |
| Type of High School |  |  |  |  |  |  |  |
| Main Effect: Student Type |  |  |  |  |  |  | $\checkmark$ |
| Main Effect: Type |  |  |  |  |  |  |  |
| Interaction |  |  |  |  |  |  |  |
| Type of Community |  |  |  |  |  |  |  |
| Main Effect: Student Type |  |  |  |  |  |  | $\checkmark$ |
| Main Effect: Community | $\checkmark *$ |  |  | $\checkmark *$ |  |  | $\checkmark * * * *$ |
| Interaction |  |  |  |  |  |  |  |
| College |  |  |  |  |  |  |  |
| Main Effect: Student Type |  |  |  |  |  |  | $\checkmark$ |
| Main Effect: College <br> Interaction |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Note: All check marks reflect a higher mean score for top academic studeats than for general population students. Exceptions are noted with *. <br> * Statistically significant difference in main effect of community type. <br> ** Students from College of Information Science have significantly higher mean score than students from College of Engineering and Technology. <br> *** Females have significantly higher mean score than males. <br> **** Students from townships have significantly higher mean scores than students from rural areas. |  |  |  |  |  |  |  |

successful degree completion and professional licensure. The component of personal interest shown in the student by the faculty/staff indicated a statistically significant difference when controlling for gender with female students having a higher mean score than male students (see Table 64). These results call attention to what may be one of the most important findings in this study. National studies confirm a less than desirable number of females opting to specialize in fields of engineering and information technology (Congressional Commission on the Advancement of Women and Minorities in Science, Engineering and Technology Development, 2000).

The findings of this study suggest that if female enrollments in engineering and information technology are to be cultivated and increased, a sincere personal interest must be shown in female students both during the recruitment period as well as during their tenure as students. While this is not directly related to the differences between top academic and general population students, it is, nevertheless, a valuable finding.

The component of personal interest shown in the student also had a statistically significantly higher mean score for top achieving students when controlling for size of high school, type of high school, community type, and college of attendance (see Table 64). From the analysis, it is possible to determine that personal interest shown in students by the faculty/staff is more important to top academic students than to the general population.

Proximity. The factor of proximity to home from the school of attendance is one of personal perspective rather than defined measurements. The components assigned to the factor of proximity for the purpose of this study included being close enough to visit
home on holidays, being close enough to visit home daily, being close enough to drive home at will, and being far enough to gain independence. Each student's interpretation of an acceptable distance between home and school was defined by the student in their own mind and through their respective responses.

For top academic students as compared to general population students, there were statistically significant differences in the components of being close enough to visit on holidays and far enough away to gain independence (see Table 65). Mean scores, generally, were higher for top academic students in these components despite gender, size of high school, type of high school, and college of attendance. Over $80 \%$ of the respondents in the top academic category live on campus and fall between the ages of 18 to 23 .

Student respondents in the general population group, on the other hand, may be of any age, may or may not live on campus, may have their own families (spouse and children) and may work part- or full-time while working toward their degrees. Perhaps this explains why the component of being close enough to visit family daily is the only finding in the entire study where the general population students had a mean score significantly higher than the top academic students.

## People of Influence

This study attempted to ascertain the people of influence most important to high achieving students and general population students when controlling for gender, high school size, high school type, community type and college of attendance. The people used for the purpose of this study were identified in large part in previous studies, several

Table 65

Statistically Significant Differences for Components of Proximity

|  | Being Close Enough to Visit on Holidays | Being Close Enough to Visit Daily | Being Close Enough to Drive Home at Will | Being Far Enough to Gain Independence |
| :---: | :---: | :---: | :---: | :---: |
| Gender : |  |  |  |  |
| Main Effect: Student Type | $\checkmark$ |  |  | $\checkmark$ |
| Main Effect: Gender |  |  |  |  |
| Interaction |  |  |  |  |
| Size of High School |  |  |  |  |
| Main Effect: Student Type | $\checkmark$ |  |  | $\checkmark$ |
| Main Effect: Size |  | $\sqrt{*}$ |  |  |
| Interaction |  |  |  |  |
| Type of High School |  |  |  |  |
| Main Effect: Student Type | $\checkmark$ |  |  | $\checkmark$ |
| Main Effect: Type |  |  |  |  |
| Interaction |  |  |  |  |
| Type of Community |  |  |  |  |
| Main Effect: Student Type |  | $\checkmark * *$ |  | $\checkmark$ |
| Main Effect: Community |  |  |  |  |
| Interaction |  |  |  |  |
| College |  |  |  |  |
| Main Effect: Student Type | $\checkmark$ |  |  | $\checkmark$ |
| Main Effect: College |  |  |  |  |
| Interaction |  |  |  |  |
| Note: All check marks reflect a high <br> * Students from large high schools <br> ** General population students have | mean score for top acaden e significantly higher mea gnificantly higher mean scor | students than for general scores than students from s e than top academic studen | ulation students. Exceptio 11 high schools. | are noted with *. |

of which are cited in the review of the literature included in Chapter 2 of this report. The people included both parents/guardians, mother/female guardian, father/male guardian, teacher, counselor and peers.

Statistically significant differences were noted between top achieving students and general population students with regard to both parents/guardians together, mother/female guardian and father/male guardian (see Table 66). For each of these categories of people, there was a statistically significant difference between top achieving students and the general population students without regard to gender, high school size, high school type, community type or college of attendance. In each case, top achieving students had a higher mean score than did the general population students. This indicates that top achieving students felt the influence of parents more strongly than did the general population student. This may be related to the ages of the two student types queried in this study. The general population group had a wider and more mature distribution of ages. These students may have attained a higher level of independence and thus be less inclined to rely on parental input than younger students who may depend heavily on adivice from parents/guardians.

The other three categories of people included teacher, counselor and peers. These categories generated fewer statistically significant differences than did the students' parents. There were only two statistically significant differences for counselors and one for teachers. Counselors were rated as more influential for top academic students when controlling for high school size and community type. Only when controlling for community did the mean score of top achieving students differ significantly from the

Table 66
Statistically Significant Differences for People of Influence

|  | Both Parents/ Guardians | Mother/ Female Guardian | Father/Male Guardian | Teacher | Counselor | Peers |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gender |  |  |  |  |  |  |
| Main Effect: Student Type | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |
| Main Effect: Gender |  |  |  |  |  |  |
| Interaction |  |  |  |  |  |  |
| Size of High School |  |  |  |  |  |  |
| Main Effect: Student Type | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |
| Main Effect: Size |  |  |  |  |  |  |
| Interaction |  |  |  |  |  |  |
| Type of High School |  |  |  |  |  |  |
| Main Effect: Student Type | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |
| Main Effect: Type |  |  |  |  |  |  |
| Interaction |  |  |  |  |  |  |
| Type of Community |  |  |  |  |  |  |
| Main Effect: Student Type | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |
| Main Effect: Community |  |  |  |  |  |  |
| Interaction |  |  |  |  |  |  |
| College |  |  |  |  |  |  |
| Main Effect: Student Type | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |
| Main Effect: College |  |  |  |  |  |  |
| Interaction |  |  |  |  |  |  |

mean score of general population students. In this case, the top academic students rated the influence of teachers higher than did the general population. In no case did peers generate a statistically significant difference between the groups (see Table 66).

