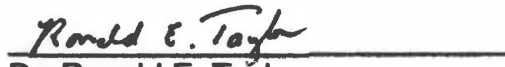


To the Graduate Council:

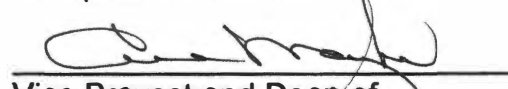
I am submitting herewith a dissertation written by Deborah J. Hicks entitled "Factors affecting choice and perceptions of quality of the University of Tennessee, Knoxville: A Qualitative Study." I have examined the final paper copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Education, with a major in Education.


Dr. E. Grady Bogue, Major Professor

We have read this dissertation
and recommend its acceptance:


Dr. Norma T. Mertz
Dr. Ronald E. Taylor
Dr. William T. Snyder

Accepted for the Council:


Vice Provost and Dean of
Graduate Studies

**Factors affecting choice and perceptions of quality of the University of
Tennessee, Knoxville: A Qualitative Study**

**A Dissertation
Presented for the
Doctor of Education Degree
The University of Tennessee, Knoxville**

**Deborah J. Hicks
August, 2003**

Thesis
2003b
.H53

Copyright® Deborah J. Hicks, 2003
All rights reserved

DEDICATION

This dissertation is dedicated to my family and especially to my father, Eugene L. Hicks who never had the chance for an education and valued it very highly. He always said an education is something no one can take away from you. Without his inspiration, I could never have completed this.

ACKNOWLEDGEMENTS

There are many professional colleagues and mentors to whom I owe much gratitude for their patience and guidance throughout the completion of this project. I want to thank my friend, Kim Hall for her understanding and support during this degree.

I am grateful to Dr. E. Grady Bogue for his encouragement, suggestions and guidance, as well as the other members of my dissertation review committee, Drs. Norma Mertz, Ronald E. Taylor and William T. Snyder. My educational experiences at the University of Tennessee and the contributions to my Doctor of Education program by the faculty members have led to both my professional and personal growth. I also wish to thank the National Merit Scholars at The University of Tennessee who participated in this research, without whom my data collection would not have been possible.

Many other people have encouraged me throughout this doctoral program, including my church family and the staff at Walters State Community College. I wish to express to them my appreciation for their support.

ABSTRACT

A qualitative interview study was undertaken to describe factors central to the decision of National Merit Scholars in attending the University of Tennessee, Knoxville. In addition, this study sought to discover how National Merit Scholars who had attended the university viewed the academic quality of the university after having attended for at least two semesters. The study sought to answer four questions:

1. What factors influenced National Merit Scholars to enroll at UTK?
2. What indicators of institutional quality do National Merit Scholars use to assess the academic reputation and quality of an institution?
3. What perceptions did enrolled National Merit Scholars have about the academic reputation and quality of UTK before they enrolled? Did that perception change in any significant way after they have been in attendance for at least two semesters.
4. What suggestions do National Merit Scholars offer for making the University of Tennessee more attractive to high ability students?

The study utilized twenty-five face-to-face interviews with National Merit Scholars who had attended UTK for at least two semesters, in addition to relevant documents readily available at the university, past and present UTK administrators, Internet sources, UTK staff and observations made during the interviews.

Findings from the study showed that National Merit Scholars do not perceive UTK to be a high quality academic institution before attendance. The major factor influencing their initial attendance is the perception that the university does offers an exceptional educational value, as evidenced by

scholarship/financial aid package offered coupled with the perception that UTK offers superior programs of study in participants' desired program of study. The participants who reported that their perception of UTK had changed positively cited the UTK faculty, Honors Program, and opportunities offered at UTK as influencing these changes. Those participants who reported that their perception had changed negatively toward the academic quality of the university cited lack of sufficient state funding and the UTK administration as influencing these changes.

TABLE OF CONTENTS

Chapter 1 Introduction	1
National Merit Scholars and National Merit Corporation	1
Problem Statement	10
Purpose Statement	12
Research Questions	12
Significance	12
Delimitations	13
Limitations	14
Assumptions	14
Definitions	15
Organization of the Study	15
Chapter 2 Literature Review	17
Student College Choice Research	17
Recent Student Choice Research and Decision Making Models	23
Factors Affecting College Choice for all Students	27
Factors Affecting College Choice for Academically Gifted Students Including National Merit Scholars	30
Summary	42
Chapter 3 Research Design	45
Introduction	45
Research Method and Design	45
Site and population	48
Source of Data	48
Procedure	50
Data Collection	51
Data Analysis	54
Validity and Reliability	55
Researcher Ethics and Bias	57
Chapter 4 Findings	59
Demographic Data	60
Research Question #1	62
Summary	73
Research Question #2	74
Summary	88
Research Question #3	88
Summary	98
Research Question #4	99
Summary	118
Chapter 5 Conclusions and Recommendations	120
Overview of Study	120
Summary of Findings	121
Discussion	125
Conclusions	129

Recommendations for the University of Tennessee for Attracting More National Merit Scholars _____	130
Recommendations for Higher Education _____	131
Recommendations for Further Study _____	132
References _____	134
Appendices _____	147
Appendix A Invitation to Participate _____	148
Appendix B Demographic Survey _____	150
Appendix C Interview Protocol _____	152
Appendix D Informed Consent _____	155
Appendix E Statistical Comparisons University of Tennessee and THEC Designated Peer Institutions _____	158
Appendix F Participants Demographic and Statistical Charts _____	160
Appendix G Perceived Effects of Insufficient State Funding _____	166
Vita _____	168

LIST OF TABLES

Table 3.1 Interview as Research Collection Method _____	47
Table 4.1 Factors affecting the decision to attend UTK _____	62
Table 4.2 Reported Change in Perception by Class _____	90
Table 4.3 Perceived Effects of Inadequate State Funding _____	97
Table 4.4 Suggestions of changes for Improving UTK to make it More attractive to National Merit Scholars _____	100

CHAPTER 1

INTRODUCTION

In a recent issue of the **Chronicle of Higher Education**, Cartensen stated, "...colleges compete for students just as producers of other services compete for customers." (Cartensen, 2001, p. B24) Among the most sought after students are high ability students such as National Merit Scholars. Some educators and legislators view the number of National Merit Scholars attending a university as one indicator of the quality of the student body and the institution. Others may view National Merit Scholars as a data point in assessing national rankings or in state mandated accountability measures.

It is reasonable that colleges and universities desire to attract and retain high ability students like National Merit Scholars. How does a student become a National Merit Scholar? What is the philosophy behind the National Merit Scholarship? What benefits do colleges and universities gain from having National Merit Scholars among their student body?

National Merit Scholars and the National Merit Corporation

The National Merit Corporation is an independent, non-profit organization. It operates without government assistance and is privately funded. It is the largest privately financed provider of scholarships to students in the United States. The National Merit Corporation is located in Evanston, Illinois and was founded in 1955.

Initially, the Ford Foundation established the National Merit Corporation to assist high ability students who wished to pursue a college education in realizing their plans of attending the college or university of their choice. In the first forty years of awarding scholarships, "...over 181,000 students have won scholarships valued at \$633 million." (Garrigues, 1994, p. 60)

Students qualify for these scholarships by taking the PSAT/NMSQT test administered in October to high school juniors throughout the United States. The PSAT (Preliminary Scholastic Aptitude Test)/NMSQT (National Merit Scholarship Qualifying Test) are preliminary tests administered by the College Board and Educational Testing Service of Princeton, New Jersey to over a million juniors annually. Based on these scores, the National Merit Corporation determines finalists in a detailed selection process.

Selection Process

Once students have completed the PSAT/NMSQT, all scores are forwarded to the National Merit Scholarship Corporation. Based on the number of high schools in each state, that state will receive a designated percentage of those taking the test as National Merit Semifinalists. For instance, if a state has 10% of all high schools in the nation, that state will receive 10% of the available semifinalist slots.

After this criterion has been met, semifinalists are mailed an application for a National Merit Scholarship. The National Merit Corporation utilizes the following criteria to determine finalists:

- High School transcripts

- GPA
- Difficulty of course load during high school
- Depth and breath of subjects
- SAT scores
- Recommendation from high school principal
- Biographical essay written by the student which details the student's attainments, interests and goals
- Demonstrated leadership ability in school and civic activities

In addition, parents of semifinalists are requested to file a financial status statement. This financial statement is used as a needs assessment tool. If parents do not wish to file such a statement, they may submit a form for a request for a minimum award, usually ranging from \$250 - \$500. (McClendon, 2000)

Other stipulations must be met before a student can become a finalist:

- Students must be planning to enroll as a full-time day student
- Students must enroll in an accredited institution in the fall semester following high school graduation
- Students must specify which institution they wish to attend when they take the preliminary exam in October (McClendon 2000)

Changes in college choice are permitted only for winners who are not admitted to the college designated or who for very good reasons cannot carry out their original intentions. (Thistlethwaite, 1959, p. 298)

Next, a selection committee reviews all of these data before awarding a student National Merit Finalist status. Approximately 90% of all National Merit semifinalists become finalists. (McClendon, 2000) Those who do become finalists are awarded a \$2,400 single payment award. Some corporate and collegiate sponsors offer additional monetary awards to finalists. Other certificates for commendation and awards sponsored by corporations and

colleges are awarded to students who score in the top 5% nationally and who may not be finalists.

Why would a student want to compete for this award? Do students benefit in ways other than financially? Winning a National Merit Scholarship may be one of the best ways the United States educational system has developed to honor and recognize high ability students. In addition, most students need financial aid. Third, winning a National Merit Scholarship helps open doors to institutions with highly selective admissions policies.

Clearly, National Merit Scholarships benefit students. But how do they benefit institutions of higher education other than the scholarship monies provided? All universities desire to attract and retain high ability students such as National Merit Scholars. Many universities and colleges sponsor National Merit Scholars who attend their university with an additional scholarship award above and beyond that awarded by the National Merit Corporation. Many of these awards are renewable for up to four years of undergraduate study. For instance, the University of Florida guarantees that all students who qualify as National Merit Finalists and name the University of Florida as their college of first choice will qualify for an award of approximately \$16,000 over four years. (Wielins, online www.reg.ufl.edu/admission/adnflasc.htm)

Benefits to institutions

Why is the number of Merit Scholars a university attracts significant? How do National Merit Scholars benefit the institution? The University of Florida feels that the number of National Merit Scholars they attract becomes a "...quick way

to raise public perception of a school's academic quality. They [number of National Merit Scholars] also provide a measure that is easy to understand. That's particularly important for public universities, which are being called by legislators to quantify improvements in the name of accountability." (Washington, 1997, p. 2) Additionally, other state legislators may rely on quantifiable indicators like the number of Merit Scholars to assess the quality of the education within a state. The number of Merit Scholars has become a quantifiable, understandable data point in justifying additional revenue expenditures.

Others may view the number of National Merit Scholars attending a university as a sign of academic excellence. Astin (1993) expressed the opinion that anyone who has worked in academe for very long will tell you that "...selective admissions signifies academic excellence. The more selective the institution, the more excellent it is presumed to be."(p. 9) Obviously, National Merit Scholars are academically talented students. So, an obvious rationale might be the more National Merit Scholars attending a particular institution, the higher the quality of that institution.

The presence of a large body of National Merit Scholars may additionally provide assistance to an institution in obtaining external research dollars awarded by private corporations. Many corporations sponsor National Merit Scholars in addition to those who win scholarships from the National Merit Corporation. These corporations specifically sponsor scholars who will pursue majors of interest to the particular corporation. In the past, corporations like 3M,

Shell Oil, Georgia-Pacific and Bell-South have sponsored National Merit Scholars.

Furthermore, the presence of National Merit Scholars can also aid admissions and public relations staff in institutional marketing, and recruiting efforts. Astin states "...if so many bright students want to come here, we must be pretty good." (Astin, 1993, p. 9) An analogy might be drawn here with an institution that has just won a major football championship. Coaches and recruiting staff find it easier to attract next year's promising players after just having won a national championship. Most people want to be associated with a winning team. Just as high ability athletes want to be associated with a winning team, so the high ability student wants to be associated with other high ability students.

Other benefits might include the view that the number of National Merit Scholars attending an institution and participating in an honors program might be one indicator of the difficulty of the coursework within an honors program. Others may view the number of National Merit Scholars as an indicator of the quality of the student body and the academic reputation of a university. Additionally, one of the criteria used in *US News and World Report's* annual ranking of colleges and universities in the United States includes "student selectivity." According to the *US News and World Report* web site, student selectivity constitutes 15% of the weighted scores used in developing the rankings. Student selectivity, according to *US News and World Report*, includes average admission test scores of incoming students and rank in the high school graduation class of

incoming freshmen. Other criteria used in the ranking of American colleges by *U S News* include faculty resources (for example, class size); financial resources; alumni giving; and, for national universities-doctoral and liberal arts colleges-bachelor's only, an indicator of graduation rate performance. (www.usnews.com/usnews/edu/rankings)

Increasingly, colleges and universities compete for students of all abilities. The University of Tennessee, Knoxville as a Doctoral/Research University – Extensive is no exception. Dr. William T. Snyder, Chancellor Emeritus at the University of Tennessee, Knoxville and Special Assistant to former President J. Wade Gilley from January through June 2001, completed a report in the year 2001 addressing this subject. In this report, Dr. Snyder stated that the University of Tennessee, Knoxville sought to attract National Merit Scholars as part of an overall strategy to attain higher rankings and ratings in polls such as *US News and World Report*. (Snyder, 2001, p. 2) More recently, Dr. John W. Shumaker, current president of the University of Tennessee, has created a Scorecard for the University of Tennessee, addressing goals and challenges for the university. This document includes the number of National Merit Scholars attending the university as one data point among many to be tracked on the University of Tennessee's "Strategic Agenda for 2010". The UT "Strategic Agenda for 2010" is a performance plan that tracks annual changes in 50 categories relating to student quality in addition to other data points. (www.utk.edu)

The University of Tennessee ranked 43rd in the *US News and World Report's* 2002 rankings, after being ranked 44th for two consecutive years. Dr.

John Shumaker, current UT President, recently stated, "Moving up in the rankings is the second indicator this month of UT's progress." Dr. Shumaker further stated,

We have just enrolled at Knoxville the best freshman class in the university's history. The first-year students who enrolled this fall have the highest ever average high school grade point average and ACT entrance test scores. (Bradley, 2002, online)

UTK reportedly enrolled 33 National Merit Scholars in the academic year 2001 – 2002. (*Chronicle of Higher Education*, 2002, p. 22) In comparison, UTK enrolled 35 National Merit Scholars in the academic year 2000-2001 and 30 in the academic year 1999-2000. (www.TheCenter.com)

National Merit Scholars have been of interest to educators, researchers and administrators since 1957. Most of the early research studies will be discussed in chapter 2. However, one study is of interest here. The Tennessee Higher Education Commission conducted research in 1984 to determine factors that led to the college choices of high ability students from Tennessee. These students were either National Merit Scholars or National Merit Semifinalists. The THEC study found that in 1984, approximately 70% of the high ability students from Tennessee elected to enroll in either Tennessee's public or private institutions. Approximately 50% of those entering Tennessee institutions of higher education enrolled in public institutions. The other 50% enrolled in private institutions. By contrast, former UT President Dr. J. Wade Gilley reported that in the academic year of 1999 – 2000, 84% of Tennessee's National Merit Scholars left the state to attend institutions of higher education. (Gilley, 2001)

The 1984 THEC study reported that factors important in the decision to attend a Tennessee institution included availability of program in preferred major, affordable cost, scholarship/grant offers and employment opportunities after graduation. However, for those students who elected to attend higher education outside Tennessee, neither scholarship, cost of tuition nor grants were reported to be important factors in their decision. Those high ability students who left Tennessee were concerned about academic reputation and other academic characteristics.

The single most important factor to those who entered colleges in other states, or those who entered a private college either inside or outside of Tennessee, was the academic reputation of the school, as compared to only about 42% of those who entered one of Tennessee's public institutions. (THEC, 1985, p. 24)

On the basis of the findings of this study, THEC made several recommendations designed to help Tennessee universities recruit high ability students and to encourage Tennessee's National Merit Scholars and other high ability students to enroll in Tennessee public higher education. These included:

- Actively recruit high ability students by making them aware of educational opportunities at Tennessee institutions.
- Design targeted approaches to aid in recruiting that include early identification of academically superior students, establishing a closer rapport with high school guidance counselors, and developing workshops for students and parents to make them aware of the academic profile of Tennessee institutions of higher education.
- Increase student financial aid for academically talented students
- Offer other incentives, which would include unique programs, private matching funds, academic enrichment experiences for students and recognition of their abilities.
- A public awareness campaign which would call attention to exceptional faculty and programs, establish more Centers and Chairs of Excellence, advise parents and students of such

- programs of prominence and to seek additional support to provide low cost, high quality educational opportunities
- Evaluate the impact of these recommendations (THEC, 1984, p. 7-9)

Given the desirability of National Merit Scholars attending an institution, a number of studies other than the THEC study have examined the factors influencing the college choice decision of National Merit Scholars. Some of these studies specifically sought ways help to attract and retain National Merit Scholars. While many have identified factors utilized by National Merit Scholars in their college choice decision, these lists have varied from study to study. Some institutions have attempted to use the information gained in an attempt to change the institutional profile to more closely adhere to that reported by National Merit Scholars to be their ideal institution.

Problem Statement

Prior research studies have described a number of factors reportedly used by National Merit Scholars in determining their college choice. Yet these studies have afforded little assistance in understanding how colleges and universities can attract and retain specific high ability students. Previous studies have not accurately described the factors used by National Merit Scholars in choosing the institution or institutions to which they will apply. These studies also have not described what factors are instrumental in the ultimate choice of attendance for National Merit Scholars. Nor have these studies described the perceptions of quality of an institution before students enroll. Finally, existing studies have not

adequately described how National Merit Scholars assess an institution's quality after attendance.