The results of this portion of the study indicate that top achieving students identify their parents, either jointly or separately, as having more impact on the decisionmaking process than the general population students when deciding on the college for their post-secondary educational opportunity.

## Implications for Further Study

This research surveyed both students new to the Institute and students who were near completion of their undergraduate or graduate degrees. It is possible that a difference might exist in their perceptions of influences near to the time of their entry into the program as opposed to their opinions after some duration in the program. A longitudinal study could examine changes in motivation over the course of the students' entire postsecondary educational career.

Another research study might focus on the impact personal interest plays on recruitment and retention of female students in fields of study where females are considered non-traditional students and their participation is not only desirable, but highly sought after. Results from this endeavor might have applicability to other minority groups in a variety of situations from undergraduate studies to actually providing a new pool of robust candidates for graduate study.

## Concluding Thoughts

This research examined the differences between those factors and people having an influence on top achieving students and general population students. It provided insights into the perceptions through which all students journey in making one of life's most important decisions ... what and where to study in preparation for a lifelong career.

Understanding these student perceptions can assist faculty and staff at the university level in providing information that will enhance the selection process and clarify the expectations for everyone involved. Knowing which people assist a potential student in making this difficult decision can guide the flow of information to those people most likely to be called upon by the student.

If questions are answered, if outreach is personal and focused, and if a comfortable match between student and institution is made, it follows that a higher potential exists for student retention and ultimate success ... a goal common to educators and students alike.

## References

ACT Assessment (2003). Retrieved March 23, 2003 from www.act.org/aap/scores/norms1.html

Analysis of the Gulf Coast Consortium student perceptions of College Services Spring 2001 Survey. (2001, Spring). (ERIC Document Reproduction Service No. ED 464681). Austin: Austin Community College Office of Institutional Effectiveness.

Ash, J. M. (1987). An analysis of college choice influence items and selected biographic and demographic characteristics of entering freshmen at a large southeastern urban university. Atlanta: Georgia State University Press.

Astin, A. W. (1962). An empirical characterization of higher education institutions. Journal of Educational Psychology, 53, 224-235.

Birmingham, S. P. (1992). Decision-making processes of high school students engaged in the college choice process. Philadelphia: University of Pennsylvania Press.

Bowers, T., \& Pugh, R. (1973). Factors underlying college choice by students and parents. Journal of College Student Personnel, 220-224.

Broekemier, G. M., \& Seshadri, S. (1999). Differences in college choice criteria between deciding students and their parents. Journal of Marketing for Higher Education, 9(3), 1-13.

Butner, B., Caldera, Y., Herrera, P., Kennedy, F., Frame, M., \& Childers, C. (2001). The college choice process of African American and Hispanic women: Implications for college transitions. Journal of College Orientation and Transition, 9, 24-32.

Cabrera, A. F., \& La Nasa, S. M. (May, 2000). Using national databases to study the college choice of low-SES students. Paper presented at the Annual Forum of the Association for Institutional Research, Cincinnati.

Carnegie Foundation for the Advancement of Teaching. (1986). How do students choose a college? Change, 18(1), 29-33.

Chapman, D. W. (1981). A model of student college choice. Journal of Higher Education, 52, 490-505.

Clagett, C. A. (1999). Recent high school graduate focus groups. Market analysis 0001. (ERIC Document Reproduction Service No. ED 436212) Westminster, MD, Carroll Community College.

College Board Online (2003). Retrieved March 23, 2003 from www.collegeboard.com/highered/ra/sat/sat resources.htm1.

Congressional Commission on the Advancement of Women and Minorities in Science, Engineering and Technology Development (2000). Land of plenty: Diversity as America's competitive edge in science, engineering and technology.

Douran, E., \& Kaye, C. (1962). Motivational factors in college entrance. In N. Sanford (Ed.), The American College, (pp. 192-223). New York City: John Wiley and Sons, Inc.

Espinoza, S., Bradshaw, G., \& Hausman, C. (November, 2000). The importance of college choice factors from the perspective of high school counselors. Paper presented at the Annual Meeting of the Association for the Study of Higher Education, Sacramento.

Festinger, L. (1964). Conflict, decision, and dissonance. Stanford, CA: Stanford University Press.

Gilmour, J. E., Jr., Dolich, I. J., \& Spiro, L. M. (April, 1978). How college students select a college. Paper presented to the Annual Forum of the Association for Institutional Research, Houston.

Grayson, J. (1999). Who goes to university and why? Education Canada, 39 (2), 37-39.
Hanson, G. R. (1982). Measuring student development. New directions for student service, no.20. San Francisco: Jossey-Bass Publishers.

Hearn, J. C. (1984). The relative roles of academic, ascribed, and socioeconomic characteristics in college destination. Sociology of Education, 57, 22-30.

Hendricks, S. H. (1981). The role of family decision-making in college choice. Minneapolis: University of Minnesota.

Hodges, T. D., \& Barbuto, J. E., Jr. (2002). Recruiting urban and rural students: Factors influencing the postsecondary education institution choices of rural versus urban high school students. College and University, 77 (3), 3-10.

Hossler, D., \& Gallagher, K. S. (1987). Studying student college choice: A three phase model and the implications for policy-makers. College and University, 62(3), 207-221.

Hossler, D., Schmit, J., \& Vesper, N. (1999). Going to college. How social, economic, and educational factors influence the decisions students make. Baltimore: Johns Hopkins University Press.

Jackson, G. A. (1978). Financial aid and student enrollment. Journal of Higher Education, 49, 548-574.

Janis, I. L., \& Mann, L. (1977). Decision Making: A Psychological Analysis of Conflict, Choice, and Commitment. New York City: Free Press.

Karen, D. (April, 1988). Who applies where to college? Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans.

Lackland, A. C., \& De Lisi, R. (2001). Students' choices of college majors that are gender traditional and nontraditional. Journal of College Student Development, 42 (1), 39-48.

Leslie, L. L., Johnson, G. P., \& Carlson, J. (1977). The impact of need-based student aid upon the college attendance decision. Journal of Education Finance, 2, 269-285.

Lewis, G., \& Morrison, S. (1975). A longitudinal study of college selection: Technical Report No. 2. Pittsburgh: School of Urban and Public Affairs, Carnegie Mellon University.

Litten, L. H. (1982). Different strokes in the applicant pool: Some refinements in a model of student college choice. Journal of Higher Education, 53(4), 383-402.

Litten, L.H., Sullivan, D., \& Brodigan, D.L. (1983). Applying market research in college admissions programs. New York: College Entrance Examination Board.

Midwest Survey and Marketing (1998). 1998 Scott scholars survey report. Omaha, NE: Author.

Midwest Survey and Research (1999). 1999 Scott scholars survey report. Omaha, NE: Author.

Midwest Survey and Research (2000). 2000 Scott scholars survey report. Omaha, NE: Author.

Midwest Survey and Research (2001). 2001 Scott scholars survey report. Omaha, NE: Author.

Midwest Survey and Research (2002). 2002 Scott scholars survey report. Omaha, NE: Author.

Murphy, P. E. (1981). Consumer buying roles in college choice: Parents' and students' perceptions. College and University, 57, 150-160.

Omaha Institute of Information Science, Technology, and Engineering of the University of Nebraska Charter (1995). Approved by the University of Nebraska Board of Regents.

Phillips, D. L. (1986). Collegiate choice behavior in a Christian day school: An ethnography. Philadelphia: University of Pennsylvania Press.

Puffet, N. E. (1983). The college selection process: Persons of influence and factors of importance. New York City: Columbia University.

Reisberg, L. (2000). A top university wonders why it has no black freshmen. Chronicle of Higher Education, 46, A52-54.

Russick, B., \& Olsen, P.M. (1976). How high school seniors choose a college. In: Choice or Chance (pp. 66-75). St. Paul, MN: Northwest Area Foundation.

Seveir, R. A. (1986). Freshmen at competitive liberal arts colleges: A survey of factors influencing institutional choice. Columbus, OH : The Ohio State University.

Sewell, W. H., \& Armer, J. M. (1960). Neighborhood context and college plans. American Sociological Review, 31, 159-168.

Spaulding, R. (April, 2001). Influences in college choice for student aid applicants and non-applicants. Paper presented at the Annual Conference of the American Educational Research Association, Seattle.

Toutkoushian, R. K. (2001). Do parental income and educational attainment affect the initial choices of New Hampshire's college-bound students? Economics of Education Review, 20, 245-62.

Turner, S. E., \& Bowen, W. G. (1999). Choice of major: The changing (unchanging) gender gap. Industrial and Labor Relations Review, 52, 289-313.

Trusty, J., Robinson, C. R., Plata, M., \& Ng, K. (2000). Effects of gender, socioeconomic status, and early academic performance on postsecondary education choice. Journal of Counseling \& Development, 78, 463-472.

University of Nebraska at Omaha Office of Institutional Research (2002). Enrollment Statistical Summary Fall 2002. Omaha, NE: University of Nebraska at Omaha.

Wilson, C. D. (1997). The college choice process: A longitudinal study of decisionmaking among students and families. Dissertation Abstracts International, 58 (03). (UMI No. 9727317).

Zensky, R. (1986). The structure of college choice revisited. In: Measures in the College Admissions Process: A College Board Colloquium. New York: College Entrance Examination Board.

Zemsky, R., \& Oedel, P. (1983). The structure of college choice. New York: College Entrance Examination Board.

## Appendix A

Enrollment and Statistical Summary for the University of Nebraska at Omaha

Higure 25\&26.
Delivery-Site Head Count and Student Credin Hours;
by Coliege or Equivalent Academic Lnit Fall 1993 through Fall 2002 Unit: College of Engineering \& Technology



Figure $13 \& 14$.
Delivery-Site Head Count and Student Credit Hours; by College or Equivalent Academic Unit: Fall 1993 through Fall 2002 Unit: College of Information Science \& Technology

Head Count by Student Level


Student Credit Hours by Level of Instruction Produced by Information Science \& Technology Courses


COLEGE OF GVGNEETNG AND TECHNOIOGY
March 24, 2003
Office of the Associcte Dean

To Whom It May Concern:
This is to verify that the College of Engineering and Techology, Omaha Carmpus, had a total of 84 graduate students actively enolled during the fall semester of 2002 .


Elizabeth Carpenter Graduate Coordinator 402-554-2161
ecarpenter@mailanomaba.edu

## Nebrask <br> Omaha

March 24, 2003

TO: Winnie Callahan, Executive Dírector, PKI
FROM: David Hinton, Dean, IS\&T MUSC wiot
This is to verify that the College of Information Science and Technology had 809 undergraduate and 314 graduate students enrolled for the fall semester of 2002 . This excludes aboui 125 undergraduate students enrolled in computer science or information systems concentrations through the College of Continuing Studies (per UNO Audit Indicator reports over the last five years) and about 50 of the 515 graduate students classified as "non-degree graduate students" in the graduate section of the Enrolment Statistical Summary, Fall 2002.

## Appendix B

A Survey of Factors and People
Influencing Choice of College/University

## A Survey of Factors and People Influencing Choice of College/University

Please complete the following survey designed to determine those factors of influence and people of influence having the most impact on your decision to attend The Peter Kiewit Institute.

## Demographic Information

1. Gender

| $(\quad)$ | Female |
| :--- | :--- |
| $(\quad)$ | Male |

2. Size of High School
3. Type of High School
( ) Small high school (200 or less students)
( ) Mid-sized high school (over 200 and less than 500 students)
( ) Large high school (500 or more students)
( ) Public High School
( ) Private High School
( ) Home School
4. Community Type ( ) Rural (500 or less residents)
( ) Township (over 500 and less than 10,000 residents)
( ) Small city ( 10,000 to 100,000 residents)
( ) Urban/Suburban (over 100,000 residents)

## 5. Anticipated Major

College of Engineering and Technology
( ) Architectural Engineering
( ) Civil Engineering
( ) Instruction Engineering Technology
( ) Computer Engineering
( ) Electronics Engineering
( ) Industrial Engineering Technology
( ) Manufacturing Engineering Technology
College of Information Science and Technology
( ) Computer Science
( ) Management Information Systems

## Factors of Influence

On questions 6 through 8, please select the degree to which the following factors influenced your decision to attend PKI using a scale of 5 to 1, with 5 being "Extremely Important" and 1 being "Not a Factor". Circle the appropriate number.
6. Scholarship - financial/living expenses and opportunities

In your selection of PKI, how important was:

|  | Extremely Important | Very Imporant | Important | Not Very Impootant | Not a Factor |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Full 4-Year College Tuition | 5 | 4 | 3 | 2 | 1 |
| Coverage of Residence Hall/Meals/Maids | 5 | 4 | 3 | 2 | 1 |
| Campus Life Opportunities | 5 | 4 | 3 | 2 | 1 |
| Assistance in Costs of Book/Fees | 5 | 4 | 3 | 2 | 1 |
| Gifting of a Personal Computer System | 5 | 4 | 3 | 2 | 1 |
| Opportunities for Networking and Internships | 5 | 4 | 3 | 2 | 1 |
| Other | 5 | 4 | 3 | 2 | 1 |

7. Reputation of University - overall excellence of programs and facilities

In your selection of PKI, how important was:

|  | Extremely Important | Very Important | lmportant | Not Very lmportant | Nota Factor |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Name Recognition | 5 | 4 | 3 | 2 | 1 |
| Cuting-edge Facilities/Technologies | 5 | 4 | 3 | 2 | 1 |
| Academic Excellence | 5 | 4 | 3 | 2 | 1 |
| Quality of Professors | 5 | 4 | 3 | 2 | 1 |
| Academic Offerings | 5 | 4 | 3 | 2 | 1 |
| Accessibility of Faculty/Staff | 5 | 4 | 3 | 2 | 1 |
| Personal Interest Shown in Me | 5 | 4 | 3 | 2 | 1 |
| Other | 5 | 4 | 3 | 2 | 1 |