A small-scale study conducted by this researcher at the University of Tennessee, Knoxville in the winter of 2001 added to the intrigue of understanding how colleges and universities actually attract and retain National Merit Scholars and how they perceive the university. This research suggested that most National Merit Scholars at the University of Tennessee, Knoxville who began as freshmen in the fall, 2000 academic year chose the University of Tennessee because of its financial package, low cost, and personal contact from a professor or honors staff. This seems to suggest a difference from findings in previous studies that indicated that institutional academic prestige and superior programs in preferred major area of study rank ahead of financial aid in attracting National Merit Scholars. Additionally, the study provided information that seemed to suggest that after attendance, National Merit Scholars' perception of the university changed positively.

Research has identified factors reported as being important in the decision-making process. A small-scale pilot research study completed by this researcher at the University of Tennessee, Knoxville indicated somewhat different factors as important to University of Tennessee students in their decision-making process. The pilot study also indicated that National Merit Scholars perceptions of quality of the university changed positively after their attendance. We do not know whether this pattern and priority of factors will hold true for other National Merit Scholars at the University of Tennessee or whether

UTK National Merit Scholars will report other factors as important in their decision. Finally we do not know whether the finding of enhanced reputation after attendance will hold true for all or part of the National Merit Scholars who have attended the University of Tennessee for at least two semesters.

Purpose Statement

The purpose of this study is to describe the factors that were central to the decision of National Merit Scholars to attend the University of Tennessee and to determine whether their perceptions of the university's quality changed after they had been enrolled in the University of Tennessee for at least two semesters.

Research Questions

Research questions that guided this study are:

- What factors influenced National Merit Scholars to enroll at UTK?
- What indicators of institutional quality do National Merit Scholars use to assess the academic reputation and quality of an institution?
- What perceptions did enrolled National Merit Scholars have about the academic reputation and quality of UTK before they enrolled? Did that perception change in any significant way after they have been in attendance for at least two semesters.
- What suggestions do National Merit Scholars offer for making the University of Tennessee more attractive to high ability students?

Significance

This study will help the University of Tennessee administration, staff, faculty and recruiters understand how National Merit Scholars view the university academically and provide suggestions for changes that could be made to enhance its desirability to high ability students. This study will also describe

factors used by National Merit Scholars attending the University of Tennessee, Knoxville in determining their college choice decisions. These findings could then be utilized to design changes in curricula and UTK policies, and to enhance recruiting and marketing policy aimed to enhance enrollment and retention of National Merit Scholars.

The findings will be useful in showing whether there are any changes in perception regarding the academic quality of UTK after students have attended for at least two semesters. If there is a change in the perception of quality after attendance, this may shed light on information influential in recruiting high ability scholars and what, if any, changes need to be made. Finally, this study will add to the limited literature on how institutions can effectively to attract and retain National Merit Scholars.

Delimitations

The study is delimited to examining and exploring the factors used by National Merit Scholars attending the University of Tennessee at this particular time. In addition, currently enrolled National Merit Scholars who have studied at UTK for at least two semesters delimit the study to examining the perception of academic quality of the University of Tennessee, Knoxville of these students. Participation is voluntary, and results will reflect only those who willingly participate. There were ninety-eight National Merit Scholars who were currently attending the University of Tennessee, Knoxville when this study was conducted. Twenty-five chose to participate in this study. Therefore, we do not know whether interviews from the other seventy-three students would have shown

similar results. This delimits the study to the perceptions and suggestions from the twenty-five students who did participate. It also delimits the study because it does not include those who have already graduated from UTK or those from other universities. The study will deal specifically with this location, the University of Tennessee, Knoxville, at this specific time, April through July 2002.

Limitations

This research study is limited to National Merit Scholars at the University of Tennessee, Knoxville and the factors they report as being important in their choice to attend. While the findings and recommendations of this study may prove to be beneficial to other, similar institutions, there is no claim of generalizability to other institutions.

Assumptions

It is assumed that participants who are interviewed will provide accurate and truthful information and opinions. It is acknowledged, however, that some participants may not communicate an accurate picture of their own perceptions of the University of Tennessee, Knoxville and that some inaccuracies may take place because of poor recall or difficulty in articulating feelings and perceptions.

Yet, as with all research studies, the interviewer's interpretation of the responses can be a threat to internal validity. Careful note taking, tape-recording of interviews and member checks will be used to assure internal validity.

Definitions

The following terms are used in this study:

National Merit Scholars - Students who have been designated by the National Merit Corporation as finalists in the National Merit Scholars competition. The National Merit Scholarship Corporation is located in Evanston, Illinois.

Academic Reputation - Academic reputation refers to students' perceived quality of an institution. This includes, but is not limited to areas of instructional quality, credentials of faculty, availability of desired majors, programs and honors programs, and rate of admission into graduate and professional schools.

Organization of the Study

This study is organized into five chapters. Chapter 1 includes an introduction to the study, and specifies the problem statement, purpose statement and research questions. Chapter 2 provides a review of research and literature about the student's selection of an institution of higher education. This chapter provides a look at factors affecting all college students in their collegiate choice and factors reported as affecting academically gifted students in their collegiate choice. In addition, chapter 2 provides an overview of decision-making models.

Chapter 3 describes the research method, outlining the site, population under study, the procedure for collecting data and process for analyzing the data.

Chapter 4 is a descriptive narrative of the findings of the study. The chapter is organized around the research questions. Themes are used to provide a logical flow for the narrative and quotes are utilized to illustrate major themes.

Chapter 5 includes a summary of the findings for each question, conclusions drawn from this study and recommendations for possible changes that may aid institutions in recruiting and retaining National Merit Scholars. Chapter 5 also contains recommendations for other possible research studies.

CHAPTER 2

LITERATURE REVIEW

Why do students elect to enroll in one institution rather than another? What factors do students use in assessing the quality of an institution? How much does the perceived quality of an institution determine whether students apply or enroll? Are there reasons other than quality influencing why students choose to attend an institution? This chapter explores the available literature in student college choice, beginning with Holland's work in the 1950s. We begin with an introduction on the beginnings of research interest in student college choice.

The chapter is divided into subsections covering the topics of recent student choice research and decision-making models. After an overview of recent student choice research, the remainder of the chapter will discuss factors affecting all students' college choice of particular institution and will ultimately examine the student college choice of academically gifted students, including National Merit Scholars.

Student College Choice Research

Throughout the past fifty years, the focus in research in the area of student college choice has shifted. During the 60s, Astin and other researchers were generally interested in the decision to attend higher education institutions and in socioeconomic factors leading to that decision. Later in the 1970s, a shift began to occur towards a more student-satisfaction orientation. Finally, in the

1990s as in corporate and consumer sectors, research began to focus on segmenting the population.

Research on student college choice began as early as the 1950s. Many factors may have influenced the interest in student college choice. These may have included the end of World War II, the GI Bill, new economic prosperity in the United States, and technological expansion. The end of World War II resulted in an explosion in the number of students attending institutions of higher education because of the passage of the GI bill. Additionally, women and minorities began to attend institutions of higher education in greater numbers. Some sectors began to perceive that higher education is a right that should be afforded to every United States citizen.

As early as 1957, Holland began to study students who were winning National Merit awards and their educational ambitions and achievements. (Holland, 1957, p. 434) Holland also conducted research in 1957 aimed at discovering why these gifted students choose particular institutions. Holland summarized that these high ability students "selected colleges for factors of institutional status, size, location, religious affiliation, liberal arts orientation, coeducational status, and popularity and that student factors entering into these choices were socioeconomic status, sex differences and personality needs." (Holland, 1958, p. 313)

Later in 1959, Hood began to discuss the college choice decisions of all students, theorizing that students seek institutions that support their need structures. Hood deduced that students with high academic ability and strong

academic motivation might be expected to choose an institution with a perceived image that meets their desire for a prestigious institution. (Hood, 1965, p. 8)

Through the 1960s, Astin and others continued to implement research aimed at determining what factors affect all students' college choice. Since the 1960s several factors have accented the need for research aimed at student college choice. These factors included budget cuts, declining enrollments, student demographic changes, legislation, accountability efforts, rankings and ratings and a tendency toward a more student as consumer orientation. (Paulsen, 1990, p. iii) While Astin (1964) and Holland (1957) were generally interested in socioeconomic background and other societal and personal differences from a sociological standpoint, later research has focused on these factors in order "to plan and forecast their enrollment more effectively" and "to influence the college-going decision making process of desired students." (Paulsen, 1990, p. iii)

The 1970s saw a major societal trend that may have affected research on student college choice, along with many other aspects of society: the move toward consumerism. During this time, both corporate and collegiate sectors began to turn their attention to consumers and their wishes. Perhaps some of this emphasis came about because of the Deming Total Quality Management philosophy placing emphasis on the satisfaction of the customer. This trend spilled over into the collegiate arena where universities and colleges began to operate in a more competitive environment. Some colleges and universities began to view college students as if they were clients. Some parents and

students began to view higher education as a means that would result in better jobs and larger salaries. Some universities began to change curricula to meet these changing perceptions. The era of student and alumni satisfaction surveys emerged.

In response to this shift, some curricula were added (or dropped) and campus resources were diverted to high demand programs and away from the traditional liberal arts curricula. Secondly, universities channeled additional resources into many student service-oriented programs such as expanded financial aid offices, student services offices, testing and evaluation, student satisfaction surveys, and other services designed to meet and assess students' needs. Thirdly, some colleges added expanded campus amenities like bowling alleys, high-visibility concerts for students, movie nights, health club facilities, free checking accounts at local banks, discounts at department stores and other "perks." While these may not be directly related to enrollment and retention, they certainly provide added incentives for enrollment and retention.

During the 1970s and 80s, there was a decided move in higher education toward more professional and business-oriented programs, with many institutions deleting some portions of traditional liberal arts programs. Stadtman (1980) reported that as a result of the move toward more professional and business-oriented programs, 43% of higher education institutions added programs in engineering; 55% added programs in business; 67% added programs in legal, judicial and political science curricula; 65% added programs in health sciences. Why this shift away from liberal arts? Because these were the programs

students perceived would eventually lead to higher paying jobs. These were the programs sought by students. Students were voting with their feet (Stadtman, 1980, p. 142).

In addition to this, some institutions of higher education deleted or condensed less popular, but more traditional humanities programs. In the late 1970s, 66% of higher education institutions dropped foreign language requirements; 16% dropped physical science programs; 14% dropped other programs in the humanities. (Stadtman, 1980, p. 142) A shift also occurred in the area of degrees conferred. Rehnke reports that "...by 1985, institutions of higher education were conferring over 50% of their bachelor's degrees in occupational or professional fields" (Rehnke, 1987, p. 1).

Research around 1990 indicated that those institutions with small endowments, which were more tuition-driven, made proportionally more programmatic, consumer-oriented changes in an attempt to recruit students (Chaffee, 1984; Paulsen, 1990).

These data reflect a growing accent on student satisfaction in higher education. Additionally the data suggest that the economic role and purpose of higher education may have shifted within the last 25 years to one more oriented toward the ambitions and desires of students and parents. Many parents and students seem to perceive that the role of higher education is to provide higher salaries and better jobs. College administrators may have viewed changes made as higher education's sensitivity to the needs of those served by the institution. Ihlanfeldt summarizes this shift by saying, "...when suppliers become

feverish in their efforts to provide what consumers want, a buyer's market has evolved." (Ihlanfeldt, 1975) So a buyer's market may have evolved in higher education.

While there is obviously much competition in higher education and a general trend toward consumerism, there is a liability in viewing the student as a customer. While colleges and universities are concerned with the satisfaction of students in certain legitimate and understandable ways, it is important to understand that there is a limitation to this philosophy.

Unlike corporate sector outcomes, students have a major responsibility in the outcome and quality of their own educational experience. They are not inanimate materials, but human beings with their own talents, imaginations, determinations, initiatives, curiosities, limitations, and ambitions. Students, therefore have some responsibility and control in the quality of their own education. For instance, it is certainly possible to provide students with piano lessons. However, if the student does not practice on his own, he will not become a fine pianist. Even though students do play an important role in their own education, and ultimately in the quality of an institution, it is still important to understand how students perceive the reputation of an institution.

No one would quarrel with the idea that a college education does contribute to the economic success of the student. However, American citizens surely expect more than that from institutions of higher education. Higher education has traditionally been the mechanism by which young people learn to become good citizens, to understand their cultural heritage, to understand

themselves and to learn to question. Bogue elaborated on the complex mission of higher education by saying that higher education in the United States should conserve the past, criticize the present, and construct the future. (Bogue, 1998, p. 16) Americans expect higher education to do more than serve as an employment agency for students. Higher education is the mechanism whereby we learn of our past, understand our present, and shape our future civic and economic goals.

Recent Student Choice Research

And Decision Making Models

In part because recruiting and retaining students has become so competitive, researchers in the 1980s began more fervently to explore the factors leading to college choice decisions not only for academically gifted students, but for all those who either elect to attend or not to attend higher education institutions. (Cain & McLintock, 1987; Carnegie Foundation, 1986; Chapman, 1981; Chapman and Jackson, 1987; Douglas & Powers, 1985; Douglas and Powers, 1983, Cook & Zallocco, 1983; Erdmann, 1983; Hearn, 1984; Higgins, 1984; Jaschik, 1987; Keller & McKeown, 1984; Kerr & Colangelo, 1988; Kuntz, 1987, Paulsen and Pogue, 1988, Paulsen, 1990)

There are many factors that may have led to this increased interest in student college choice. Competition for students was certainly one factor. Other factors fostering the increased interest in college choice may have included state and federally mandated accountability measures, the quality assurance trend in both corporate and collegiate sectors, the growing interest in socioeconomic and

psychological factors pertaining to college-bound students, rankings and ratings and changing demographic characteristics of college students.

Models of student-choice were developed. Research was conducted on the effects of financial factors, ability factors, personal factors, institutional factors and many other factors to determine why students select a particular institution and how the selection was made. Most of these studies have been quantitative in nature and ultimately sought to generalize their findings to a larger population, thereby seeking to aid recruitment and enrollment procedures for institutions.

Institutions began to recruit students with characteristics consistent with their individual institutional characteristics and utilized these studies to become more attractive to desirable students thereby being better able to affect the student decision making process. (Paulsen, 1990, p. vii) Yet with shrinking numbers of traditional aged students, budget cuts, and accountability mandates, researchers delved into the question of why students choose to attend a particular higher education institution over another.

According to the Carnegie Council on Higher Education, "...between the late 1970s and the mid-1990s the traditional 18 to 21 year old student population was expected to shrink by 21 percent to 25 percent." (Carnegie Council, 1980, p. 153) For some regions, such as the Northeast, even larger decreases in enrollment were predicted. (WICHE, 1988, p. 13) This factor alone has caused increased competition in higher education institutions for students. During the early 1970's, with the conclusion of the Vietnam War, college participation of

traditional aged students fell from 35.2 percent to 17.8 percent. (Freeman, 1975, pp. 289-298)

In 1982, Jackson proposed a three-phase model describing the college choice process. (Jackson, 1982) By 1987, Hossler and Gallagher had also proposed a more detailed three-stage model. A synopsis of the Hossler and Gallagher model is as follows:

- **STAGE I *PREDISPOSITION STAGE*** - Family, societal and economic factors generate interest in and attitudes conducive to enrollment in higher education.
- **STAGE II - *SEARCH STAGE*** - College bound students explore potential institutions and evaluate these institutions and their own financial capabilities in relation to potential choices. They also gather information about institutions, their facilities, reputation, program, and faculty.
- **STAGE III - *SELECTION STAGE*** - During this stage, students select their first choice for higher education, and possibly several others. (Hossler and Gallagher, 1987)

Stage I in the decision making process has been one of the primary focus points of sociologists and may be one of the most important stages in studying why students actually do *desire* to attend college. These "...results consistently have emphasized the importance of characteristics of the student's family background and high school background, as well as the student's academic ability." (Paulsen, 1990, p. 7)

While many sociologists have been interested in the first stage of the college choice decision, focusing on family, later educational researchers have focused on subsequent stages in the college choice decision-making process. The focus of these studies has varied greatly from family income to friends'

choices to teachers and guidance counselors to the financial aid package offered by institutions. Some of these researchers have focused more on economic trends as they affect college choice. Paulsen has conducted research on the effects of the overall economic climate showing the following effect of a recession on actual enrollment in higher education:

Recessions usually stimulate college enrollment because of reduced job opportunities for non-college graduates. During recessions, employers are able to hire college graduates for the same salary as non-college graduates; hence non-graduates begin to enroll in college. (Paulsen, 1990, p. iv-v)

Additionally, Paulsen found that

When job market opportunities in professional and managerial positions, traditionally filled by college graduates, improve, this increases the perceived benefits of college and the likelihood of attendance. However, when job market opportunities in positions available for non-college graduates improve, this increases the perceived costs of college and decreases the likelihood of attendance. (Paulsen, 1990, p. 13)

Brubacher and Rudy have alluded to the fact that United States involvement in war also is a determining factor in Stage II - the decision to pursue a college career - although the effect seems to be somewhat different depending on the war. Following World War II with the passage of the GI Bill, many returning American servicemen swarmed to institutions of higher education as the government passed legislation aimed at defraying the cost of education for returning veterans. During the Vietnam War, young men flocked to higher education institutions as a means of avoiding service in the military. Hence, with the end of the Vietnam War and the draft, the incentive to attend higher education disappeared for some. This explains the enrollment decrease noted

by Freeman in 1975 of traditional aged students. (Freeman, 1975, p. 289-98; Brubacher and Rudy, 1997, p. 233-35)

While these factors appear to be important in the decision to seek admission to an institution of higher education (Stage II), what determines which institution students prefer (STAGE III) and actually attend?