8. Proximity - acceptable distance from home In your selection of PKI, how important was it for you to be:

|  | Extremely Important | Very Important | Important | Not Very Important | Not a Factor |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Close enough to visit family on holidays | 5 | 4 | 3 | 2 | 1 |
| Close enough to visit family daily | 5 | 4 | 3 | 2 | 1 |
| Close enough to drive home at will | 5 | 4 | 3 | 2 | 1 |
| Far enough to gain independence | 5 | 4 | 3 | 2 | 1 |
| Other | 5 | 4 | 3 | 2 | 1 |

## People of Influence

On question 9, please select the degree to which the following people influenced your decision to attend PKI using a scale of 5 to 1 , with 5 being "Extremely Important" and 1 being "Not a Factor". Circle the appropriate number.
9. People - individuals with opinions that influenced you

In your selection of PKI, how important was the influence of your:

|  | Extemely Imporant | Very Important | Important | Not Very Important | Not a Factor |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Parents (both father and mother)/ Guardians | 5 | 4 | 3 | 2 | 1 |
| Mother/Female Guardian | 5 | 4 | 3 | 2 | 1 |
| Father/Male Guardian | 5 | 4 | 3 | 2 | 1 |
| Teacher | 5 | 4 | 3 | 2 | 1 |
| Counselor | 5 | 4 | 3 | 2 | 1 |
| Peers | 5 | 4 | 3 | 2 | 1 |
| Other | 5 | 4 | 3 | 2 | 1 |

## Rankings of Factors and People of Influence

10. Rank the following factors from 1 to 3 with 1 being the most influential and 3 being the least influential on your decision to attend The Peter Kiewit Institute:
$\qquad$ Scholarship - financial/living expenses and opportunities
$\qquad$ Reputation of University - overall excellence of programs and facilities
$\qquad$ Proximity - university's location was perceived by you to be an acceptable distance from your home
11. Select the top three people of influence from the following list and rank them with 1 being the most influential and 3 being the least influential on your decision to attend The Peter Kiewit Institute:
$\qquad$ Parents (both father and mother)/ Guardians
$\qquad$ Mother/Female Guardian
Father/Male Guardian
Teacher
$\qquad$ Counselor
$\qquad$ Peers
$\qquad$ Other $\qquad$
12. From your perspective, are there other people or factors that you considered influential in your decision to come to The Peter Kiewit Institute that were not identified in the previous questions? If so, who are they?
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Please return the completed survey to Room 301 in The Peter Kiewit Institute or return the form in the enclosed postage-paid return envelope via U.S. Mail by Monday, April 14, 2003.

## Thank you for your time and cooperation with this request.

## Appendix C

## Cover Letter for Survey

IRB \#138-03-EX
April 8, 2003

Dear Peter Kiewit Institute Student,
Please take a few minutes and respond to the attached survey instrument. It attempts to understand what people or factors may have impacted your decision to come to The Peter Kiewit Institute. Realizing that you are clearly among the top students in Nebraska and even the nation, it would be helpful to those of us recruiting future classes of top students to better understand those influences that you weighed most heavily in making your final choice for higher education.

This survey and the subsequent results will be used as a part of a doctoral dissertation as well as providing valuable information that will be used in our efforts to continue improving opportunities here at the Institute for you and future students.

Some of you may have filled out this survey about 3 weeks ago. Please do so again, as the first time was a pretest to establish content reliability.

Please return both the survey instrument and the enclosed card. Your survey will be completely anonymous. I will be using these cards to determine which of you may need a gentle reminder.

On your way to classes here at PKI, drop the survey and the card in the box at the receptionist's desk in Room 301. I would like to have them no later than Monday, April $14^{\text {th }}$.

Thank you so much for your help.
Sincerely,

Winnie L. Callahan<br>Executive Director

(2 enclosures)

## Appendix D

Card for Identification of Completed Surveys

(front)


## Appendix E

Means for Total Respondents of Factors of Influence

Means for Total Respondents of Factors of Influence

| Factors of Influence | Mean $(\mathrm{n}=183)$ |
| :--- | :---: |
| Scholarship | 3.7923 |
| 4-year Tuition | 2.9180 |
| Residence Hall/Meals/Maids | 2.4262 |
| Campus Life | 2.8361 |
| Books/Fees | 2.6011 |
| Personal Computer System | 3.4973 |
| Networking/Internship Opportunities | 2.8907 |
| Reputation | 4.1257 |
| Name Recognition | 3.7650 |
| Cutting Edge Facilities/Technologies | 3.6995 |
| Academic Excellence | 3.8825 |
| Quality of Professors | 3.4590 |
| Academic Offerings | 3.5355 |
| Accessibility of Faculty/Staff |  |
| Personal Interest in Student | 3.1366 |
| Proximity | 2.1475 |
| Close Enough to Visit Family on Holidays | 2.8415 |
| Close Enough to Visit Family Daily | 2.6885 |
| Close Enough to Drive Home at Will |  |
| Far Enough to Gain Independence |  |

## Appendix F

Means for Total Respondents of People of Influence

Means for Total Respondents of People of Influence

| People of Influence | Mean $(\mathrm{n}=183)$ |
| :--- | :---: |
| Both Parents/Guardians | 3.0492 |
| Mother/Female Guardian | 2.9727 |
| Father/Male Guardian | 2.9290 |
| Teacher | 2.3552 |
| Counselor | 2.1311 |
| Peers | 2.3661 |

## Appendix G

Tables of Two-Way Analysis of Variance

Tables of Two-Way Analysis of Variance
G1. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Gender Regarding the Influence of Campus Life Opportunities on College Choice

| StuType | Gender | Mean | Std. Deviation |  | n |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Regular Student | Female | 2.6923 | 1.49358 |  | 13 |
|  | Male | 2.1667 | 1.19066 |  | 84 |
|  | Total | 2.2371 | 1.23973 |  | 97 |
| Scott Scholar | Female | 2.6364 | . 95346 |  | 22 |
|  | Male | 2.6406 | . 96555 |  | 64 |
|  | Total | 2.6395 | . 95687 |  | 86 |
| Total | Female | 2.6571 | 1.16171 |  | 35 |
|  | Male | 2.3716 | 1.12050 |  | 148 |
|  | Total | 2.4262 | 1.13087 |  | 183 |
|  | urce | Mean Square | e $\begin{aligned} & \text { e }\end{aligned}$ | Sig. |  |
| Corrected Model |  | 3.498 | $8 \quad 2.817$ | . 041 |  |
| Intercept |  | 685.341 | $1 \quad 551.946$ | . 000 |  |
| STUTYPE |  | 1.166 | - . 939 | . 334 |  |
| GENDER |  | 1.813 | 31.460 | . 228 |  |
| STUTYPE * GENDER |  | 1.873 | $3 \quad 1.509$ | . 221 |  |
| Error |  | 1.242 |  |  |  |
| Total |  |  |  |  |  |
| Corrected Total |  |  |  |  |  |

Q2. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Gender Regarding the Influence of Opportunities for Networking/Internships on College Choice


G3. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Gender Regarding the Influence of Name Recognition on College Choice

| StuType | Gender |  | Mean St | Std. Deviation |  | n |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Regular Student | Female |  | 3.3077 | 1.03155 |  | 13 |
|  | Male |  | 2.9286 | 1.22017 |  | 84 |
|  | Total |  | 2.9794 | 1.19878 |  | 97 |
| Scott Scholar | Female |  | 2.8182 | 1.00647 |  | 22 |
|  | Male |  | 2.7813 | 1.01526 |  | 64 |
|  | Total |  | 2.7907 | 1.00722 |  | 86 |
| Total | Female |  | 3.0000 | 1.02899 |  | 35 |
|  | Male |  | 2.8649 | 1.13478 |  | 148 |
|  | Total |  | 2.8907 | 1.11388 |  | 183 |
| Source |  | df | Mean Square | e F | Sig. |  |
| Corrected Model |  | 3 | 1.088 | 8 - .875 | . 455 |  |
| Intercept |  | 1 | 934.468 | $8 \quad 751.603$ | . 000 |  |
| STUTYPE |  | 1 | 2.705 | $5 \quad 2.176$ | . 142 |  |
| GENDER |  | 1 | 1.155 | - 5 - 929 | . 336 |  |
| STUTYPE * GENDER |  | 1 | . 781 | - . 628 | . 429 |  |
| Error |  | 179 | 1.243 |  |  |  |
| Total |  | 183 |  |  |  |  |
| Corrected Total |  | 182 |  |  |  |  |

G4. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Gender Regarding the Influence of Cutting Edge Facilities/Technologies on College Choice


G5. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Gender Regarding the Influence of Academic Excellence on College Choice

| StuType | Gender | Mean S | Std. Deviation |  | n |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Regular Student | Female | 4.2308 | . 72501 |  | 13 |
|  | Male | 3.6667 | 1.18559 |  | 84 |
|  | Total | 3.7423 | 1.14817 |  | 97 |
| Scott Scholar | Female | 3.8182 | . 79501 |  | 22 |
|  | Male | 3.7812 | . 84457 |  | 64 |
|  | Total | 3.7907 | . 82770 |  | 86 |
| Total | Female | 3.9714 | . 78537 |  | 35 |
|  | Male | 3.7162 | 1.05004 |  | 148 |
|  | Total | 3.7650 | 1.00793 |  | 183 |
|  | ource | Mean Square | F | Sig. |  |
| Corrected Model |  | 1.237 | - 1.222 | . 303 |  |
| Intercept |  | 1602.009 | -1582.693 | . 000 |  |
| STUTYPE |  | . 592 | - . 585 | . 445 |  |
| GENDER |  | 2.410 | - 2.381 | . 125 |  |
| STUTYPE * GENDER |  | 1.854 | $4 \quad 1.832$ | . 178 |  |
| Error |  | 1.012 |  |  |  |
| Total |  |  |  |  |  |
| Corrected Total |  |  |  |  |  |

G6. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Gender Regarding the Influence of Quality of Professors on College Choice

67. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Gender Regarding the Influence of Academic Offerings on College Choice


G8. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Gender Regarding the Influence of Accessibility of Faculty/Staff on College Choice

| StuType | Gender | Mean S | Std. Deviation |  | n |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Regular Student | Female | 4.1538 | . 68874 |  | 13 |
|  | Male | 3.4643 | 1.09155 |  | 84 |
|  | Total | 3.5567 | 1.07014 |  | 97 |
| Scott Scholar | Female | 3.4091 | 1.00755 |  | 22 |
|  | Male | 3.3281 | . 99291 |  | 64 |
|  | Total | 3.3488 | . 99134 |  | 86 |
| Total | Female | 3.6857 | . 96319 |  | 35 |
|  | Male | 3.4054 | 1.04873 |  | 148 |
|  | Total | 3.4590 | 1.03627 |  | 183 |
|  | ource | Mean <br> Square | F | Sig. |  |
| Corrected Model |  | 2.477 | - 2.358 | . 073 |  |
| Intercept |  | 1374.689 | 1308.791 | . 000 |  |
| STUTYPE |  | 5.177 | - 4.928 | . 028 |  |
| GENDER |  | 3.961 | - 3.771 | . 054 |  |
| STUTYPE * GENDER |  | 2.471 | - 2.352 | . 127 |  |
| Error |  | 1.050 |  |  |  |
| Total |  |  |  |  |  |
| Correct | otal |  |  |  |  |

G9. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Gender Regarding the Influence of Being Able to Visit Family Daily on College Choice

| StuType | Gender |  | Mean |  | Deviation |  | n |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Regular Student | Female |  | 2.0769 |  | 1.55250 |  | 13 |
|  | Male |  | 2.3929 |  | 1.49713 |  | 84 |
|  | Total |  | 2.3505 |  | 1.50029 |  | 97 |
| Scott ScholarTotal | Female |  | 1.6818 |  | . 94548 |  | 22 |
|  | Male |  | 2.0000 |  | 1.30931 |  | 64 |
|  | Total |  | 1.9186 |  | 1.22920 |  | 86 |
|  | Female |  | 1.8286 |  | 1.20014 |  | 35 |
|  | Male |  | 2.2230 |  | 1.42772 |  | 148 |
|  | Total |  | 2.1475 |  | 1.39271 |  | 183 |
| Source |  | df |  | Mean | F | Sig. |  |
| Corrected | odel | 3 |  | 3.762 | 1.970 | . 120 |  |
|  | cept | 1 |  | 443.264 | 232.183 | . 000 |  |
|  | YPE | 1 |  | 4.142 | 2.169 | . 143 |  |
|  | DER | 1 |  | 2.682 | 1.405 | . 237 |  |
| STUTYPE*G | DER | 1 |  | . 00003 | . 000 | . 997 |  |
|  | Error | 179 |  | 1.909 |  |  |  |
|  | Total | 183 |  |  |  |  |  |
| Correct | Total | 182 |  |  |  |  |  |

G10. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Gender Regarding the Influence of Being Able to Drive Home at Will on College Choice


G11. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Size of High School Regarding the Influence of Campus Life Opportunities on College Choice


G12. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Size of High School Regarding the Influence of Opportunities for Networking/Internships on College Choice


G13. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Size of High School Regarding the Influence of Name Recognition on College Choice


G14. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Size of High School Regarding the Influence of Cutting Edge Facilities/Technologies on College Choice


G15. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Size of High School Regarding the Influence of Academic Excellence on College Choice


G16. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Size of High School Regarding the Influence of Quality of Professors on College Choice


G17. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Size of High School Regarding the Influence of Academic Offerings on College Choice


G18. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Size of High School Regarding the Influence of Accessibility of Faculty/Staff on College Choice