Factors Affecting College Choice for all Students

From available research it appears that many factors help determine the ultimate college choice decisions for students, depending on their individual circumstance. Extensive research has been conducted in this area. As early as 1964, Richards and Holland found that four broad factors tend to influence the college choice decision of students. These broad areas are the *intellectual emphasis of the institution, practicality* (affordability, location, etc), *advice of others*, and *social emphasis*. (Richards and Holland, 1964) Since 1964, many studies have been conducted examining further the ultimate college choice decisions of students. A summary of recent research finds the following factors to be influential in this decision:

- *Institutional characteristics* (quality, reputation, prestige, availability of major or academic programs) (Chapman and Jackson, 1987; Erdmann, 1983, Keller and McKeown, 1984, Maguire & Lay, 1981; Litten, 1982; Manski and Wise, 1983; Powers and Douglas, 1985; Rickard and Walters, 1984, Krakower and Zammuto, 1987; Paulsen and Pogue, 1988)
- *Financial constraints* (expense of the institution, financial aid available) (Manski and Wise, 1983; Litten, 1982; Powers and Douglas, 1985; Douglas, powers and Choroszy, 1983; Maguire & Lay, 1981)
- *Student Ability and Preparation* (Litten, 1982; Manski and Wise, 1983; Powers and Douglas, 1985; Paulsen and Pogue, 1988; Chapman and Jackson, 1987; Wanat, 1989)

- *Family income level* (Campbell and Siegel, 1967; Galper and Dunn, 1969; Handa and Skolnik, 1975; Mattila, 1982; Manski and Wise, 1983; Chapman and Jackson, 1987)
- *Personal Factors* (Distance from home, size of the institution, campus location, recruitment efforts, campus visit) (Chapman and Jackson, 1987; Douglas, Powers and Choroszy, 1983; Erdmann, 1983; Keller and McKeown, 1984; Maguire and Lay, 1981)
- *Parents' expectations, wishes and educational attainment* - May be the most influential in the decision for all college students, but appear to be more influential for lower ability students. (Corrazzini, Dugan and Grabowski, 1972; Hopkins, 1974; Tannen, 1978; Erdmann, 1983; Lundstedt and Lynn, 1984; Maguire & Lay, 1981, Wanat, 1989)
- *Timing of financial aid offers* (Litten, 1982; Wanat, 1989)
- *Expected salaries and employment opportunities* - Enrollment is directly related to salaries and employment opportunities for graduates (Freeman, 1975; Handa and Skolnik, 1975 and Mattila, 1982)
- *Armed forces* - Public policies affecting the growth in the size of the armed forces (Paulsen, 1997; Galper and Dunn, 1969)

Recently, researchers have begun to segment student populations, focusing on the college choice of high ability students, women, minorities and other segments separately from the entire potential student population. Some factors in this trend might be state and nationally mandated accountability measures, rankings and the scarcity of resources. Rankings and ratings like *U S News and World Report's* ranking of American Colleges offer the public indices of quality that depend heavily on student aptitude and satisfaction. They offer quantifiable data points that are easily perceived by academic, state, federal and private sectors.

This is not the place for discussion of the merits or lack of merit in public media ranking and rating reports. The interested reader can find comments on these media reports in Bogue and Aper (1999) and Bogue and Saunders (1992).

Competition for high ability students has increased in the past few years. Many states have passed legislation creating "*Hope*" scholarships in an attempt to keep the brightest students in their home states. These scholarships guarantee financial aid for students who show high academic success in high school. Several SREB states have adopted merit-based scholarships. Among these are the Florida Bright Futures Scholarships, Georgia Hope Scholarships, Kentucky Educational Excellence Scholarships and the South Carolina Palmetto Scholars programs. The perceptive observer can see the implications of these scholarships for Tennessee's higher education, as Tennessee is situated in the midst of states that have adopted merit-based scholarships. Recently the residents of the State of Tennessee passed legislation that would establish a lottery in Tennessee. The perception is that net revenues from the Tennessee lottery would also be allocated to scholarship programs for Tennessee's students.

In recent years, researchers have become very interested in the college choice decisions of high ability students, particularly National Merit Scholars and how these differ from those factors already cited for other students.

Factors Affecting College Choice for Academically Gifted Students

Including National Merit Scholars

For academically gifted students, research has shown that there are three broad categories affecting the college choice decision. Those are *personal factors*, *financial factors* and *institutional factors*, which are the same general categories affecting the decisions of all college students. However, research has shown that for academically gifted students institutional factors may be more important than the other factors. Let us look at each of these three factors affecting student college choice and the research implemented regarding each.

Personal Factors

Some research suggests that personal factors play an important role in the college choice decision-making process for high ability students. Some of these factors include people (parents, family, friends, counselors, teachers) and other personal preferences (distance from home, size of institution). (Hossler, Braxton and Coopersmith, 1989, Cain and McLintock, 1987; Chapman, 1981; Chapman and Jackson, 1987; Douglas & Powers, 1985; Hearn, 1984; Higgins, 1984; Kuntz, 1987, Wanat, 1989; Flint, 1992) However, Chapman (1987) states that although there are many determinants of college choice, prior preference is the primary and paramount determinant (p.5). Prior preference means what college the student first prefers when beginning the college choice search.

Some research has suggested that parents are more influential for lower ability students than high ability students in college choice decisions (Carnegie Foundation, 1986; Erdmann, 1983; Maguire & Lay, 1981, in Wanat, 1989, p. 8).

Flint, 1992, found that family education, income and degree offerings by a university were significant factors in the college choice process (Flint, 1992, p. 702-703). Other researchers have postulated that parents are very important in the first stage of the student choice process by planting the desire or expectation to attend higher education in the mind and attitudes of their children (Wanat, 1989, p. 15). During Stage II and III parents may play differing roles in the high ability student's college choice. Some parents may leave the decision entirely up to the student. Others may establish financial or distance criteria or limitations. Some may exert pressure to attend one school or the other. As one student reported:

I talked about my college choices mostly with my mom, but I would say my father's influence was stronger regarding what schools I was able to afford. If money was a factor, my father had great influence. Beyond that, it was my choice and my mom helped me narrow down these choices. (Wanat, 1989, p. 16).

In a 1984 Pennsylvania study, Hossler (1985) noted the importance of parents in college choice (p. 7). Murphy reported that approximately 50% of high school students (not just high ability students) indicated that parents first made the suggestion that they attend college (Murphy, 1981 in Hossler, 1985, p. 7). Hicks found that the several National Merit Scholars interviewed in a 2001 study at the University of Tennessee, Knoxville cited parents as having influenced their decision to attend UTK.

My parents were the major influences, of course. They simply told me they could not pay and said UTK was the only option for me...." (Hicks, 2001)

Research suggests that the role of friends in the college choice decision of high ability students is minimal. While once thought to have a more profound effect on college choice, Wanat (1989) found that for high ability students, friends are not extremely important in college choice for high ability students. Wanat explains:

Scholars [high ability students] often sought information about specific colleges, campuses, and programs from friends who attended them. Most scholars report, however, that there was “no pressure among friends” to attend the same school. (Wanat, 1989, p. 14)

This research reported that friends acted as a source of information, not as a deciding factor.

Hicks found in the 2001 pilot study that friends had no bearing on National Merit Scholars’ choice to attend the University of Tennessee, Knoxville as evidenced by these representative quotes:

I have quite a few friends that came to UT. I didn’t know that most of them were here until I ran into them at orientation. So, no, it didn’t influence my decision.

I was the first to make the decision to come here. Two of my closer friends decided to come up here with me and they are my suite/room mates now. Some other friends came, too, but that wasn’t a factor. I would have come up here regardless. (Hicks, 2001)

Past research suggests that during the second stage of the college decision making process, high school counselors and teachers may have a significant impact on the choices of high ability students. (Ihlanfeldt, 1980; Zemsky and Oedel, 1983; Paulsen, 1990) The second stage is the *SEARCH STAGE*, where many institutions may be eliminated. Guidance counselors and

teachers may be sources of information, sources of encouragement, or may aid in influencing a student toward or away from a particular institution. Teachers and counselors may offer a listening ear, as reported by Wanat in a 1989 study:

My math and choir teachers gave me valuable input, telling me what they knew. They had more influence on me than anyone else did. My choir teacher helped me sort things out; he helped sort ideas without adding bias; he helped to clarify things, and he encouraged me (Wanat, 1989, p. 17).

While research shows that a range of family, friends and other people do play some role in the college choice decision, other personal preferences may play an even more important role for high ability students. These personal preferences may include campus size, location, intended major area of study and distance from home.

Both Paulsen (1990) and Wanat (1989) found that high ability students prefer urban collegiate settings. These findings reported that a majority of high ability students wanted access to a larger city that would provide opportunities for cultural events. (Wanat, 1989, p. 19; Paulsen, 1990)

Distance from home has also been cited as a personal preference factor influencing college choice. Westerman suggested in a 1993 study of Kansas National Merit Scholars that distance is an important factor. Westerman (1993) found that 53.1% of these Kansas National Merit Scholars attended either Kansas institutions or neighboring state institutions because of its proximity to their home (p. 2).

Hicks (2001) found that distance from home had little effect on the ultimate decision of the students to attend the University of Tennessee, Knoxville, but

may have had an effect on the parents' decision for students to attend as evidenced by this comment:

It did not influence me, but it may have influenced my parents. I think they had a hard time justifying sending me to a small, far-away private school which they'd never heard much of before. (Hicks, 2001)

While personal preferences have been shown to be important in the college choice process, financial and institutional factors may be the deciding factor for certain high ability students.

Financial Factors

For many students, including many high ability students, financial constraints appear to be an important factor in the choice of a college or university. Financial considerations include family economic status, financial aid packages, timing of financial aid offers, tuition, scholarships, and renewability of scholarships. Chapman found that financial considerations had a statistically detectable influence on college choice, even though prior preference was still more important in determining college choice (Chapman and Jackson, 1987, p. 5). Hicks found that financial aid and scholarships were the determining factors in college attendance of ten National Merit Scholars at the University of Tennessee, Knoxville. (Hicks, 2001) One participant in the study related:

I wanted a college, a decent distance away from home, but not too far, I wanted a FREE college. (Hicks, 2001)

Another participant stated:

My parents thought it [UTK] was the best choice. It was free. (Hicks, 2001)

While a third reported:

The main reason I chose UTK was because of the financial package I received. Not only did my scholarship cover all expenses, but I would get the excess money back. That was a big factor because I had a lot of outside scholarships. (Hicks, 2001)

Researchers seem to disagree about the importance of financial aid, scholarships and tuition, even though they do seem to agree that monetary considerations are secondary to academic reputation or perceived quality of the institution for high ability students (Chapman, 1981; Chapman & Jackson, 1987, p. 5; Wise, 1983; THEC, 1985; Seneca and Taussig, 1987; Wanat, 1989). Other researchers state that lower tuition is a determining factor in college choice, but not for academically gifted students (Anderson, 1976, Chapman, 1979, Murphy, 1981).

In a survey of 2500 applicants conducted in 1980 at Boston College, a private institution, financial aid was the most important predictor of attendance (Wanat, 1989, p. 7). Chapman and Jackson found that increased financial aid packages influenced some academically gifted students to switch institutions from their original choices (Chapman and Jackson, 1987, p. 5). Hicks found financial considerations to be the most important determinant of attendance at the University of Tennessee, Knoxville for freshmen National Merit Scholars. (Hicks, 2001)

Additionally, other research indicates that academically gifted students are more interested in the "net cost" than in total cost. "Net cost" is the cost of tuition, room and board, and books, less any financial aid the student receive. In

other words, these students are concerned about the actual out-of-pocket cost more than the overall cost (Litten, 1982 in Wanat, 1989, p. 7).

For many lower socioeconomic academically gifted students, financial aid seems to be a more significant factor than for many higher socioeconomic students as evidenced by this quote from Wanat:

When financial issues were important parental input in the financial area was considerable. My parents made it very clear, especially my father, that they were only going to pay a maximum of \$5,000 a year towards my education. (Wanat, 1989, p. 20)

Hicks' concurred with Wanat finding that financial aid was a very significant factor. This study did not however examine parental economic status. (Hicks, 2001)

In 1985, THEC (Tennessee Higher Education Commission) found that high ability students who did not choose to attend Tennessee higher education institutions were less concerned about cost and financial aid when they entered public institutions in other states. However, when these participants entered private institutions, they tended to emphasize financial aid more. (THEC, 1985, p. 26)

In research conducted by the State of Wisconsin for those high ability students who received a Byrd Scholarship, it was determined that the scholarship was "...not a determining influence in college choice and was perceived as an honor rather than a financial reward." (Wanat, 1989, p. 21) Scholarships were viewed as honors for hard work.

While financial aid has been shown to be an important factor, renewability of aid has also been shown to be important to academically gifted students. Chapman and Jackson conducted research that suggested that academically talented students are influenced by whether or not financial aid awards are renewable when making their final decision about college choice (Chapman and Jackson, 1987, p. 5). Chapman and Jackson's research suggested that students desire good financial aid packages, but at the same time want to be certain these packages are locked in for the duration of their collegiate life. However, while renewability of scholarship may be important, it may not be as important as the timing of the financial aid scholarship or award.

Research has shown that academically gifted students begin thinking about their choice of college decisions earlier than other students do. Some may begin a serious deliberation as early as their junior year in high school and make a final decision in the fall of their senior year (Wanat, 1989, p. 23 Litten, 1982). Because of this early involvement in gathering information to select a college, the timing of financial aid and scholarship offers may become an even more important factor. In the University of Wisconsin survey, Wanat found this timing issue to be of vital importance. When questioned about the timing of scholarship awards, one student stated, "If given during the first semester of my senior year, it would be more influential [in my college choice]" (Wanat, 1989, p. 21).

At each level, personal and financial factors have been shown to be important in the college decision. However, some researchers feel that

institutional factors may be more important, especially for the academically gifted student. (THEC, 1985, p. 5; Litten, 1982, p. 4; Wanat, 1989, p. 4; Tierney, 1983; Chapman and Jackson, 1987, p. 5-6; Chapman, 1987, p. 9; Douglas & Powers, 1985; Douglas, Powers and Choroszy, 1983; Keller and McKeown, 1984 in Wanat, 1989, p. 6)

Institutional Factors

Institutional factors have been reported to profoundly affect college choice. (THEC, 1985, Wanat, 1989 Cain and McClintock, 1984, Wanat and Bowles, 1992, Coccari and Javalgi, 1995, Conn and LaBay, 1996) For many high ability students, institutional factors are of the utmost importance. Since research supports the view that institutional factors are of prime consideration in the high ability student's decision to attend one institution over another, one might wonder what factors make up institutional factors. Institutional factors from prior research include:

- Academic reputation (THEC, 1985, p. 26)
- Selective admissions policy (THEC, 1985, p. 26)
- Availability of a particular program (THEC, 1985, p. 26)
- Availability of employment after graduation (THEC, 1985, p. 26)
- Admission to professional programs or graduate school (Wanat, 1989, p. 6)
- Quality of course instruction (Wanat, 1989, p. 6)
- Recruitment (Cain and McClintock, 1984 in Wanat, 1989, p. 9)
- Personal attention from recruiters (Wanat and Bowles, 1992)
- Campus visits (Chapman and Jackson, 1987, p. 10)
- Written information and brochures (Hossler, 1985, p. 8)
- Student/Teacher ratio (Coccari and Javalgi, 1995)
- Well managed facilities (Conn and LaBay, 1996)
- Career preparation (Martin, 1996)
- Quality of school's research program (Martin, 1996)
- Library resources (Martin, 1996)
- Reputation of professors (Wanat and Bowles, 1992)

- Research opportunities (Wanat and Bowles, 1992)
- Challenges of coursework (Wanat and Bowles, 1992)
- Perceived prestige of the institution (Wanat and Bowles, 1992)
- Recognition of the school's name (Wanat and Bowles, 1992)

The Tennessee Higher Education Commission in 1985 found that there were five categories that affected the college choice of Tennessee's academically gifted students. Three of these included the academic characteristics of the institution (perceived prestige and reputation), the student's choice of major, and factors related to cost of education at a given institution. The THEC study also found non-academic characteristics of the institution to be influential. In particular these non-academic characteristics were personal preferences on size and location of an institution. (THEC, 1985, p. 19)

Academic quality, reputation and prestige are difficult concepts to define. Much research has been conducted to define these qualities. The cluster of institutional factors listed above may be considered to work together to constitute academic quality, reputation and prestige. Academic quality, reputation and prestige have been shown to be institutional factors that are of prime importance for many high ability students. Chapman and Jackson stated "...our results indicate that perceived college academic quality is the main determinant of prior preferences for colleges. In turn, the main influencer of perceived college quality is actual college quality, as proxied by an index from a number of objectively verifiable college quality measures" (Chapman and Jackson, 1987, p. 9).

While factors like library books, student/teacher ratio, number of available research opportunities, number of letters and phone calls from recruiters,

students acceptance rates in graduate and professional schools seem to be quantifiable data points, other factors seem to be less quantifiable and appear to be primarily based on perception. These less quantifiable factors might include perceived academic prestige, academic quality, academic reputation, quality of course instruction and perceived superior programs.

Students perceive the quality of an institution based on a number of components, which ultimately make up the institution's image. Some of these components have been found to be meaningful factors relative to college choice. Huddleston and Karr state that "...the image of a college is the personality it presents to a particular audience, a complex of meanings and relationships serving to characterize the college to a defined audience. Basically, an image is a set of beliefs that persons associate with a college" (Huddleston and Karr, 1982, p. 364-5) Sidney J. Levy defines the image of an organization in the following way:

...an interpretation, a set of inferences, and reactions. It is a symbol because it is not the object itself, but refers to it and stands for it. In addition to the physical reality of product, brand, and organization, the image includes its meanings – the beliefs, attitudes, and feelings that have come to be attached to it. These meanings are learned or stimulated by the component experiences people have with the product and these components are particular symbols. (Levy, 1978, p. 170-171).

Researchers began in the 1980s to conduct research to determine the image students perceived of specific institutions, as well as the image of an ideal institution. Huddleston and Karr directed one such study in 1982 and found that

the respondent's image of Bradley University differed significantly from the ideal college image for these students (Huddleston and Karr, 1982, p. 369).

Senecca and Taussig found that academically gifted students are more attracted to institutions they perceive as more prestigious (Senecca and Taussig, 1987, p. 355). Other more recent research has added to this growing body of information academic reputation. Flint, 1992, reported the following:

The single most important factor to those who entered colleges in other states, or those who entered a private college either inside or outside of Tennessee, was the academic reputation. Nearly three quarters of these students rated the academic reputation of the school as being very important, as compared to only 42 percent of those who entered one of Tennessee's public institutions. Among the most academically-talented students, the same findings were observed to an even higher degree, with 84 percent of those in colleges outside of Tennessee, and 53 percent of those enrolled in-state, reporting that the academic reputation of the college was very important. (THEC, 1985, p. 25)

Does image shape prestige? Does prestige rest on academic quality and reputation? What factors determine quality and reputation? Is the quality of an institution based on its reputation? How does an institution create an academic reputation? What factors are instrumental in academic quality? Are rankings and ratings a source for judging of academic quality? Selective admissions? Curricula and programs of instruction? High quality professors? Research dollars generated? Library holdings? Is the quality of an institution the perception of students and parents?

Bogue and Saunders (1992) in their book *The Evidence for Quality*, supply several widely held theories used to assess the quality of an academic institution.

It is beyond the scope of this study to do more than mention these theories. The authors point to six conventional theories about academic quality:

- Expensive colleges are quality colleges
- Large, comprehensive colleges are quality institutions
- Selectivity breeds quality
- Nationally recognized institutions are quality institutions
- Only a few colleges can achieve quality
- More resources means better quality (Bogue and Saunders, 1992, p. 7)

Other more recent research has added to this growing body of information on institutional factors affecting the college choice for high ability students. Coccari and Javalgi found that quality of faculty and staff, types of degree programs, schedule of classes, student/teacher ratio, faculty/student interaction and financial aid were all-important factors (Coccari and Javalgi, 1995). Wanat and Bowles, 1992, found that academic reputation was of prime importance in college choice decision (Wanat and Bowles, 1992).

Summary

During the 1960s, research on college choice for all students determined that financial concerns, intellectual emphasis [of the institution], advice of others, and social emphasis were the determining factors in the college choice decision. (Richards, 1964; Astin, 1965; Alexakos, 1967; Bluemfeld, 1967) Research in the 1970s dealing with high ability students, tended to focus on perception more than individual factors. Of particular importance during this era was the student's perception of the academic quality of the institution, as evidenced in a 1976 study by Fidler and Bucy which determined that academically talented students did not

perceive the University of South Carolina as an academically superior institution.

Fidler and Bucy made this recommendation:

Based on student recommendations, USC could enhance its appeal to these students by taking steps to strengthen its undergraduate academic reputation, by promoting its newly created medical school, by expanding existing honors and study abroad programs, and by offering additional scholarships awarded on merit. (Fidler and Bucy, 1976, p. 11)

The 1980s and 1990s have emerged as the era where researchers have been pre-eminently interested in the college choice decisions of high ability students. Researchers have listed many factors influential in the college choice decisions of high ability students. While researchers have identified factors influencing college choice decisions for high ability students like National Merit Scholars, there seems to be some discrepancy in the *reported* plans of students and their *actual* decisions to attend. For example, some report that they had no outside influence in their ultimate decision, yet later reported that they attended a particular institution because of parental preferences. (Westerman, 1993; Clarke, 1997; Chapman, 1986; Powers, 1983; Higgins, 1984).

In addition, we know very little about high ability students' perceptions once they have enrolled in an institution of higher education. For those who do not attend their first choice, we have little data describing their perceptions of the institution they are attending after having attended. The question of an institution's image and academic reputation as viewed by high ability students continues to be an important issue. As evidenced by the above research, many states have implemented research aimed at discovering the answers to these

questions, yet many questions remain: Why do high ability students either choose to stay in their home state to attend higher education, or determine that they desire to leave the state? What factors create an institution's academic reputation as viewed by high ability students? How much influence do parents play in the decision to attend specific institutions? How much influence do financial factors play? Upon enrollment, how do National Merit Scholars perceive individual institutions? Are they happy with their choices? How many ultimately leave their first choice institution?

This study will help University of Tennessee, Knoxville administrators and recruiters understand how National Merit Scholars view the university academically both before and after attendance. In addition, this study will aid in helping to understand what changes might be made in order to make the University of Tennessee, Knoxville more attractive to National Merit Scholars by interviewing those who have attended for at least two semesters. These findings might be used to implement changes that would aid in the recruiting and retention of National Merit Scholars. Finally, the findings in this study will add to the limited literature their perceptions of quality before and after attendance at an institution.

CHAPTER 3

RESEARCH DESIGN

Introduction

The purpose of this study is to describe factors that were central to the decision of National Merit Scholars to attend the University of Tennessee. In addition, the study sought to determine whether the perceptions of these National Merit Scholars of the university's academic quality changed after they had been enrolled in the University of Tennessee for at least two semesters.

The research questions guiding this study are:

- ❑ What factors influenced National Merit Scholars to enroll at UTK?
- ❑ What perceptions did enrolled National Merit Scholars have about the academic reputation and quality of UTK before they enrolled? Did that perception change in any significant way after they have been in attendance for at least two semesters?
- ❑ What indicators of institutional quality do National Merit Scholars use to assess the academic reputation and quality of an institution?
- ❑ What suggestions do National Merit Scholars offer for making the University of Tennessee more attractive to high ability students?

Research Method and Design

Since understanding, discovering and describing a phenomenon (perceptions) were central to this study, it was determined that a qualitative design utilizing face-to-face interviews was the best research design for this study. Qualitative interviews have been shown to be effective when seeking to understand an experience or phenomenon or when seeking to understand reality

as constructed by individual persons. Additionally, "...qualitative research can reveal how all the parts work together to form a whole. It is assumed that meaning is embedded in people's experiences...." (Merriam, 1998, p. 6) Face-to-face interviews permit the researcher to explore participants' experiences by allowing the researcher to ask the participants firsthand about their own experiences. In addition, the researcher is able to use probing follow-up questions to clarify answers or explore other areas that might arise. Qualitative interviews have been shown to be effective when the research study seeks to describe participants' interpretations of reality since participants are accessed directly through face-to-face interviews. This study sought to describe participants' perceptions of quality of the University of Tennessee; therefore it was determined that a qualitative design was best suited.

Face-to-face interviews are also effective when the researcher desires to explore decisions made by participants including options available and/or people and events influencing the decision. This method has been chosen in this case because in-depth interviews have been shown to be effective for the reasons listed above as well as in circumstances when the researcher wishes to answer questions like "What is really going on here?"

Table 3-1 has been adapted from Creswell (1994), Yin in Bickman and Rog (1998) and Merriam (1998) showing the strengths and weaknesses of using one-on-one interviews as the primary data-gathering tool.

Table 3-1

Interview as Research Collection Method	
STRENGTHS	WEAKNESSES
Targeted- focuses directly on the topic	Bias due to poorly constructed questions
Insightful – provides perceived causal inferences	Response bias
Informants can provide historical information	Could be inaccurate due to poor recall
Participants can provide their own perspective about a topic	Reflexivity - interviewee may answer what s/he thinks interviewer wants to hear
Researcher can be responsive to the participant	

(Creswell, 1994, p. 150, Yin, in Bickman and Rog (1998), p. 231; Merriam, (1998, p. 6-8)

In a qualitative study, participants report their own reality based on their own experiences. These realities are best gained through the use of face-to-face interviews with the researcher as the primary instrument for data collection and analysis. In qualitative research, the researcher enters the participant's world and through interaction seeks the participant's perspectives, perceptions and experiences. The participant is interviewed in surroundings where the participant feels comfortable and at ease. Interviews held in a naturalistic setting help to create a relaxed atmosphere where participants are likely to provide detailed information about their experiences and perceptions. Finally, in an interview situation, the researcher can ask probing follow-up questions in order to explore other areas of interest as they emerge. Qualitative research recognizes that reality is subjective and will be specific to each individual's experiences. Qualitative research is descriptive in nature and uses the experiences and reported perceptions of the participant to construct a descriptive narrative that is

focused on understanding the experiences and perceptions of these participants.

Guba and Lincoln in Merriam make the following statement about the advantages of qualitative research.

Certain characteristics differentiate the human researcher from other data collection instruments: the researcher is responsive to the context; he or she can adapt techniques to the circumstances; the total context can be considered; what is known about the situation can be expanded through sensitivity to nonverbal aspects; the researcher can process data immediately, can clarify and summarize as the study evolves, and can explore anomalous responses. (Guba and Lincoln, 1981 in Merriam, 1998, p. 6)

Site and Population

This research study was conducted on the campus of the University of Tennessee, Knoxville. The University of Tennessee, Knoxville is a state, land grant institution consisting of approximately 25,000 students. The initial population for this study included all National Merit Scholars who had attended the University of Tennessee, Knoxville for at least two semesters. The Dean of Students of the University of Tennessee provided the researcher with ninety-eight names and addresses of National Merit Scholars currently attending UTK. The final sample for the study included twenty-five National Merit Scholars who agreed to participate.

Source of Data

An interview protocol was developed for use with participants in this study that helped to guide the interviews and ensured that all participants were asked the same general questions. (See **Appendix C**) The interview protocol questions were designed specifically to answer the research questions. Twenty-

five National Merit Scholars who had attended the University of Tennessee for at least two semesters participated in face to face interviews. The verbatim transcriptions of these interviews provided answers to the research questions.

While the use of face-to-face interviews provides advantages, there are disadvantages to using this method. The researcher must take care in question construction to avoid leading questions that might bias the data provided by participants. In this study, care was taken when constructing the interview questions to avoid leading questions that could cause inaccurate or biased data. Additionally, the researcher's doctoral committee reviewed the interview protocol questions. Some questions were revised after having been reviewed by this committee.

Another potential disadvantage in using face-to-face interviews is that participants may not recall accurately their experiences and perceptions. Some participants have not thought about their experiences in selecting an institution and their perceptions of the quality of the university before enrollment for several years. In order to address this potential weakness, the researcher provided detailed information both in the invitation to participate letter (**Appendix A**) and in the informed consent form (**Appendix C**) so that participants might begin to think about factors central to their decision to attend UTK. In addition, the time between the initial invitation to participate letter and the actual interview provided participants with additional time to think about their perceptions of quality of the university. Finally, a summary was provided to all participants after the interviews had been transcribed and summarized. Participants had the

opportunity to make changes, deletions or additions to their interviews as they reflected on their interview summaries.

A final disadvantage of using face-to-face interviews is the possibility of reflexivity. In other words, the participant may provide information s/he thinks the interviewer wants to hear on a particular subject. In order to reduce the effect of the researcher on the information provided, the researcher avoided leading questions and utilized the same interview protocol for all participants. Additionally, the researcher took care when conducting the interviews not to pose leading questions.

Procedure

After initial submission and approval of this prospectus by the researcher's doctoral committee, Form B was prepared and submitted to the University of Tennessee's Institutional Review Board for approval. Upon receipt of approval from the IRB, names, addresses and phone numbers of National Merit Scholars who were presently attending and had attended the University of Tennessee, Knoxville for at least two semesters were requested from the Honors Program and the Dean of Students. After names and addresses had been secured, all ninety-eight National Merit Scholars provided to the researcher were mailed an invitation to participate in this study along with other information.

An initial letter (**Appendix A**) explaining the project and inviting participation in the study, a demographic questionnaire (**Appendix B**), and two copies of the informed consent form (**Appendix D**) were mailed to all potential

participants. The initial demographic questionnaire requested the following information:

- Ethnic background
- Parents' education background and income level
- Gender
- Length of time attending UTK
- Current phone number and e-mail address (in order to set up interviews and provide students with interviews once they have been transcribed)

Willingness to participate in this study was evidenced by returning the demographic questionnaire (Appendix B) and a signed copy of the informed consent to the researcher (Appendix D). Once these documents were returned, students were contacted in order to set up a time and place for each interview.

Data Collection

All interviews for this study were conducted between April 20 and July 10, 2002. This study included twenty-five National Merit Scholars currently attending UTK. Each had attended for at least two semesters. After the initial letter had been mailed, eighteen students responded. A second follow-up letter was mailed to the eighty students who did not respond on the first mailing. After the second letter was mailed, nine more participants expressed a willingness to participate. Twenty-seven informed consent forms were returned, expressing a willingness to participate. Twenty-five interviews were successfully completed. The researcher was unable to set up interviews with two students.

An Interview Protocol (**Appendix C**) was prepared to ensure that the interviewer asked the same basic questions to all participants. The Interview Protocol included specific opening statements about the purpose of this study

and the confidentiality of participants' answers, along with primary and probe questions. The researcher requested that all participants allow their interviews to be tape-recorded to ensure accurate reporting. No participant refused to allow the interviewer to tape-record his or her interview. The interview questions were open-ended in nature, encouraging free expression from participants. After completion of each interview, audiotapes were transcribed verbatim along with field notes compiled during and after each interview by the researcher. Confidentiality of interview data was preserved, as the researcher secured all audiotapes in a locked box in her home and each participant was assigned a code number. Transcripts of interview data were coded and no participants' name appeared in the transcripts. Audiotapes will be destroyed after three years from the completion of this study.

The data was collected through the use of face-to-face interviews that were audiotaped. Interviews were approximately thirty to sixty minutes in length and were transcribed verbatim upon completion of the interview. In addition, the researcher recorded field notes made during and after the interview detailing participants' reactions to questions, impressions of the interviewer and information about the site of each interview. Merriam (1998) suggests that once the interview has been completed, immediately after leaving the site, the researcher should record field notes either by audiotape or by hand writing, summarizing the interview. Field notes contained time, place and purpose of the interview and were recorded and transcribed along with the audiotapes for each interview. One major advantage of field notes is that they allowed the researcher

to record her reactions and to be aware of possible researcher bias. In addition, field notes were a valuable tool in preliminary data analysis, as the researcher used them to begin to categorize the data. Finally, field notes provided clarification for questions the researcher felt important for future participants. According to Merriam (1998), field notes, when used along with interviews and observations allows for a holistic interpretation of the data and the situation under study. (p. 111)

Once all interviews, transcriptions and summaries of each interview were completed, participants were invited to review their summary at a panel check meeting. Two panel check meetings were held, one in July 2002 and the other in September 2002. The summary provided participants the research questions and interview protocol questions complete with a descriptive summary of participants' answers to the questions. Additionally, quotes to be utilized from each participant were included. Four students attended these panel check meetings held in July and September to review their summary. Twenty-one participants stated that they could not attend either meeting. In order to enhance the validity and reliability of this study, the researcher mailed and/or e-mailed copies of individual interview summaries to the other twenty-one participants. Participants then checked these summaries at their leisure and either mailed them back to the researcher in a self-addressed envelope provided or forwarded an e-mail verification with additions, corrections or deletions or with approval of summary as reported. Three participants did not respond even though summaries were mailed to their home addresses and attempts were made to

phone and e-mail them. No significant additions, corrections or deletions were made to any summary provided to participants for their review.

Data Analysis

After the first interview, the researcher transcribed the participant's answers verbatim. The researcher then began to categorize data (interview transcripts and field notes) immediately by asking herself, "What is the meaning of this interview data?" "What is going on here?" This was an ongoing process that continued through each interview completion. The researcher read each interview transcript several times, making notes in the margins and writing memos about what she thought was going on. In addition, the researcher reframed the question about what indicators of quality these National Merit Scholars would use to assess the quality of an academic institution. Since some participants had difficulty in describing indicators the researcher reframed this question by asking, "If you were going to advise your friends or sibling about criteria to look at in assessing an academic institution, what kinds of things would you have them look for?" This clarification seemed to aid the students in providing more detailed answers for this question

Upon transcription and review of initial interview transcripts, the researcher began to categorize the data, extracting themes that provided answers to the research questions. After several more interviews were completed, descriptive wording for categories was developed further reducing the data into themes. Codes were developed for specific themes. After all interviews had been transcribed and themes extracted, the researcher went back through the

interview transcripts and coded themes throughout the transcripts, extracting quotations for each theme. Finally, the researcher began to draw conclusions from the interview data and noted recommendations based on the interview data.

Subsequently, the researcher constructed a narrative description from the interview data. Research questions were utilized as an outline for the narrative. The narrative utilized the major themes that emerged during the data analysis and were supported quotes the researcher felt appropriate for each theme. Patterns, irregularities, other possible explanations in addition to negative and discrepant cases were noted. These themes, organized around the research questions, will be presented in chapter 4 of this study.

Validity and Reliability

All types of research are concerned with producing valid and reliable results in an ethical manner. (Merriam, 1998, p. 198) Merriam goes on to state that the results of a research study are trustworthy “to the extent that there has been some accounting for their validity and reliability....” (Merriam, 1998, p. 198) Validity refers to the accuracy of the information and making sure that the researcher has captured what is really going on. According to Merriam, internal validity in qualitative research answers questions like: “How congruent are the findings with reality?” “Do the findings capture what is really there?” (Merriam, 198, p. 202) One assumption of qualitative research is that reality is multi-dimensional and ever changing. Qualitative research also assumes that there is not only one reality, but that reality is different for different individuals. Qualitative

research seeks to understand how individuals make meaning out of their experiences.

Member checks were utilized in this study to enhance internal validity. Panel checks provided feedback from informants about the accuracy of their interview transcriptions and of the major themes and quotes to be utilized in reporting of the study. In addition, panel checks provided all participants with the opportunity to make additions, deletions or corrections to their individual interview summaries. There were no significant additions, deletions or corrections made to any interview summary.

Drawing on advice by Maxwell, in Bickman and Rog (1998), other strategies were used to enhance validity of the study. These strategies included providing a detailed and complete narrative of the interview data that specifically answered the research questions. In addition, interviews were transcribed verbatim to ensure accuracy in developing major themes that provided answers to the research questions. Verbatim transcripts also ensured that quotations from participants used in the narrative were reported accurately. (Maxwell, in Bickman and Rog, 1998, p. 93-95)

The findings in this study are unique to the University of Tennessee at this particular time. While it would be difficult to replicate this research exactly, the method described above could be replicated. To facilitate replication of this study, a detailed audit trail of the procedure followed, the selection of participants, data collection methods, and data analysis procedures are provided.