G19. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Size of High School Regarding the Influence of Being Able to Drive Home at Will on College Choice


G20. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Type of High School Regarding the Influence of Campus Life Opportunities on College Choice

| StuType | Type | School | Mean |  | Std. <br> Deviation | n |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Regular Student |  | Public | 2.1333 |  | 1.18929 | 75 |
|  |  | Private | 2.5909 |  | 1.36832 | 22 |
|  |  | Total | 2.2371 |  | 1.23973 | 97 |
| Scott Scholar |  | Public | 2.6462 |  | . 99107 | 65 |
|  |  | Private | 2.6842 |  | . 82007 | 19 |
|  |  | Home | 2.0000 |  | 1.41421 | 2 |
|  |  | Total | 2.6395 |  | . 95687 | 86 |
| Total |  | Public | 2.3714 |  | 1.12744 | 140 |
|  |  | Private | 2.6341 |  | 1.13481 | 41 |
|  |  | Home | 2.0000 |  | 1.41421 | 2 |
|  |  | Total | 2.4262 |  | 1.13087 | 183 |
|  | Source |  |  |  | F Sig. |  |
| Corrected | Model |  |  | 2.377 | 77 . 054 |  |
|  | tercept | 147 |  | 19.139 | 139 . 000 |  |
| STU | TYPE |  |  | 2.334 | 34 . 128 |  |
|  | TYPE |  |  | 1.055 | 55-350 |  |
| STUTYPE * | TYPE |  |  | 1.118 | $18 \quad .292$ |  |
|  | Error |  |  |  |  |  |
|  | Total |  |  |  |  |  |
| Correcte | Total |  |  |  |  |  |

G21. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Type of High School Regarding the Influence of Opportunities for Networking/Internships on College Choice


G22. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Type of High School Regarding the Influence of Name Recognition on College Choice


G23. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Type of High School Regarding the Influence of Cutting Edge Facilities/Technologies on College Choice


G24. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Type of High School Regarding the Influence of Academic Excellence on College Choice


G25. Two-way Analysis of Variance for General Population Compared to Top
Academic Students Controlling for Type of High School Regarding the Influence of Quality of Professors on College Choice


G26. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Type of High School Regarding the Influence of Academic Offerings on College Choice


Q27. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Type of High School Regarding the Influence of Accessibility of Faculty/Staff on College Choice


G28. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Type of High School Regarding the Influence of Being Close Enough to Visit Family Daily on College Choice


G29. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Type of High School Regarding the Influence of Being Close Enough to Drive Home at Will on College Choice

| StuType | Type of High School |  | Mean |  | Std. <br> Deviation | n |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Regular Student |  | Public | 3.1067 |  | 1.56459 | 75 |
|  |  | Private | 2.4091 |  | 1.36832 | 22 |
|  |  | Total | 2.9485 |  | 1.54361 | 97 |
| Scott Scholar |  | Public | 2.7231 |  | 1.31705 | 65 |
|  |  | Private | 2.5263 |  | 1.12390 | 19 |
|  |  | Home | 4.5000 |  | . 70711 | 2 |
|  |  | Total | 2.7209 |  | 1.28933 | 86 |
| Total |  | Public | 2.9286 |  | 1.46245 | 140 |
|  |  | Private | 2.4634 |  | 1.24695 | 41 |
|  |  | Home | 4.5000 |  | . 70711 | 2 |
|  |  | Total | 2.8415 |  | 1.43045 | 183 |
| Source |  |  |  |  | F Sig. |  |
| Corrected Model |  | 4 |  | 2.219 | 9.069 |  |
| Intercept |  | 267 |  | 134.209 | 9.000 |  |
| STUTYPE |  |  |  | . 281 | 1.597 |  |
| TYPE |  | 6 |  | 3.066 | 6 - 049 |  |
| STUTYPE *TYPE |  | 1. |  | . 993 | 3.320 |  |
| Error |  |  |  |  |  |  |
| Total |  |  |  |  |  |  |
| Corrected Total |  |  |  |  |  |  |

G30. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Type of Community Regarding the Influence of Campus Life Opportunities on College Choice


G31. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Type of Community Regarding the Influence of Opportunities for Networking/Internships on College Choice


G32. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Type of Community Regarding the Influence of Cutting Edge Facilities/Technologies on College Choice


G33. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Type of Community Regarding the Influence of Academic Excellence on College Choice

| StuType |  | Community Type |  | Mean | Std. <br> Deviation | n |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Regular Student |  | Rural (Less than 500) |  | 2.5000 | 1.91485 | 4 |
| Township (500-10,000) |  |  |  | 4.1875 | . 83417 | 16 |
| Small City ( $10,000-100,000$ ) |  |  |  | 3.7000 | 1.26074 | 20 |
| Urban/Suburban (Over 500) |  |  |  | 3.7193 | 1.08157 | 57 |
| Total |  |  |  | 3.7423 | 1.14817 | 97 |
| Scott Scholar Rural (Less than 500) |  |  |  | 4.0000 | . 50000 | 9 |
| Township (500-10,000) |  |  |  | 3.7500 | . 84699 | 24 |
| Small City ( $10,000-100,000$ ) |  |  |  | 3.8571 | . 66299 | 14 |
| Urban/Suburban (Over 500) |  |  |  | 3.7436 | . 93803 | 39 |
| Total |  |  |  | 3.7907 | . 82770 | 86 |
| Total Rural |  | Less | an 500) | 3.5385 | 1.26592 | 13 |
| Township (500-10,000) |  |  |  | 3.9250 | . 85896 | 40 |
| Small City ( $10,000-100,000$ ) |  |  |  | 3.7647 | 1.04617 | 34 |
| Urban/Suburban (Over 500) |  |  |  | 3.7292 | 1.02062 | 96 |
| Total |  |  |  | 3.7650 | 1.00793 | 183 |
| Source |  | df | Mean Square | F | Sig. |  |
| Corrected Model |  | 7 | 1.443 | 1.444 | . 190 |  |
| Intercept |  | 1 | 1377.613 | 1379.217 | . 000 |  |
| STUTYPE |  | 1 | 2.457 | 2.459 | . 119 |  |
| COMMUNITY |  | 3 | 1.547 | 1.549 | . 204 |  |
| STUTYPE * COMMUNITY |  | 3 | 2.737 | 2.740 | . 045 |  |
| Error |  | 175 | . 999 |  |  |  |
| Total |  | 183 |  |  |  |  |
| Corrected Total |  | 182 |  |  |  |  |

G34. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Type of Community Regarding the Influence of Academic Offerings on College Choice


G35. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Type of Community Regarding the Influence of Accessibility of Faculty/Staffon College Choice