These techniques give a clear and accurate picture of the methods used and allow for replication of the study.

Researcher Ethics and Bias

In this study, the researcher is the primary tool for collecting and analyzing data. As such, reactivity is a possible source of bias. Reactivity is the effect that the researcher has on those who participate in the study. The researcher asked questions of herself like, "Is this participant providing truthful answers or answers that s/he thinks I wants to hear?" In order to address threats of reactivity, research objectives were articulated both in the initial invitation, the informed consent and at the beginning of the interview to help ensure that participants understood the objectives of this study. This then encouraged participants to provide their own insights and to not report what they thought the researcher wanted to hear. The participants were provided with a description of how this data would be used and how their confidentiality would be maintained. Therefore, participants were assured that they were free to express their own views.

The researcher was aware that the rights of participants must be respected at all times. Participants' rights were safeguarded through several strategies. No participant's name was utilized during reporting. All participants were assigned a number, which appears on their verbatim transcripts. Written permission was obtained from all participants before interviews took place. Verbatim transcriptions were made available to all participants, and twenty-three participants reviewed interview summaries. The copy of the informed consent

form clearly stated that participation in this study was on a voluntary basis and that students could withdraw at any time with no adverse consequences to them.

The researcher has served in higher education for eight years. She has completed coursework at the doctoral level in Higher Education Administration and Policy Studies. Her doctoral studies have acquainted her with the many issues concerning quality issues in higher education, student satisfaction issues, qualitative research techniques, and issues specific to the State of Tennessee and UTK at this specific time. Additionally, her current position as Head of the Music and Theatre Department at Walters State Community College has helped her become aware of the challenges and issues encountered when seeking to recruit and retain high ability students.

CHAPTER 4

FINDINGS

This study was conducted to describe the factors that were central to the decision of National Merit Scholars in choosing to attend the University of Tennessee, Knoxville and in describing their perceptions of the quality of the university before and after attendance. Twenty-five National Merit Scholars who had attended the university for at least two semesters were interviewed. Four research questions guided the study:

- What factors influenced National Merit Scholars to enroll at UTK?
- What indicators of institutional quality do National Merit Scholars use to assess the academic reputation and quality of an institution?
- What perceptions did enrolled National Merit Scholars have about the academic reputation and quality of UTK before they enrolled? Did that perception change in any significant way after they have been in attendance for at least two semesters.
- What suggestions do National Merit Scholars offer for making the University of Tennessee more attractive to high ability students?

Presented in Chapter 4 are the findings of this research study. First, demographic data describing the twenty-five National Merit Scholars who participated in the study will be presented. This demographic data was obtained through a demographic survey filled out by participants prior to the interview. The narrative describing factors influential in the decision to attend UTK and participants' perceptions of quality have been organized around the research questions. A summary will be included at the end of each research question

section. Quotations are cited in order to illustrate and represent the themes that emerged from participants. Text added by the researcher for explanation purposes is enclosed in brackets.

Demographic Data

Prior to their interviews, all participants reported information about their gender, parental educational background, family/household annual income, ethnic origin, and length of time in attendance at UTK prior to being interviewed. Results of the demographic survey indicated that an almost equal number of men and women participated in the survey: thirteen men and twelve women National Merit Scholars. All participants reported that they were Caucasian.

The demographic survey indicated that eleven of the participants' mothers had completed their high school diploma, compared with eight of their fathers. Nine of participants' mothers and fathers were reported to have completed a college degree. Eight participants' fathers were reported to have completed graduate work, along with five mothers. Two participants reported that their fathers were physicians. Two participants reported their fathers were lawyers. Two participants reported their fathers were engineers and one participant reported that his father was a dentist. No participant reported their mother's occupation.

Six participant fathers were reported to hold higher degrees than did participants' mothers, while two participants reported their mothers held higher degrees than did their fathers. Figure 4-1 displays the reported educational attainment levels of the parents of the participants.

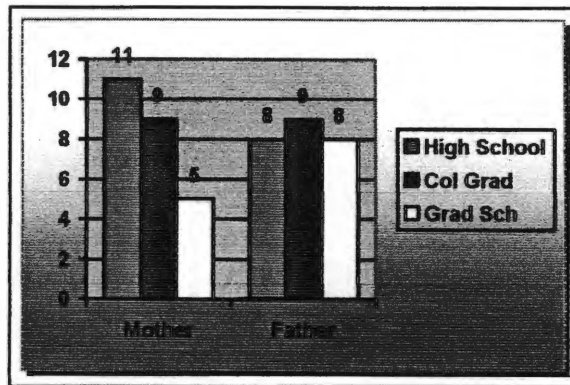


Figure 4-1

Reported Educational Attainment of Participants' Parents

Nineteen participants reported an annual parental income over \$60,000 per annum. Four participants reported family incomes between \$45,000 - \$60,000. One participant reported a family annual income of \$25,000 - \$34,999 and one participant reported an annual family income of \$35,000 - \$44,999.

This study targeted National Merit Scholars who had attended UTK for at least two semesters. Of the twenty-five National Merit Scholars participating in this study, four participants reported having attended UTK for two semesters, nine reported having attended for four semesters, five reported having attended for six semesters, and seven reported having attended for eight semesters. Of the students who had attended four semesters, five had participated in the pilot study for this research during the 2000-2001 academic year.

Twenty-two participants reported Tennessee as their home state. Twelve participants reported that they were from Middle or West Tennessee, while ten reported that East Tennessee was their home. Additionally, North Carolina,

South Carolina and West Virginia were each reported as being the home state of three participants. Four freshmen, seven sophomores, seven juniors and seven seniors participated in this research study.

Research Question #1

What factors influenced National Merit Scholars to enroll at the University of Tennessee, Knoxville?

While scholarship offered by the university was reported by twenty-two participants as influential in their decision to attend, only three participants stated that scholarship alone was the deciding factor. Nineteen students reported that several factors worked together to influence their decision to attend UTK. Students cited an average of four factors influencing this decision. Table 4.1 provides a breakdown of the factors reported by participants as being influential in their decision to attend the university.

As reported above, the most important factor noted by these National Merit Scholars influencing their decision to attend UTK was the scholarship/financial aid package offered. Ten students reported that they perceived UTK to be an exceptional educational value due to the scholarship/financial aid package offered. Ten students reported that they perceived UTK to be an exceptional

Table 4.1	
Factors affecting the decision to attend UTK	
Scholarship/Financial aid offered	22 (88%)
Academics/Program of Study	10 (40%)
Campus Visit	9 (36%)
Honors Program	7 (28%)
Opportunities offered at UTK	7 (28%)
Distance from home/location	6 (24%)
1 st choice too expensive	5 (20%)
People outside UTK	5 (20%)

educational value due to the scholarship/financial aid package offered in conjunction with their perception that the program in their preferred area of study was a superior program at UTK. Other institutional factors reported to influence the decision to attend UTK were the campus visit (9), UTK Honors Program (7), opportunities offered at UTK (7) and location (6). In addition, five students reported that people outside UTK, specifically parents, professionals and friends had influenced their decision. Five students, who reported their first choice institution was a private institution, reported that they had attended UTK because their first choice institution was too expensive. Conversely, high school guidance counselors and UTK recruiting efforts, other than those by the Honors Program, were reported to discourage students from attending. Eleven students reported that their high school guidance discouraged them from attending the university, except as a backup university. One reported:

They [guidance counselors] wanted me to go to Duke or Virginia. I don't know if they think that's a better place to go. I think they think the academics here [UTK] aren't as good. Or it's just sheer reputation. And it was hard to choose here based on her going, "You should really go to UVA or go to Duke." (#15)

In addition, these guidance counselors reportedly encouraged the participants to apply to UTK only as a backup institution, in case they were not able to attend their first choice institution. Six participants reported that their high school guidance counselor did not approve of their decision to attend UTK and instead voiced the opinion that participants should attend a more prestigious institution.

In addition, eleven participants reported that UTK recruiting brochures did not adequately emphasize academics.

Three participants stated that their parents' financial situation deterred them from adding to their parent's financial burden with what they perceived to be excessive tuition at a private undergraduate institution of their choice. One participant, whose reported family income was above \$60,000 per annum, stated:

I guess at the last minute I decided to come to UT because I didn't want to put my parents in financial bind. So either I could go to a school that costs \$30,000 or I could go to a school where I got need-based aid of \$16,000. They just weren't going to be able to afford it. (#3)

Scholarship/Financial Aid Package Offered

The financial aid/scholarship offered by UTK was reported by 88% of the participants as influencing their decision to attend. However, only three reported the scholarship offered by UTK as the only reason influencing their decision to attend. Nineteen reported that a full scholarship alone was not enough to influence their decision to attend the university. Five participants reported that they had been offered a full scholarship at another institution yet chose to attend UTK. One reported that while he was offered a full scholarship at Vanderbilt, he did not attend because he did not have a choice of majors.

I think I should tell you that Vanderbilt offered me a full scholarship to go there. I didn't go there because of the specific program the scholarship was for. I would have gotten to go there for very little expense to my family, but I didn't have the choice of my major. (#4)

Ten other participants reported that, while they did get scholarship offers from other institutions, the scholarships offered were not comparable with those offered by UTK.

The big one [reason for attending UTK] was scholarship because I did end up getting a full ride [at UTK]. And the school I was comparing it to was a little private school in Georgia, Berry, in Georgia. Also Vanderbilt. I got accepted to both of them and that was the only three I was considering. I got money from all of them, but definitely not as much as I got here. And as expensive as Vanderbilt was, this was a much better choice. (#11)

Six participants expressed their perception that before attending higher education, they perceived that National Merit Scholars could expect to attend the college of their choice and receive a full scholarship. One participant reported that while Vanderbilt did offer a full scholarship, it was with the stipulation that the student major in a specific area. Twelve participants reported that they applied to what they perceived to be a more prestigious academic institution than UTK, expecting that they would receive a full scholarship.

- They [Duke] just didn't give me enough money. I was told by my guidance counselor, "You can go anywhere that you want." But I got into all the universities I applied to, but none of them gave me enough money, except UT. (#23)

Programs of study

While participants reported that they recognized the exceptional educational value being offered them through scholarships and financial aid at UTK, ten participants reported that the scholarship package, in conjunction with their perception that UTK offered a superior program of study in a specific field, was influential in the decision to attend. Three participants reported that their

perception of a superior program of study was the factor that most influenced their decision to attend UTK. Programs of study mentioned as superior at UTK were Engineering, Veterinary Medicine, Education, Agriculture, Architecture and Nursing.

I don't know where NC ranks [in Engineering], but they are both top achievers. [UT and North Carolina] UT is very well rated, especially for an undergraduate [school]. There are many leading researchers and experts as well [in Engineering at UTK]. (#7)

The fact that UTK offers the only program in the state in certain specific areas of study was important for two participants. One participant, who had originally planned on attending a small private, Christian college, decided to attend UTK because it offered an agriculture program, whereas the private Christian college did not. (#10) Another participant originally hoped to become a veterinarian, but realized that getting into a veterinarian program out of state was difficult.

When I applied to UT, I was planning to become a veterinarian. Since vet schools are very difficult to get into, and nearly impossible if you're an out of state student, I wanted to stay in Tennessee. And UT is the only college with a vet school in the state. I ended up switching my major to English, but I didn't know I would do that then. (#19)

Campus Visits

Campus visits to the UTK campus were reported to be influential in the decision to attend UTK for nine participants, in conjunction with the scholarship/financial aid package offered. Campus visits afforded the participants an opportunity to meet faculty and students, learn about their particular areas of interest, explore opportunities offered that would enhance their educational experience, and helped to influence the perception of UTK as a

large, impersonal university. The nine participants reported that the personal attention they received on campus visits from UTK faculty, students, and Honors Program staff became a major factor in their ultimate decision to attend UTK. While some participants stated that before their campus visit, they perceived UTK to be large and impersonal, after the campus visit, UTK did not seem so imposing. One participant from North Carolina stated:

What it came down to was that I made a visit to NC State and a visit here. When I went to NC State, I paid the housing deposit and everything there and they pretty much assumed that I was there already, which I wasn't. I was still deciding. I still had offers for scholarships coming in. And basically, they really kind of gave me the run around at NC State. But when I came up here, somebody came to meet me on a Saturday and took me around to different facilities. I went on a tour. A student came in. A grad student. He told me what I could expect when I graduate. He answered questions about the Honors Program, which I opted not to do.

I think it was the difference in those two visits [that influenced the decision to attend]. I felt like I didn't get any respect when I went to NC State and when I came here, somebody paid a little bit of attention to me; even though it was a student, and he didn't know anything about me. (#7)

Honors Program

Thirteen participants mentioned the Honors Staff as influential both in the decision to attend UTK and their decision not to attend another university. The Honors weekend and Honors Program were reported to have provided participants with personal attention, information about challenging coursework, information about small class size in honors classes, access to professors, and other perks. The Honors weekend provided students information about perks such as a special lounge for honors students, personalized advising,

recommendations for internships and summer jobs and priority registration. One participant explained it this way:

The honors program was the big thing that convinced me that the school wasn't so big. The way they pitched it to me and the way that it has worked really is that it kind of shrinks down the school. And in a lot of ways it does because being the honors program they watch you more closely than others. You work with Michelle and you have a little place you can go back to and work because you have your own little honor's lounge. You can register early. Because it really does shrink the school down. But you are still taking classes with other people. (#11)

Conversely, five participants commented that while they were influenced to attend the University of Tennessee after contact with Honors staff, after attending the university, they felt the Honors Program was understaffed and under-funded and could not fulfill their expectations.

Opportunities Offered at UTK

Campus visits and honors weekends were reported to be instrumental in providing potential students with information about the numerous opportunities available to students at the University of Tennessee and were reported to be very important to seven participants in their ultimate decision to attend UTK. Participants mentioned the chance for study abroad, internship opportunities, extra curricular activities, the UTK sports program, intramural sports, opportunities to serve in a volunteer capacity, numerous academic and non academic clubs, fraternity and sorority membership opportunities, and opportunities for professional seminars. Participants perceived that opportunities were numerous at UTK, but that finding such opportunities was the responsibility of the student. One participant stated:

Also, the opportunities that you get at a big college. As long as you are willing to get out there and do the work yourself, you can pretty much find whatever you want to do. (#11)

Location

Six participants reported that the location of UTK was important and influential in their decision to attend UTK. Individual participants listed both close to home and far enough away from home as important factors, depending on their preference. Of particular importance to these six participants was that the university was within driving distance of home. Participants listing driving distance as an important factor reported that they desired a driving distance of four to six hours from home as their optimal range.

I enjoy the location because it's in a city, but easy to get out of and not too close, not too far away. I am only 3 ½ hours away. [from home] Not to mention the beautiful drive. (#22)

Three others reported that UTK offered an ideal setting, close to lakes, yet close to the mountains, while at the same time offering cultural events specific to many large cities as compared with a more rural setting.

People outside UTK

Institutional factors like academics, scholarship offered and personal attention were reported to be important to participants in their decision to attend UTK, as were personal preferences. However, people outside UTK were also reportedly influential for five participants in their decision to attend including family, friends, and professionals.

It has a lot to do with family history first of all. Both my parents went to UT. My uncle was on the board of trustees. (37)

These five participants reported that they asked their family members who had attended UTK about their experiences while attending. Participants reported that their family members related that they had a positive experience while attending the university. Additionally, three participants specifically stated that they asked professionals in the areas of their desired major for their opinion on the academic quality of UTK. These professionals included an agriculture specialist, engineering professional and a veterinarian, all of whom reported that they felt UTK to be an excellent institution. These people outside UTK were reported to be one source students used as a source of information about the academic quality of UTK.

Top Choice University

The University of Tennessee, Knoxville was reported to be the top choice university for 36% (9) of the participants after the application process. However, 48% (12) reported that their top choice was a private institution. Private institutions mentioned as top choice were Vanderbilt, the University of Chicago, Columbia University, Boston University, Washington University (St. Louis), Wake Forest, Notre Dame, Duke, West Point and Carnegie Melon. Two participants reported other public institutions as their top choice, Virginia Tech and University of Kentucky. Three participants reported that they did not have a top choice institution, while two participants reported two schools as their top choice, UTK and a private institution.

Thirteen students reported that the reasons they did not attend their first choice were financial reasons. Financial factors cited included the high cost of

tuition at the other institution, insufficient amount of scholarship offered, scholarship offered in one area only, or the amount of the UTK scholarship.

Four other participants reported that their decision not to attend their top choice institution was affected by the location of the institution. Distance from home, size of campus and opportunities available at UTK were reported to be more important than their top choice university. Five other participants reported that the reason they did not attend their top choice was the desire for a “real world” experience. While a private institution might be listed as first preference, five of these National Merit Scholars reported that they felt private institutions did not provide a “real world” experience.

I said, “Because I want college to prepare me for the real world and I don’t feel like that’s going to happen at Lipscomb [I will select UT]. It was much more of an open atmosphere [at UT]. I visited Lipscomb one weekend and at 12:00 there is a lockdown in the dorms. If you open the door the alarm went off. And they are just really strict and sheltered and I wanted to come somewhere where it was much more like what you would really encounter in every day life. And so I just decided that I wanted an experience functioning as an adult rather than a twenty-year old child. (#1)

Four participants reported that other institutions did not seem to care about them or, in some cases, left them with an undesirable impression of the school’s attitude toward potential students. One participant noted that he did not feel students he talked to who attended Vanderbilt were very happy at that institution.

How happy the students are would be just as important as academics to me. How much I enjoy the place. That’s what I didn’t like about Vanderbilt. I talked with the students there and I just didn’t like the people. They were very, very snobby and really competitive. I’ve been through that since I was in kindergarten. (#15)

Two National Merit Scholars reported that they did not attend their top choice institution because they did not want to wait a year to attend college. These two students had been placed on a waiting list at private institutions (Washington University, St. Louis and Duke). One other National Merit Scholar reported that he was not admitted to his top choice, Notre Dame.

Three important perceptions emerged from interviews. The first perception, reported by ten students, was that undergraduate education at all major universities was essentially equal in quality. These ten participants perceived that any major university would offer challenging coursework if the student were willing to expend the effort to find these courses. In addition, five participants reported that they thought that all major universities offered enhancements to their undergraduate education including interaction between universities, clubs specific for any program area, internship opportunities, fraternity and sorority opportunities, and research opportunities. One participant reported:

It doesn't really matter where you go. You could go somewhere else and not do anything and just take classes, but you will come out with about the same quality as you could have gotten. That may not be considered a high academic decision, but I perceive that whatever you put into something is what you are going to get out of it. (#5)

In conjunction with these perceptions, two other participants expressed the opinion that undergraduate education can be whatever the student wants it to be. The responsibility is up to the student to find those enhancements to the undergraduate experience that make the collegiate experience worthwhile.

I just felt UT could offer whatever you put into it. Any school is as much as the student wants it to be. (#20)

Finally, five of these National Merit Scholars perceived that if a student were planning on attending graduate school, an undergraduate education was merely a stepping-stone. Hence, attendance at an undergraduate institution was not viewed by these participants to be as critical in the long run as the graduate school they planned to attend later.

Undergraduate education doesn't matter if you are planning on attending graduate school. How many of your professors did you ask about their doctoral program? I know I've asked several of mine. Now compare that to how many you've asked about their undergraduate program. I'm willing to bet it's significantly lower. All undergraduate education is, for someone who intends to continue education, is a way to make it into a graduate program. (#21)

Summary

The findings suggested that while twenty-two participants reported that they were influenced to some degree to attend UTK because of the financial aid/scholarship package, other factors were also important and influential in their decision to attend. These factors included superior programs of study, honors programs, campus visits, opportunities offered by UTK, a real world experience, distance from home, people outside UTK, and not being admitted to their first choice institution. The three students who reported that the UTK scholarship was not an influential factor cited program of study as the influencing factor in their attendance.

While the data suggested that National Merit Scholars perceived private, higher priced institutions as more prestigious, they ultimately did not attend these

institutions. The data suggested that fifty-six percent of these National Merit Scholars perceived that UTK offered an inferior academic education before attending UTK. Thirty-six percent reported that they felt UTK was about academically equal to other institutions and fifty-six percent reported that they perceived that all undergraduate education was essentially the same.

Quite the contrary, no participant reported that their Guidance Counselors encouraged submitting an application to the University of Tennessee as their first choice institution, only as a backup. Indeed, eleven participants reported that their High School Guidance Counselors discouraged them from attending UTK, encouraging them to attend a “more prestigious institution.” The Guidance Counselor’s attitude seemed to be viewed by these participants as an indication that the Guidance Counselor perceived UTK to be less prestigious and less academically challenging.

Research Question #2

What indicators of institutional quality do National Merit Scholars use to assess the academic reputation and quality of an institution?

The National Merit Scholars who participated in this study named eighteen indicators they would use to assess the academic reputation and quality of an institution. **(See Appendix F)** These indicators were grouped into five main categories: private university, financial indicators, institutional indicators, academic indicators and personal preference indicators.

Private Institutions vs. Public

Seventeen National Merit Scholars reported that one indicator they would use in assessing the quality of an academic institution was whether that institution was a private, expensive university. These seventeen participants reported that they perceived private, expensive institutions as higher quality academic institutions than state institutions.

I think Washington and Lee and Duke are far superior academically. I think definitely cost is a factor [in quality].

INTERVIEWER: Are you saying that higher cost equals higher quality?

Yes. (#12)

Since the perception of higher priced/private institutions as superior institutions was apparent after three interviews, the researcher began to ask participants what characteristics of private, higher priced institutions were indicative of quality.

Characteristics identified were:

- ☐ Better reputation/rankings
- ☐ Higher selectivity standards
- ☐ More challenging coursework
- ☐ More competition among students
- ☐ Emphasis placed on academics
- ☐ Smaller school, smaller class size
- ☐ Better faculty salaries
- ☐ More research opportunities
- ☐ Better facilities and grounds
- ☐ Less use of GTA's

Participants stated that, for the most part, they perceived that these characteristics were lacking at UTK. They also reported that they believed private institutions received higher amounts of financial support from alumni than

did public institutions. In addition, five participants reported that they perceived that a degree from a private institution would, in itself, be indicative to other institutions of some degree of competency on the part of the individual as they applied for a job or for graduate school.

I think I would have gotten...definitely the reputation of getting the diploma from there [Vanderbilt]. I perceive that when I go off to grad school that if I could hold a diploma from Vanderbilt that I could already pass quite a few aspects of standards. But coming from UT, I think they'll say, "OK, you've graduated. Now what?" And they'll ask to see what else I have done. (#11)

One participant pointed out the importance of competition to high ability students, while perceiving that academic competition was probably greater at a private, more expensive university.

Most overachievers, which generally catches the National Merit students, are used to impressing people with their accomplishments. When the first thing people ask you for the next four years is something like "Where are you going to school?" overachievers want to be able to say something impressive – not the same thing that a fourth of their class will be saying. (#21)

In addition, three participants voiced the opinion that public institutions depended more heavily on research dollars, than did private institutions. Therefore, according to these participants, professors could spend more time with their students and on quality teaching, instead of conducting research.

I think the professors are better at private schools. They can pay them more. There's not as much pressure to do research. (#12)

Conversely, one participant perceived that private institutions offered more research opportunities than did public universities. This participant, who is a

pre-med. major and currently involved in research with a UTK professor, when asked what qualities were found at Vanderbilt that are lacking at UTK, reported:

I think there are more opportunities for research and more of an academic reputation [at Vanderbilt.] (#15)

Financial Indicators

Twelve participants reported that one financial indicator they would use to assess the quality of an academic institution was its funding. Specifically, participants reported that especially for a state institution of higher education, the amount of state funding the institution received was indicative of the emphasis placed on academics by the state and its commitment or lack of commitment to higher education. As one participant expressed it:

The thing that really concerns me is it looks like that's continuing (lack of funding). I think long term, we are going to lose a lot of high quality students, here again based on the reputation. The fact that the school is not getting the funds that they need is widespread. They're trying to draw students from out of state. It seems that the out of state students don't have the same impression of UT because they don't know about the budget problems. If I was going to a state school in say, Oklahoma, I wouldn't know about their budget either. I think if they're going to recruit top quality students from within the state they're going to have to do something about that. (#9)

Participants' perceptions of the effects of continued inadequate state funding on the University of Tennessee are included as **Appendix G**.

Institutional Indicators

Participants mentioned eight institutional indicators as indicators for assessing the quality of an institution. They were: selectivity (7 students), class size, (5 students), reputation (4 students), ranking (4 students), campus visit (2 students),

student life (3 students), recruiting brochures (1 student), and library holdings (1 participant).

Seven participants reported that the admissions policy used by a university was important in assessing its quality. Admissions policy here refers to the high school GPA and SAT/ACT scores of students in addition to the institution's acceptance rate. Participants perceived that the quality of the students comprising the student body was indicative of the school's academic quality and in assessing an institution's attitude toward academics. One student stated:

I think the type of students at a school is indicative of its quality. Well, if you look at the average incoming GPA of the students and average test scores, that's a pretty good indicator of the kind of students they are trying to recruit. (#7)

Another participant reported:

I realize I probably sound redundant, but it is generally true that large state schools like UT, University of Alabama, Clemson and University of South Carolina have lower academic standards than small schools and private ones. This matter is not completely out of UT's control. Standards can be raised. (#22)

There was some disagreement among participants as to whether or not UTK should institute higher admissions standards for students. One participant in particular noted that UTK was a land grant institution, and as such this participant perceived that a land grant institution's mission was to serve the population of the state through open access. On the other hand, other participants reported that exclusivity breeds quality.

Four participants reported that they would assess the academic quality of an institution based on its academic reputation. There have been many attempts to

define “academic reputation.” The term appears to be elusive, meaning different things to different people. However, three of four participants who mentioned academic reputation reported that they perceived UTK’s academic reputation to be less than average for a public institution. One student reported that he perceived UTK’s reputation to be good in some programs, but poor in others.

Participants reported that they based their perception of UTK’s reputation on the UTK recruiting brochures mailed to them, their high school guidance counselors, and Internet sources like *US News and World Report* and the College Board. Of these sources, no source was reported to have provided the perception of high quality for the university. Some participants also reported that they also based their assessment of the reputation of quality of the university on their parents and other professionals. These sources presented different picture of the university’s quality than did the high school guidance counselor, recruiting brochures and Internet sources. Three participants, whose parents had attended UTK, reported that their parents encouraged them to attend the university. In addition, two participants reported that professionals they talked with encouraged them to attend UTK in certain academic areas, specifically Engineering and Veterinary medicine.

After enrollment, the funding shortfall and crisis in the state caused some participants to worry about UTK’s academic reputation and the impact of funding on it.

I worry about UT’s academic reputation, especially now. I wonder what my degree is going to be worth. It seems like UT is slowly

slipping academically at least. It seems like some of the colleges are all right. (#11)

Four participants also noted that an institution's rank in media services like *U. S. News and World Report* was another criterion they would use to assess the quality of an academic institution. Three of these participants perceived UTK's ranking to be lower than desired. As one participant reported:

Our rank as an institution is not so high or impressive. (#21)

Conversely, three other participants reported that they felt rankings were not good indicators of the quality of an academic institution.

I didn't really put as much faith in the published rankings and statistics as a lot of people did. (#8)

Two participants mentioned campus visits as one indicator useful in assessing the quality of an academic institution. These participants reported a positive experience on their pre-enrollment campus visit and indicated that their campus visit gave them the perception that UTK was a high quality university. Interaction with UTK faculty members, honors staff and students was reported to have influenced their positive perception of quality.

Information about student life was reported to be important in assessing the quality of an institution for three participants. In the campus visit, these participants reported that they looked at dorm life and organizations on campus and were concerned about the overall student satisfaction with their degrees and whether the university provided peer advising. Again, participants stressed the importance of interaction with other students in order to gain credible information about the quality of an institution.

I would try to find anybody I knew that had gone there. That would be the first thing because you get propaganda from anyone else! And then I would want to visit definitely to see it and to talk to students. I'd want to see if they had peer advising or anything like that like they do at UT. (#16)

Two participants reported that they would assess the quality of an academic institution by the way the institution markets itself. One participant indicated that she would use a school's recruiting brochures as an indicator of its quality. This participant noted that she perceived UTK's recruiting brochures as not providing information that would lead a prospective student to believe that the university was a strong academic institution. Another stated that when looking at college packets, a student should notice whether academics were stressed, or whether sports, extra curricular activities, student life or some other area was stressed. The participant stated that the contents of the marketing/recruiting brochures were indicative of the type of student the university is trying to attract.

I guess when they send you the packet in the mail, like the college packets. I look at the way the school markets themselves, because the way the school markets itself is the kind of student it's trying to attract. They [recruiting brochures and staff] didn't talk about classes being small, classes being in depth and good. I think it's the color orange – the blaring fun color. Duke's colors are blue and white and blue, in my mind, it's a more serious color than orange.

UT [recruiting and brochures] emphasizes student life, football team and other schools do not mention football team. I think they emphasize student life a lot and student life is good here. I have to say they did talk about the football team a lot and I have to say that you can't really ignore it. Maybe I only think it was a lot because I was looking at the Rice University brochures where it's not even an issue. Even though they have a pretty good team, they didn't mention it at all. They never said anything about their team at all. (#23)

Throughout the interviews, other participants mentioned that they felt UTK recruiting brochures were not targeted to reach the high ability student. These participants noted that current UTK recruiting brochures stressed athletics, student life, clubs and organizations. While participants reported that these were important, these participants noted that high ability students are more interested in superior programs of study, prestigious faculty, honors programs, special attention and perks afforded honors students, internship opportunities, opportunities to study abroad, selective admission rates and graduation results. High ability students, participants added, were interested in challenging coursework, small classes and low student/teacher ratio. According to these participants, UTK's recruiting brochures do not adequately address these issues.

One participant reported that he would use the size and quality of the library as evidence of the quality of an academic institution. This particular student had visited both the University of Kentucky and the University of Tennessee and had toured both libraries.

Five participants reported that class size was an indicator of quality they would use to assess an academic institution. All five participants reported that they perceived UTK's class size to be either average for a public institution or too large when compared to other public institutions. They reported that large classes left students feeling like anonymous persons and that it was impossible for a professor to provide any personal attention in classes containing hundreds of students. One student reported:

I think David Lipscomb is probably a better school. It has smaller class sizes and it's a private school. (#1)

Academic Indicators

Participants reported using four academic indicators to assess the quality of an institution of higher education. These were programs of study (7), results after graduation (10), percentage of faculty holding doctoral degrees (5), and amount of emphasis placed on sports.

Seven participants reported that one indicator of quality they would use was a university's programs of study. Participants were particularly interested in the reputation of their desired program of study in any institution they considered for attendance and whether the university offered a major in the desired program of study. Participants reported that they utilized several different sources to determine the quality of programs that interested them: *Princeton Review on Engineering*, *US News and World Report*, professionals in the area of interest, family, friends, professors, and guidance counselors. Participants stressed the importance of the reputation of a program. One participant stated:

I would definitely look at what the school has to offer and what I wanted to study. Like if I wanted to study education, I would look at that program and talk to some people that are in the program.
(#18)

All seven participants reporting programs of study as one indicator of quality reported that they perceived UTK to have several superior programs of study. Conversely, most of these participants stated that UTK had some academic programs that they perceived to be less than superior.

I think, my experience is that engineering is an exception to the rest of the school. And that may be my own impression. I thought the engineering department did a really good job. I think there are some graduating in other areas that are not prepared. : I think those graduating in marketing, arts and sciences. (#9)

Ten participants reported that they felt results after graduation were indicative of the quality of an institution and that they would use this as an assessment indicator of quality. Results after graduation included satisfaction of graduates with their degree, graduation rates, graduate admissions tests results, graduate school attended after graduation, and job placement after graduation. These participants reported that it was very important to assess and compare how well graduates scored on all kinds of admission tests including the Graduate Record Exam and exams designed for admission into the medical field, law and veterinary medicine. Participants reported that they would not only seek quantitative indices, but also would talk to graduates about their job placement and test results. One participant stated:

Do people graduate here and get jobs in their field easily? Or do they have to look for jobs? I think also the opinions of the students after they leave is very important. I asked a lot of students, that was one thing I did a lot. People who were already here, who had already graduated - to see what they had thought about the school. (#13)

Of the ten participants who mentioned results after graduation as one indicator used to assess quality, five perceived UTK to be above average in this area. Participants reported that they perceived UTK graduates as being satisfied with their degrees in most areas. They also reported that they perceived UTK graduates performed well on entry exams for graduate school and were recruited

by major companies for good jobs. One participant reported that he had talked with an employer who expressed the desire to hire an Ivy League graduate for the prestige of having an employee from a distinguished institution. However, this same participant stated that he recognized the fact that UTK graduates were high profile CEO's, Vice Presidents and Presidents of major companies.

I've heard that a lot of Harvard graduates are just getting job so that people can say they have them on staff. I have a friend who says we just give them a job so we can have Ivy Leaguers. That's terrible. In opposition to that, you have to point out all the UT grads that are doing really great things. UT grads are CEO's and VP's and presidents of major companies. They are faces that people know. (#7)

Five participants reported that the number of faculty holding doctoral degrees was indicative of the quality of the faculty's education and therefore indicative of the quality of an academic institution. Four of the five participants reported that UTK was about average in this area while one participant reported that they perceived the number of UTK faculty with doctorates to be less than average when compared with other institutions. During the course of these interviews, twelve of the twenty-five students interviewed reported that they felt the budget crunch and current state funding had hurt UTK's ability to recruit and retain qualified faculty. Moreover, students reported that they perceived many of UTK's finest faculty members were contemplating seeking positions outside the state.

I've heard that a lot of professors are leaving and going to other colleges. I think it's a salary issue. They will probably bring in people who don't have as much experience. If they did have a lot of experience, they'd go somewhere else. (#25)

Interestingly enough, participants reported that, for the most part, current UTK faculty in their preferred programs of study impressed them.

Three participants reported that the emphasis placed on sports by the institution was an indicator of the academic quality of an institution. All three participants reported that in their opinion, the University of Tennessee, Knoxville placed too much emphasis on its athletic programs. These participants noted that an institution's athletic program might not be as important to high ability academic scholars as it was to other students, faculty, staff and the general state population.

One participant reported that he perceived that UTK was one of the only SEC schools where the academic program was not subsidized by the athletic program. Another stated that while he loved football, he perceived the emphasis placed on football in particular at UTK, had a detrimental effect on the academics of the institution. However, this participant noted that Big Orange football did attract a lot of students and donors to the university.

Finally, two participants viewed the emphasis placed on the athletic program at the University of Tennessee as a lack of dedication on the part of the institution to academics.

UT hasn't really impressed me with its dedication to education. It seems to me that they spend much more money on football and other things that aren't really important to me than they do making sure there are enough teachers or good classrooms. (#19)

Another student perceived that Duke emphasized academics more than UTK.

I was pretty sure it was going to be a superior education at Duke. I felt that the emphasis was placed on academics and not football.”
(#23)

Personal Indicators

Participants reported using the amount of personal attention they received as an indicator of the quality of an institution before attendance. Personal attention was evidenced by interaction with faculty before enrollment, campus weekends where participants interacted with students and honors staff, and phone calls from faculty and honors staff. In addition, students said personal attention would be manifested in whether the university afforded special attention to honors students, peer advising, and excellent student services.

I got multiple calls from faculty and students [at UT] letting me know what was going on at the university and that was kinda nice. The engineering faculty and students were a big factor. (#2)

Another participant spoke of personal contact with the Honors Program before enrollment as a personal indicator of quality.