G36. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Type of Community Regarding the Influence of Being Close Enough to Visit Family on Holidays on College Choice

| StuType |  | Community Type |  | Mean | Std. <br> Deviation | n |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Regular Student Rural (Less than 500) |  |  |  | 3.0000 | 1.82574 | 4 |
| Township (500-10,000) |  |  |  | 3.3750 | 1.45488 | 16 |
| Small City ( $10,000-100,000$ ) |  |  |  | 2.7500 | 1.65036 | 20 |
| Urban/Suburban (Over 500) |  |  |  | 2.5263 | 1.54810 | 57 |
| Total |  |  |  | 2.7320 | 1.57133 | 97 |
| Scott Scholar $\quad$ Rural (Less than 500) |  |  |  | 3.2222 | 1.39443 | 9 |
| Township (500-10,000) |  |  |  | 3.5833 | 1.10007 | 24 |
| Small City ( $10,000-100,000$ ) |  |  |  | 3.2143 | 1.31140 | 14 |
| Urban/Suburban (Over 500) |  |  |  | 3.8205 | 1.35475 | 39 |
| Total |  |  |  | 3.5930 | 1.28684 | 86 |
| Total Rural |  | Less t | an 500) | 3.1538 | 1.46322 | 13 |
| Township (500-10,000) |  |  |  | 3.5000 | 1.24035 | 40 |
| Small City ( $10,000-100,000$ ) |  |  |  | 2.9412 | 1.51640 | 34 |
| Urban/Suburban (Over 500) |  |  |  | 3.0521 | 1.59848 | 96 |
| Total |  |  |  | 3.1366 | 1.50381 | 183 |
| Source |  | df | Mean Square | F | Sig. |  |
| Corrected Model |  | 7 | 6.912 | 3.330 | . 002 |  |
| Intercept |  | 1 | 1031.647 | 497.076 | . 000 |  |
| STUTYPE |  | 1 | 7.607 | 3.665 | . 057 |  |
| COMMUNITY |  | 3 | 1.570 | . 756 | . 520 |  |
| STUTYPE * COMMUNITY |  | 3 | 3.608 | 1.738 | . 161 |  |
| Error |  | 175 | 2.075 |  |  |  |
| Total |  | 183 |  |  |  |  |
| Corrected Total |  | 182 |  |  |  |  |

G37. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Type of Community Regarding the Influence of Being Close Enough to Drive Home at Will on College Choice

| StuType |  | Community Type |  | Mean | Std. <br> Deviation | n |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Regular Student Rural (Less than 500) |  |  |  | 2.7500 | 2.06155 | 4 |
| Township (500-10,000) |  |  |  | 2.9375 | 1.56924 | 16 |
| Small City ( $10,000-100,000$ ) |  |  |  | 2.6500 | 1.56525 | 20 |
| Urban/Suburban (Over 500) |  |  |  | 3.0702 | 1.52198 | 57 |
| Total |  |  |  | 2.9485 | 1.54361 | 97 |
| Scott Scholar | ar Rural (Less than 500) |  |  | 2.2222 | . 66667 | 9 |
|  | Township (500-10,000) |  |  | 2.5417 | 1.17877 | 24 |
|  | Small City ( $10,000-100,000$ ) |  |  | 2.8571 | 1.09945 | 14 |
|  | Urban/Suburban (Over 500) |  |  | 2.8974 | 1.50079 | 39 |
|  | Total |  |  | 2.7209 | 1.28933 | 86 |
| Total Rural |  | Cess th | n 500) | 2.3846 | 1.19293 | 13 |
| Township (500-10,000) |  |  |  | 2.7000 | 1.34355 | 40 |
| Small City ( $10,000-100,000$ ) |  |  |  | 2.7353 | 1.37750 | 34 |
| Urban/Suburban (Over 500) |  |  |  | 3.0000 | 1.50787 | 96 |
| Total |  |  |  | 2.8415 | 1.43045 | 183 |
| Source |  | df | Mèan Square | F | Sig. |  |
| Corrected Model |  | 7 | 1.376 | . 664 | . 703 |  |
| Intercept |  | 1 | 763.236 | 368.180 | . 000 |  |
| STUTYPE |  | 1 | 1.255 | . 606 | . 438 |  |
| COMMUNITY |  | 3 | 1.298 | . 626 | . 599 |  |
| STUTYPE * COMMUNITY |  | 3 | . 672 | . 324 | . 808 |  |
| Error |  | 175 | 2.073 |  |  |  |
| Total |  | 183 |  |  |  |  |
| Corrected Total |  | 182 |  |  |  |  |

G38. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for College Regarding the Influence of Name Recognition on College Choice

| StuType | College | Mean | Std. <br> Deviation | n |
| :---: | :---: | :---: | :---: | :---: |
| Regular Student | Engineering | 2.9250 | 1.34712 | 40 |
| Information | iences \& Tech | 3.0175 | 1.09367 | 57 |
|  | Total | 2.9794 | 1.19878 | 97 |
| Scott Scholar | Engineering | 2.7000 | 1.09265 | 50 |
| Information | iences \& Tech | 2.9167 | . 87423 | 36 |
|  | Total | 2.7907 | 1.00722 | 86 |
| Total | Engineering | 2.8000 | 1.21044 | 90 |
| Information | iences \& Tech | 2.9785 | 1.01058 | 93 |
|  | Total | 2.8907 | 1.11388 | 183 |
| Source | df $\begin{array}{r}\text { Mean } \\ \text { Square }\end{array}$ | F | Sig. |  |
| Corrected Model | $3 \quad .936$ | . 751 | . 523 |  |
| Intercept | $1 \quad 1479.328$ | 1187.403 | . 000 |  |
| STUTYPE | $1 \quad 1.176$ | . 944 | . 333 |  |
| COLLEGE | $1 \quad 1.059$ | . 850 | . 358 |  |
| STUTYPE * COLLEGE | $1 \quad .171$ | . 137 | . 712 |  |
| Error | $179 \quad 1.246$ |  |  |  |
| Total | 183 |  |  |  |
| Corrected Total | 182 |  |  |  |

G39. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for College Regarding the Influence of Academic Excellence on College Choice

| StuType | College | Mean | Std. <br> Deviation | n |
| :---: | :---: | :---: | :---: | :---: |
| Regular Student | Engineering | 3.5000 | 1.41421 | 40 |
| Information | iences \& Tech | 3.9123 | . 89204 | 57 |
|  | Total | 3.7423 | 1.14817 | 97 |
| Scott Scholar | Engineering | 3.7600 | . 84660 | 50 |
| Information | iences \& Tech | 3.8333 | . 81064 | 36 |
|  | Total | 3.7907 | . 82770 | 86 |
| Total | Engineering | 3.6444 | 1.13485 | 90 |
| Information | iences \& Tech | 3.8817 | . 85782 | 93 |
|  | Total | 3.7650 | 1.00793 | 183 |
| Source | df $\begin{array}{r}\text { Mean } \\ \text { Square }\end{array}$ | F | Sig. |  |
| Corrected Model | $3 \quad 1.405$ | 1.392 | . 247 |  |
| Intercept | 12492.962 | 2469.763 | . 000 |  |
| STUTYPE | $1 \quad .363$ | . 360 | . 550 |  |
| COLLEGE | $1 \quad 2.611$ | 2.587 | . 110 |  |
| STUTYPE * COLLEGE | $1 \quad 1.272$ | 1.260 | . 263 |  |
| Error | $179 \quad 1.009$ |  |  |  |
| Total | 183 |  |  |  |
| Corrected Total | 182 |  |  |  |