While I was in high school, since I was a National Merit Scholar, universities were throwing money at me. Here with Dr. Broadhead with the Honors Program, and all the attention! When I came here on a visit, a person from advising met with me.... (#4)

Other participants reported that they asked family, friends and their high school guidance counselors about the academic quality and reputation of an institution and then based their assessment on that information. One participant stated that after asking friends where they were going to school after high school graduation, she got the impression that UTK was the highest quality academic state school in Tennessee.

I looked to see where my friends were going. Sixty or so came here. It's supposed to be the best school in the state as far as state colleges go. (#6)

Summary

Participants listed indicators in five broad areas as indicative of quality in an academic institution. These were private institutions, financial indicators, institutional indicators, academic indicators and personal indicators.

Participants reported that some indicators provided a positive perception of their pre-enrollment perception of quality at UTK. These included the campus visit, interaction with faculty, students and honors staff, results after graduation, and superior programs of study. Other indicators were reported to have led participants to perceive UTK as a less academically prestigious institution than other public institutions. These included inadequate state funding, large class size, high school guidance counselors, rankings, recruiting brochures, perceived amount of emphasis placed on sports, admissions standards and the fact that UTK is a public rather than a private institution.

Research Question #3

Did the perception of National Merit Scholars change in any significant way after they attended the university for at least two semesters?

Overall, seventeen of the twenty-five National Merit Scholars interviewed reported that they perceived the academic quality of the University of Tennessee, Knoxville to be lower than other similar public institutions before enrolling. Four participants reported that they perceived UTK to be superior in some programs prior to enrolling. Two others reported that they perceived the academic quality

at UTK to be superior overall before enrolling. One of these participants stated that he now felt that this pre-enrollment perception was due to personal ignorance on his part. Two participants stated that before they enrolled, they perceived all undergraduate education to be essentially the same and therefore didn't consider UTK's academic quality in comparison with others.

Five participants reported that they perceived UTK to be a party school, and not as academically challenging as other state institutions, specifically University of Georgia, University of Kentucky, University of Oklahoma, and University of North Carolina.

UTK's admission standards, lack of adequate funding, large class size, rank (*US News and World Report*), recruiting brochures and perceived lack of emphasis placed on challenging coursework for honors students reportedly contributed to their pre-enrollment perception of inferior quality, along with the negative perceptions of guidance counselors. One participant from East Tennessee stated:

I think there is the perception that because UT is close to home and because it's a state school, that it isn't necessarily the same education that you would get somewhere else. I think also this perception that UT is a big party school is a big negative for those of us that are trying to get an education. (#18)

While academic quality at UTK was viewed as poor before enrollment overall, several programs of study were identified as stellar. These were generally areas selected by participants as their major areas of study before enrolling.

Well, I thought I could get a degree here. And so I thought well, it'll fulfill my needs. I thought that probably it was a good college. I thought I was going to go into the marketing program and the

marketing program is really good here. I mainly came here because I knew I was going to go into the college of business. I wouldn't have come just to go to the college of arts and sciences. Or if I hadn't known my major I might not have come. If I was getting a degree in English and I really liked English, then I would have gone to a smaller liberal arts school. And so, it fulfilled my needs. (#4)

Change in Perception

Twenty-one participants indicated some change in their perception of the quality of UTK since enrolling. The other four participants reported that their perception had not changed since they had enrolled. Table 4.2 provides a display of the change in perception reported by these participants.

Of those participants who reported only a positive change, three were freshmen, four were sophomores, two were juniors and three were seniors. Of those students who reported only a negative change in perception, one was a sophomore, one a junior and three were seniors. Of those students who reported both a positive and negative change in perception, one was a sophomore, and two were juniors. Of those reporting no change, one each was a freshman, sophomore, junior and senior. The twenty-one participants who

Table 4.2				
Reported Change in Perception by Class				
	Positive Change	Negative Change	Both positive and negative	No Change
Freshmen	3	0	0	1
Sophomore	4	1	1	1
Junior	2	1	2	1
Senior	3	3	0	1

reported a change, attributed the changes to be influenced by one of three things: personal experience, institutional factors and state factors.

Eleven of the twenty-one participants reporting changes in perception indicated that personal experiences had led to both positive and negative changes. Personal experiences included experiences with faculty, personal attention from honors staff, involvement in clubs, volunteer work, Team Vols, study abroad and comparisons with students from other institutions.

Interaction and personal attention from a UTK faculty member was reported by thirteen participants as having influenced a positive change in their perception of the quality of UTK. Participants reported that through past experience, they determined that students must take the initiative to make contact with UTK professors. However, once a student asked for help, participants reported that the UTK faculty made extra efforts to provide students with personalized assistance. Interaction and assistance was reported by students with UTK faculty in the form of help with research projects, providing reading/discussion clubs, research opportunities, recommendations for internships or graduate schools, and assistance with reviewing research papers and homework assignments.

Overwhelmingly, the most positive comments, responses and experiences pertained to the UTK faculty. UTK faculty members were reported to be caring and helpful and students pointed out that the faculty helped dispel the notion that UTK was a large impersonal university. Students reported many instances of

faculty members who had impressed them with their dedication, helpfulness, loyalty, scholarship and overall quality. One participant reported:

Teachers that I have show up when they're sick. They work with us one on one, no matter how many students are in class. One class had several hundred, but they knew every one of our names. It was a chemistry class I had. He kept track of all our grades. (#6)

Another participant reported:

I've found that most of my professors were very, very helpful. I've had an English professor that sat down and went over my paper with me more than once and wrote a personal note about my paper, saying how I had improved and he wanted to see me do well in writing. I've had professors sit on the computer with me and help me find sources for my paper for 30 or 45 minutes when she didn't have to do that. She could have sent me to the library, but she sat there on her computer and helped me find it. That means a lot. (#18)

A third noted:

I've had a lot of really good professors and I did not expect it to be that way necessarily. The professors have been good teachers and caring and really excellent and helpful. My writing has gotten phenomenally better since high school and it's because of the professors here who want to help and who want to make this a good experience for you. (#22)

Conversely, three students reported unexpected and unfortunate incidents with faculty members that had led to a negative change in their perception of the university. One related:

My sophomore year, we had a faculty member come and she was quite possibly the worse professor I have ever had in my life. There have been plenty of good ones, too, so I don't want to sound like the school is horrible. But to give you an example – everyone failed the first quiz. Every person in the class! There were about 90 of us in the class. Everyone fails the first quiz. Then she gives us an assignment we've never done before and no one understands and she goes out of town for a conference. Add to that the band was going to Florida the end of the week and they were going to have

zero contact with her. The assignment she gave us she gave about a week and two days to do – it should have taken a month. It was kind of like a semester project kind of thing. She was hateful in class, called people names. The strongest quote I can remember, one guy had asked several questions on day and she told him, “You’ve asked enough questions for one day, would anyone else like to say something?” Just obvious, obvious examples of things that were horrible teaching style. (#13)

The Honors Program staff was prominently mentioned as providing the personal attention desired by high ability students in the form of recommendations, a special lounge for study use, help with problems that arise, and other perks. Two participants reported that the Honors Seminar project completed in the senior year was their most memorable experience while attending the university. These projects were reported to add value to the overall educational experience by fostering personal growth, allowing students to research topics of personal interest, and aiding them in their attempts to establish a personal creed for their lives.

I suppose the senior honors project was the most important thing to happen to me. I liked the fact that we were given so much freedom to choose a topic, so that we could do something that was really important to us, rather than just another assignment. More things like that would have improved my overall experience. (#19)

Six participants noted that involvement in a club of interest helped to positively change their perception as did conversations and personal experiences with students attending other universities. Three participants reported positive changes attributed to involvement in the Student Government Association, Baptist Student Union, alternative spring break and opportunities for professional experiences in professional organizations such as Choral Directors of America.

One participant spoke about his experience on spring break with Team Vols as the most exciting experience of his life.

Alternative spring break with Team Vols! That was just the most fun I think I've ever had. We went down to Marathon, Florida in the Florida Keys and worked in a nature conservatory all week with 20 other people. We worked outside the whole time, blazing trails and picking up trash along the shorelines. I've never had that much fun. We still hang out all the time. That was probably the most exciting thing I've ever done. (#15)

Three other participants related experiences while involved in internships, field trips or being afforded the opportunity to study abroad. One participant explained it this way.

I know students from Texas Tech, Alabama, South Carolina and I've seen what they've been able to do. And they just are NOT up to speed in my opinion. They're just not there. I worked at BP last summer for one of their partners, Fleur Daniel and my roommate and I (he's in chemical engineering here); we were just shocked at how far behind they were. And these are students that BP is intending to hire at some point. I think that speaks volumes. (#7)

Other UTK opportunities influencing a positive perception were reported to be the opportunity to serve on institutional committees, research with professors and study abroad. Participants reported that they had been impressed that they were afforded the opportunity to serve on committees that were bringing about positive changes for the university. Other participants reported that they had been impressed by the opportunity to work with internationally known professors on research projects. One participant compared the opportunities to study abroad at UTK with opportunities reported to her by friends at other major universities.

There's a lot of opportunities here that I wouldn't have if I went to Duke or Rice or a lot more expensive schools. I could study abroad [at UT] and I didn't have to pay for anything but the ticket because I have a full scholarship. I went on the direct exchange program where I just paid UT expenses and then just switched places with a foreign student. So I studied basically for free. I could not have done that." (#23)

Institutional Factors

Eight participants reported institutional factors as having influenced their change in perception of the quality of academics at UTK. Institutional factors contributed to a positive change in perception for four students and a negative change in perception for four students. Institutional factors were superior programs of study, challenging coursework, the administration and class size. Those institutional factors reported to influence a positive change in perception were superior programs of study and challenging coursework. Participants reported that after having attended classes, they found the university to be under-rated in several areas such as Statistics and Mathematics. One participant failed his first math test and reported that this gave him the perception that UTK coursework was more challenging than he had originally perceived.

I was challenged more than I ever thought I would have been. I had to study more than I ever had before. I failed my first math test. Failing math was very weird to me because I had always been great at math. (#20)

Another participant stated:

I think there are things that I didn't consider. In the business college, I minored in statistics. I think they're under-rated." (#4)

Interestingly enough, the perceived lack of challenge in some coursework in the honors program was mentioned by two participants as influencing a negative

change in their perception of the quality of academics at UTK. One participant stated:

I shouldn't say all my classes, but most of them are just like high school classes. The only honors course I have taken is Honors Spanish and I didn't find it exceptionally harder than what I thought a normal 200 level Spanish class should be. (#1)

One participant noted a negative change in perception influenced largely due to misconduct on the part of a past UTK president. Two noted a negative change due to perceived inaccessibility to administration, lack of responsiveness by administration, perception that UTK administration is not committed to education, inefficient handling of student records, and large class size. One participant noted that the longer a student attends UTK, areas of concern tended to surface.

I think some stuff it takes time - the longer you're here, you notice the little things. The more you read about problems and this and that. Some of the crazy stuff that goes on with respect to the school like presidents having affairs with secretaries and stuff like that. And that's another thing that makes you wonder about the value of your education. (#11)

Other participants mentioned areas of concern that influenced their perception of quality negatively, causing them to question the UTK administration's commitment to education. Generally these were areas specific to their own program of study or a personal experience. These areas of concern included a perceived lack of concern regarding outdated buildings, poor advising, difficulty with student records and large class size.

State factors

Lack of adequate state funding was reported by five participants as influencing a negative change in perception of the quality of academics at UTK.

In addition, during the course of these interviews, twenty-two participants reported their concerns over lack of adequate state funding, even though no question addressed this issue. It should be noted that most of these interviews were completed during April, May, June and July 2002. The state of Tennessee virtually shut down during the first week in July as the legislature grappled with the passage of a state budget. One interview was completed during the week of the Tennessee government shutdown. Table 4.3 shows the effects of lack of funding as perceived by these National Merit Scholars.

Students expressed concern over the lack of adequate state funding by the state of Tennessee and expressed that a continued lack of state funding would have an adverse effect on the perception of quality of the university. Students expressed concern over the possibility of faculty attrition and inadequate faculty salaries that they felt would lead to a decline in the overall quality of education at UTK. One student said:

Table 4.3 Perceived Effects of Inadequate State Funding	
Fewer teachers, faculty attrition	9
Poor Faculty salaries	7
Perceived lack of commitment to dedication to academics	7
Decline in quality of education	7
Fewer classes	5
Poor maintenance and upkeep of buildings and grounds	5

You need to be able to retain the good professors that are here because there are a lot of them. But they've been leaving and it's harder to get good ones when you can't pay them as much. I think that ought to be prioritized in the way that money is spent. (#8)

Another student reported:

We're losing professors because of the funding issue, then the quality is going to go down. I mean I know one department that hasn't been fully staffed since I've been here in the college of agriculture. That's because they can't pay enough to hire anyone to come in and teach. (#10)

Other students perceived that the continued lack of adequate state funding will lead to fewer classes and poor maintenance of buildings.

I've just been discouraged because I think the university has suffered. [because of inadequate funding] When I came, I looked at the catalogs for Vanderbilt and UT and I said, "Oh look at all these great classes UT offered." But now, they're offered in the spring, but not the fall, or every other year. That's because of the funding. (#4)

Participants from out of state were not aware of the budget crisis in Tennessee before attending UTK, but they quickly learned of the crisis and speculated on its effects.

Well, I wasn't aware of the budget crunch or anything before I got here. And it's kind of been a disappointment to see that education isn't valued as highly in this state as I thought it would be. I feel like it's [budget crisis] has already affected my education because I've had classes which are crowded. It's got to impact education. (#25)

Summary

Before enrolling at UTK, sixty-eight percent (68%) of these participants perceived the academic quality at the University of Tennessee to be lower than other similar state institutions. Upon attendance for at least two semesters,

twenty-one of the twenty-five participants noted a change in perception. (84%) Twelve participants noted only positive changes in perception and five noted only a negative change in perception, while four noted both a positive and a negative change in perception. Four participants noted no change in perception after attendance.

Positive changes in perception of quality were attributed to personal experiences with faculty, personal attention from honors staff, involvement in UTK activities, study abroad, internships, superior programs of study, and challenging coursework. Negative changes in perception were attributed to misconduct on the part of a past UTK president, the UTK administration, an unfortunate incident with a UTK faculty member and funding.

Students perceived that a continued lack of adequate funding would affect the university negatively by faculty attrition, fewer classes, less money for technology, higher tuition, and inadequate facilities maintenance. The lack of state funding was perceived as evidence of a lack of commitment to higher education on the part of the State of Tennessee. Participants also reported that a continued lack of adequate funding would adversely affect the educational value and quality of a degree from the University of Tennessee, Knoxville.

Research Question #4
What suggestions do National Merit Scholars offer for making the University of Tennessee more attractive to high ability students?

While one participant stated that he liked UT just fine and didn't have any suggestions, twenty-four participants had multiple suggestions for improving the university in order to make it more attractive to high ability students. Thirty-two

Table 4.4 Suggestions of changes for Improving UTK to make it more attractive To National Merit Scholars	
Suggestion Category	No. of Suggestions
UTK Personnel	22
UT Academics	15
Student Satisfaction	13
UT Programs	11
UT Recruiting	11
UT Facilities	8
Funding	7
Scholarships	6

Students listed more than one suggestion

categories emerged from the massive quantity of suggestions. These thirty-two categories were then reduced into eight classifications by clustering similar topics and developing descriptive titles. Table 4.4 outlines the eight categories and numbers of suggestions offered in each category.

UTK Personnel

Twenty-two suggestions were made in the category designated UTK Personnel. UTK Personnel included faculty, honors program staff, and UTK administration. Seventeen participants made suggestions that focused on the UTK faculty. The majority of suggestions were recommendations to provide more publicity and information about the outstanding, high quality UTK faculty to prospective students, guidance counselors and parents. These participants recommended that in order to recruit more high ability students, several current qualities of the UTK faculty should be publicized more widely.

- ❑ UTK faculty's accessibility to students
- ❑ UTK faculty's caring, personal attention to students

- ❑ UTK faculty's dedication to the institution and to students
- ❑ The impressive educational and research backgrounds of present UTK faculty
- ❑ That UTK faculty provide not only a quality academic experiences but can relate real world experience in their area of expertise

These seventeen participants generally stated that they did not feel prospective high ability academic students were aware of these qualities they had found in UTK faculty. Participants related their own personal experiences as evidence of these qualities. One participant reported that while he was a member of a very large science class, the instructor still learned the names of all students in the class. Another student reported that, despite a large Psychology class, the instructor returned homework in a timely manner.

In addition, these seventeen participants stated that they had been impressed with UTK faculty's educational background, practical, real-world experiences, research opportunities and helpfulness. According to these seventeen participants, more publicity about the UTK faculty would help attract more high ability students. One participant stated:

I think there are really smart people in that department [Engineering] that have done some real good things in the professional world. Research and things like that. (#7)

Another participant suggested:

I would let them know that the teachers are a good asset. You're not just learning your major out of books. They're not just lecturing to you or giving you something to read. They are part of what teaches you. (#16)

Four participants suggested that a good recruiting tool for the university would be to connect potential students with faculty early in the recruiting efforts. One participant suggested:

I think you'd have to come up with a way to show them that UT was giving the same high quality education as everywhere else. And how would you show that? Encourage connection between faculty and incoming students so they would know what kind of quality professors, teachers and educators we have. You have people who are out in the work force who feel they have been well prepared by the institution. (#9)

While some participants suggested that UTK publicize faculty with real-world experiences, four more participants suggested that a good way to recruit more National Merit Scholars would be to hire more faculty with real-world experiences, as well as academic credentials.

I think that when they hire teachers, they should hire teachers with real world experiences. To put people in real world settings, you need good teachers." (#12)

One participant in particular reported that the quality of an institution's academic education was directly affected by both the individual student and by the quality of its professors. This student also voiced the opinion that due to the funding crisis, UTK's quality professors were likely to leave.