G40. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for College Regarding the Influence of Quality of Professors on College Choice

| StuType | College | Mean | Std. <br> Deviation | n |
| :---: | :---: | :---: | :---: | :---: |
| Regular Student | Engineering | 3.5000 | 1.37747 | 40 |
| Information | iences \& Tech | 4.0526 | . 87466 | 57 |
|  | Total | 3.8247 | 1.13661 | 97 |
| Scott Scholar | Engineering | 3.4800 | 1.05444 | 50 |
| Information | ciences \& Tech | 3.6667 | . 82808 | 36 |
|  | Total | 3.5581 | . 96534 | 86 |
| Total | Engineering | 3.4889 | 1.20154 | 90 |
| Information | iences \& Tech | 3.9032 | . 87308 | 93 |
|  | Total | 3.6995 | 1.06511 | 183 |
| Source | df $\begin{array}{r}\text { Mean } \\ \text { Square }\end{array}$ | F | Sig. |  |
| Corrected Model | $3 \quad 3.716$ | 3.405 | . 019 |  |
| Intercept | $1 \quad 2392.222$ | 2192.315 | . 000 |  |
| STUTYPE | $1 \quad 1.825$ | 1.672 | . 198 |  |
| COLLEGE | $1 \quad 6.051$ | 5.546 | . 020 |  |
| STUTYPE * COLLEGE | $1 \quad 1.483$ | 1.359 | . 245 |  |
| Error | $179 \quad 1.091$ |  |  |  |
| Total | 183 |  |  |  |
| Corrected Total | 182 |  |  |  |

G41. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for College Regarding the Influence of Academic Offerings on College Choice


G42. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for College Regarding the Influence of Accessibility of Faculty/Staffon College Choice


G43. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for College Regarding the Influence of Being Close Enough to Visit Family Daily on College Choice


G44. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for College Regarding the Influence of Being Close Enough to Drive Home at Will on College Choice

| StuType | College | Mean | Std. <br> Deviation | n |
| :---: | :---: | :---: | :---: | :---: |
| Regular Student | Engineering | 2.9250 | 1.65464 | 40 |
| Information | iences \& Tech | 2.9649 | 1.47557 | 57 |
|  | Total | 2.9485 | 1.54361 | 97 |
| Scott Scholar | Engineering | 2.5600 | 1.19796 | 50 |
| Information | iences \& Tech | 2.9444 | 1.39272 | 36 |
|  | Total | 2.7209 | 1.28933 | 86 |
| Total | Engineering | 2.7222 | 1.42236 | 90 |
| Information | iences \& Tech | 2.9570 | 1.43644 | 93 |
|  | Total | 2.8415 | 1.43045 | 183 |
| Source | df $\begin{array}{r}\text { Mean } \\ \text { Square }\end{array}$ | F | Sig. |  |
| Corrected Model | 31.830 | . 893 | . 446 |  |
| Intercept | $1 \quad 1437.434$ | 701.257 | . 000 |  |
| STUTYPE | $1 \quad 1.645$ | . 803 | . 372 |  |
| COLLEGE | $1 \quad 1.994$ | . 973 | . 325 |  |
| STUTYPE * COLLEGE | $1 \quad 1.314$ | . 641 | . 424 |  |
| Error | $179 \quad 2.050$ |  |  |  |
| Total | 183 |  |  |  |
| Corrected Total | 182 |  |  |  |

G45. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Gender Regarding the Influence of Counselor on College Choice


G46. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Gender Regarding the Influence of Teacher on College Choice


G47. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Gender Regarding the Influence of Peers on College Choice


G48. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Size of High School Regarding the Influence of Teacher on College Choice


G49. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Size of High School Regarding the Influence of Peers on College Choice


G50. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Type of High School Regarding the Influence of Counselors on College Choice


G51. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Type of High School Regarding the Influence of Teachers on College Choice


G52. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Type of High School Regarding the Influence of Peers on College Choice


G53. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for Type of Community Regarding the Influence of Peers on College Choice


G54. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for College Regarding the Influence of Teachers on College Choice

| StuType | College | Mean | Std. <br> Deviation | n |
| :---: | :---: | :---: | :---: | :---: |
| Regular Student | Engineering | 2.3500 | 1.35021 | 40 |
| Information | iences \& Tech | 2.0877 | 1.19942 | 57 |
|  | Total | 2.1959 | 1.26359 | 97 |
| Scott Scholar | Engineering | 2.5000 | 1.05463 | 50 |
| Information | iences \& Tech | 2.5833 | 1.18019 | 36 |
|  | Total | 2.5349 | 1.10291 | 86 |
| Total | Engineering | 2.4333 | 1.19032 | 90 |
| Information | iences \& Tech | 2.2796 | 1.21015 | 93 |
|  | Total | 2.3552 | 1.19962 | 183 |
| Source | df $\quad$ M | F | Sig. |  |
| Corrected Model | $3 \quad 2.3$ | 1.639 | . 182 |  |
| Intercept | $1 \quad 1003$. | 704.761 | . 000 |  |
| STUTYPE | $1 \quad 4.6$ | 3.241 | . 074 |  |
| COLLEGE | 1 | . 249 | . 618 |  |
| STUTYPE * COLLEGE | 1 1.3 | . 929 | . 337 |  |
| Error | 179 1. |  |  |  |
| Total | 183 |  |  |  |
| Corrected Total | 182 |  |  |  |

G55. Two-way Analysis of Variance for General Population Compared to Top Academic Students Controlling for College Regarding the Influence of Peers on College Choice

| StuType | College | Mean | Std. <br> Deviation | n |
| :---: | :---: | :---: | :---: | :---: |
| Regular Student | Engineering | 2.3000 | 1.20256 | 40 |
| Information | ciences \& Tech | 2.3684 | 1.23392 | 57 |
|  | Total | 2.3402 | 1.21524 | 97 |
| Scott Scholar | Engineering | 2.3400 | 1.06157 | 50 |
| Information | cences \& Tech | 2.4722 | 1.02779 | 36 |
|  | Total | 2.3953 | 1.04351 | 86 |
| Total | Engineering | 2.3222 | 1.12007 | 90 |
| Information | eiences \& Tech | 2.4086 | 1.15379 | 93 |
|  | Total | 2.3661 | 1.13503 | 183 |
| Source | df $\quad \begin{gathered}\text { M } \\ \text { Squ }\end{gathered}$ | F | Sig. |  |
| Corrected Model | 3 | . 157 | . 925 |  |
| Intercept | $1 \quad 995$. | 761.710 | . 000 |  |
| STUTYPE | 1 | . 175 | . 676 |  |
| COLLEGE | 1 | . 341 | . 560 |  |
| STUTYPE * COLLEGE | 1 | . 034 | . 853 |  |
| Error | 179 1.3 |  |  |  |
| Total | 183 |  |  |  |
| Corrected Total | 182 |  |  |  |