Personally, I think it [quality of education] has to do with the individual and with the professors. And we're losing professors because of the funding issue. Then the quality is going to go down. (#10)

Thirteen National Merit Scholars also spoke highly of their experiences with the Honors Program staff and suggested that the personal attention received

from the Honors Program staff should be publicized and that the Honors Program should be expanded.

I think my main suggestion would be for the university to offer more honors classes. If this were developed, more National Merit Scholars and honors students might be attracted to UT, and other students would still have the same classes available to them. (#4)

Another student reported:

I really enjoyed it [the Honors Program]. Anytime I need anything I just go over there and they'll tell you who to call. If I need a recommendation for a scholarship or anything, they're right there. (#15)

UTK Administration

Twelve participants suggested changes in administrative policies at UTK, administration's management and stewardship of resources, designation of scholarship awards and administrative salaries and overhead would attract more high ability students.

I do wonder about the efficiency of the administration here sometimes. I know that they could use money, but I wonder about the things they are spending it on. You know about that bridge they're building to the AG campus. That's costing millions of bucks. And campus beautification, making things look better. That's all well and good, but you need to have enough classes first. And you need to be able to retain the good professors that are here because there are a lot of them. But they've been leaving and it's harder to get. That's all well and good, but you need to have enough classes first. I think that ought to be prioritized in the way that money is spent. (#8)

Three participants suggested that the UTK administration did not adequately value education as evidenced by the amount of state money participants perceived to be spent on sports and lowered admission standards for athletes. Eight participants made comparisons between what they perceived as the

amount of emphasis and money placed on sports with that placed on academics. Participants further reported that they believed the UTK administration should become more dedicated to education. This perception was not only associated with the amount of money appropriated for sports. Participants also perceived inequities in the educational standards for athletic students as opposed to academic students. Additionally, two participants referenced a recent article in the local news media suggesting academic impropriety on the part of the athletic program. One participant expressed:

I don't really have much of a basis for comparison, and a lot of my opinions might be unsubstantiated, but I think there's a problem with not respecting teachers and professors as much as they [administration] could. And that's shown by allowing football players to get worthless degrees and allowing people to do their homework for them. That's a complete disrespect for professors and what they're trying to do. It's a complete disrespect for all the students who are earning their degrees. (#23)

Another student voiced this opinion:

UT hasn't really impressed me with its dedication to education. It seems to me that they spend much more money on football and other things that aren't really important to me than they do on making sure there are enough teachers or good classrooms. (#19)

Additionally, six participants suggested changes be implemented in administrative policies including better articulation with community colleges, raising admissions standards, lowering administrative salaries, improving advising and efficiency in administration. One participant reported an unfortunate incident in the handling of student records:

It also seems sometimes that UT puts obstacles in students' way. I realize this isn't purposeful, but I have seen too many of my friends have their graduations delayed because of poor advisement, or

even fail to get into medical school because UT didn't send their information the way they were supposed to. Unfortunately, that kind of thing tends to create bad feelings in the students, and decrease trust in the university. (#19)

Another participant expressed concern over present admissions standards and scholarship distribution.

I've heard about them trying to go after the better students and trying to make a better university. But I don't think they're doing that. I saw in the paper [Daily Beacon] where they [administration] are offering African American scholarships. (I'm not speaking on that subject at all, so don't misunderstand me). But the student's criteria was something like a 3.0 on their high school GPA and an 18 on the ACT. I didn't even think you could get in without an 18 on the ACT. I think that's pathetic. It's lowering standards. If you do that, and I don't care if they're golden students, if they are making 18's on the ACT that doesn't make it. Well, you have athletes doing that and stuff. I'm not concerned about the athletic thing. But you can't expect to recruit good students when you're giving away money to students who make 18 on the ACT. (#7)

In addition, suggestions were made that the administration should be more accessible to students. One participant stated:

I think [the administration should] seeking the student's opinion a lot more and then acting on it. Or occasionally doing something the students wanted or that's directly focused on student life. (#11)

One participant noted that current UTK President, Dr. John Shumaker, had announced an open door policy for students and that this was a definite step in the right direction.

UTK Academics

Twelve participants recommended the following changes in areas related to UTK academics:

- ☐ UTK should strive to achieve better rankings
- ☐ UTK should emphasize academics, not sports

- ❑ UTK should consider offering more flexibility in coursework
- ❑ UTK should strive to implement personality testing aimed at aiding students in selecting a major
- ❑ UTK needs to limit its class sizes, striving for smaller classes
- ❑ UTK should implement a more selective admissions policy
- ❑ UTK needs to combat the party school image
- ❑ UTK should place less emphasis on research and more on teaching

One participant suggested that until UTK advances in the rankings and ratings game, the university would continue to be viewed as a second-class school. (#3)

This same participant also suggested that although the sports program at UTK was highly visible, the academic program was less visible. In the opinion of this student potential students, teachers, parents and the population in general need to be made aware that UTK is not all about sports. Other participants reported that they wished other people in the state valued education as much as athletics.

Another participant suggested that better advising might bring more National Merit Scholars to UTK. A fourth suggested that UTK provide more flexibility in coursework. One participant stated:

You probably couldn't do it very easily, but I wanted to go into Nursing. Every single class I have to take is preset. There are only a couple of electives. Maybe I would like to take a different kind of Biology. So if I had to have that [Biology], I could take a different Biology. Just different ways of getting the credits you need. Or if they wanted to take a different track. Because if you want to be a Biology major you can take who knows what. They're not open with what kind of classes you can take. (#16)

Another participant indicated that help with selecting a major would attract Merit Scholars.

Making students more aware of what majors are available and, and I know this is a lot of personal attention, but maybe some kind of an interest survey, because if you want to attract students, send them an interest survey." ...kind of like the Myers Briggs and then

match that with the majors offered here at UT. I think what would be good for that personality. Because I know one major problem I've had is choosing exactly which major I want. If I felt like the college cared enough about me to actually take the time to make recommendations, I would really think they cared. (#1)

Three participants suggested that smaller classes would attract more National Merit Scholars. One participant explained it this way:

Class size. I haven't had as much of a problem, but I know other students do, in class size. Because I can take honors classes where there are maybe 10 people in them as opposed to 100 in classes. I've been in big classes like that and you don't get to know your professor at all. And I guess you don't know what you're missing if you get classes that size. But if you get small classes with like six people, like I have in math, you get to know the professor. You get to go over to his house for dinner and stuff like that. And if you ever need a recommendation for something, they know you so well. (#15)

Six participants commented on the reported UTK party school image, and expressed the opinion that such an image deterred high ability students from applying.

And I think also this perception that UT is a big party school is a big negative for those of us that are there to get an education and that are trying to do that. (#18)

Two participants suggested that UTK should place less emphasis on faculty participation in research and provide more rewards for good teaching. Both participants suggested that there are great teachers and great researchers but these qualities might not be manifested in one individual. One participant stated:

I think there are teachers who teach and teachers who do research. And sometimes researchers don't make such good teachers. I think there should be equal rewards for those who teach and those who do research. (#12)

Student Satisfaction

Twelve participants made recommendations in the area of improved student satisfaction. Participants suggested changes that would increase personal attention provided for students, improve the roommate selection process, improve dormitory life, improve meal plan options, provide equality in the support of student organizations, upgrade the present fraternity system and encourage students to get involved in student life.

Students suggested that other UTK areas might learn from the policies of the Honors Program in areas where improvements could be made to enhance and increase personal attention for students. Students reported that they desired the feeling that the university really cared about them.

Four participants reported that the present roommate selection process and assignment of dormitory rooms needed to be improved. One participant spoke at length of the difficulty he had after being assigned a roommate who was not academically inclined. The same participant spoke of the difficulty he had with trying to study in his present dormitory room and suggested that freshmen not be required to live in a dormitory. He suggested that dorms were best suited for students who weren't "really prepared to work" (#6), but were more interested in extra curricular activities. Other participants reported similar comments.

Sometimes they [roommates chosen by the university] don't get along too well. I've also heard horror stories that they just can't stand each other and I have to think that there's got to be a better way to do that. That was one of my biggest fears coming in. I was afraid that I was going to get with some punk rocker who was doing drugs and would get us both in trouble for something. And God

blessed and gave me a really strong person who was very nice and we got along very well. But at the same time I have to think how it could have been different. (#13)

Three participants expressed concern and dismay over what they perceived as inequality in the university's support of student groups. Students mentioned not only what they perceived as inequity in scholarship awards to minorities, but to the university's perceived favoritism for some specific cultural and ethnic groups as opposed to others. One participant shared:

Oh, one other thing that kind of confused me, the black cultural center being built is a great symbol. But I have to wonder - where's the Christian cultural center, where's the Asian cultural center, where's the Caucasian cultural center? It seems like in trying to emphasize diversity they have institutionalized segregation. You should have a cultural center, that's great. Black cultural center leaves a bad taste, just as it would if there were a Caucasian Cultural center. I just think that's the wrong way to go. I think if there's a private institution that wants to do something like that, that's one thing. I don't have any problem with the Baptist Student Union or Methodist or whatever. But those are all private organizations. I think if someone were to start a Muslim center or an Arabic center, even a Jewish center, I don't have problems with that. They are religious, but not officially sanctioned and funded by the University. (#13)

Two participants stressed the importance of the UTK Greek system in providing an incoming freshman with a sense of community. One participant, who spoke from personal experience, spoke of his first few days at UTK. The student came from another state and to his knowledge, no one from his high school or region attended UTK. He reported feeling intensely lonely until being accepted into a fraternity. Another participant, who acted as president of his fraternity, suggested that the entire Greek system at UTK should be enhanced

and expanded. He perceived that while the UTK administration allowed the Greek system to continue, they did not foster or encourage its growth.

Two participants also suggested that UTK encourage new students to get involved in student life. One participant who lived off campus stated that he wished he had been able to live on campus in order to take advantage of some of the many diverse opportunities offered by the university. This participant stated:

Definitely get involved. I do live off campus and I don't do a lot of extra stuff. I mean I go to my classes, I go home, I study. I really wish that I had more time if I lived on campus to get into the student clubs. To take a physical education class, or do the student movie thing. It just makes it more of an experience. (#16)

UTK Programs

Eleven participants suggested changes in the area of UTK academic and non-academic programs in order to attract more National Merit Scholars. The suggestions included:

- ☐ Upgrade the Honors Program
- ☐ Stress and publicize good programs
- ☐ Provide more internship opportunities
- ☐ Provide more competition for academic students
- ☐ Eliminate or revamp SGA
- ☐ Shorten hours of operation for students at HPER facilities (in order to save money which could be reallocated to academics)
- ☐ Offer more classes during the summer
- ☐ Upgrade the music library

Five participants suggested that the present Honors Program should be upgraded, and its visibility increased and more highly publicized. Participants were impressed with the benefits offered by the Honors Program including early registration, the opportunity to study under full professors, the excellent honors

staff, and the personal attention honors students receive. One participant remarked:

Making the honors program more visible. In the literature that the students get when they're applying, it's downplayed. It's not one of their real primary focus. I know from getting other college's mailings, especially once the National Merit was announced, everybody was telling me about the honor's program. At UT you have to look for it if you find it. Once you get scholarships, UT's really good about making sure you know about the honors program, but you're not going to get scholarships if you don't apply here.

One participant suggested that it should be easier to locate the Honors Program on the UTK web site. Five students also suggested that the university increase the funding of the Honors Program in order to provide more classes. They suggested that more challenging honors classes would attract more high ability students.

I think my main suggestion would be for the university to offer more honors classes. I'm sure many of the faculty would be more than happy to teach honors sections of classes that are offered. There is definitely a lack of funding as well as interest from higher-ups. Also, it is under staffed. Lack of monetary support is a number one factor. (#22)

Two students spoke of the excellent benefits they had gained through participating in internship opportunities while at UTK and suggested that adding more internship opportunities would be an excellent way to attract high ability students.

They [UTK] should talk about the job opportunities that are out there. I've had three really good jobs [Internships] and that's important. That means a lot when you get into the professional world [as a student]. And I was paid well and learned a lot, even on a personal level. The experience was valuable. And when you talk about the kind of money you make on these internships, people

listen. I think that's better than scholarship money in a sense because that's indicative of what will come later. (#7)

Another participant suggested that an increase in the number of academic oriented competitions available to high ability students would help attract these students. One participant suggested that UTK should revamp or eliminate the Student Government Association, revise orientation and make other changes.

SGA is one of my soapboxes, too. I remember two or three years ago when the Party of Darkness had the referendum to dissolve SGA, which I voted for. I thought it was a wonderful idea. I thought, "Let's just see what happens. They're [SGA] obviously not doing anything at the moment. But one of the things that I've noticed is that the people who talk about SGA as being a bad organization usually don't vote. So I make it a very big point. If I hear anyone say that I'm not going to vote in the election then I say that I don't ever want to hear you say anything about SGA until next year when you can vote because I really get tired of that. But at the same time, I don't think SGA has given us a reason to vote. It's kind of a Catch 22 because they don't have the backing of the student body to do anything and the student body doesn't back them because they don't do anything. Which is why I thought it was a good idea to dissolve the SGA and let's start over." (#13)

Recruiting

Eleven participants made suggestions in the areas of recruiting and marketing to high ability students to make UTK more attractive. Some of the suggestions mentioned as part of other research questions are summarized here.

Participants suggested changes in recruiting to include the following:

- ☐ Change recruiting brochures to target high ability students
- ☐ Stress academics in recruiting
- ☐ Use students as recruiting ambassadors
- ☐ Provide more personal recruiting
- ☐ Recruit high ability students from within a six hour radius
- ☐ Provide more special honors weekends for high ability students
- ☐ Provide interaction with professors for recruiting purposes with high ability students

- Recruit more directly to guidance counselors

One participant suggested:

I think if they did some kind of special weekend like with an RSVP. They could bring you in and give all these National Merit Scholars a tour and show them the honors facilities. Make a big presentation and a T-shirt with a Big T on it. If they want you to come here, that's all it really takes. I don't think it has to be too fancy, just all together. (#25)

Also noting he was from out-of-state, this student spoke to the importance of recruiting National Merit Scholars in at least a six-hour radius of Knoxville.

Like I had to seek out UT because they didn't seek me out at all. My Dad one day just said, "Hey, did you ever think about the University of Tennessee?" I said, "Not really." And he said, "Well, let's schedule a tour." I was never contacted in any way. I live like four and a half-hours away. There are kids in Tennessee that live farther away than I do. You'd think they could just block off a region that's within driving distance. Like six hours. That's hundreds of kids they could contact. (#25)

Three participants suggested that UTK recruit more directly through Guidance Counselors. Problems with high school guidance counselors and their perception of the university have already been addressed earlier in this chapter. Nevertheless, these students suggested that in order to attract more National Merit Scholars, UTK needed to develop a better relationship with high school guidance counselors.

Probably the most effective way [to market UTK to high ability students], I'd say, is the guidance counselor in the local schools. Within Tennessee, that's rather easy, but that depends on the guidance counselors being in favor of UT and willing to really push the college and things like that. (#14)

Three participants suggested that one of the most effective tools UTK should use to attract more National Merit Scholars was the use of student ambassadors,

and particularly, current National Merit Scholars attending the university. Students suggested that current National Merit Scholars visit area high schools to talk with potential high ability students. Students reported that they felt a lot of high ability high school students had misconceptions about academics at UTK and voiced the opinion that the best way to alleviate these misconceptions was to send high ability students to recruit other high ability students.

Two students also suggested that the mentor system for incoming freshmen was beneficial to National Merit Scholars. One student reported that she had served as a mentor for an incoming freshman this year. The student reported that this experience was beneficial to both the incoming and the current student. Students suggested that an expansion in this system might prove beneficial in recruiting high ability students.

Fourteen National Merit Scholars, throughout the course of their interviews, suggested that to recruit high ability students, more personal attention was needed. Students suggested that this be accomplished through personal phone calls, letters, small groups during campus visits, and a specific personal letter to each high ability student explaining why UTK was a perfect fit for that student.

One student suggested:

Make them feel important. Call them. Make them feel that this is the best place for them. A letter in the mail like I received from North Carolina State after they found out I had decided to go someplace else saying that I had an \$8,000 scholarship is too late. That's a good chunk of money, but I didn't care. I was already mad. (#7)

UTK Facilities

Ten participants suggested that improvements should be made to UTK facilities in order to attract more high ability students. The students suggested improvements that included:

- Improved campus beautification
- Better parking facilities
- Better traffic flow
- Completion of the green way
- Less construction during peak school terms
- Improvement in physical aspects like lawn upkeep, trash pickup and maintaining present grounds

Students readily admitted that parking and traffic flow were problems already apparent to the UTK administration. However, students appeared to perceive that these problems were not being addressed adequately. Seven participants suggested that UTK needed to make additional improvements to enhance its present campus, including a more planned architecture so that the campus architecture improvements were similar to present architecture, mowing the lawns, pruning hedges, repairing sidewalks, and other physical maintenance and improvements. While several new buildings have been erected or renovated on the UTK campus, students reported that they perceived that most of the new buildings were in support of the athletic program. One student perceived:

In the past 15 years the athletic program has built a new building every year and for the past ten the university hasn't built a single one. They haven't had a new residence hall in 30 years. I think campus beautification, too. I think it's sad the way it is here. Just the fact that when you walk down the street - they take the time to plant these trees, but no body prunes them. I find myself breaking off branches, you know? I don't know how they do it, but I know they just maul the yard every time they mow. As far as landscaping, I've always had this theory...if you put a few people

and say, "this is your area" then they take some personal pride in that area of the campus. I think that may help. But you walk around this campus and there are weeds everywhere and I just don't see how they're going to add green ways. How are they going to keep them up when they can't keep up what they have already? That's just going to go to trash. And walking around now it's a lot of little things: how cracked the sidewalks are, how there aren't any trashcans anywhere. From here to the humanities you may pass 5 trashcans. There are none between here and down on Volunteer anywhere. And so trash gets out everywhere. You walk down and there's grass growing up everywhere. (#11)

Participants did not perceive that the campus master plan would adequately provide for campus beautification, housing or parking needs. Interestingly, they did not seem to recognize new academic buildings and renovations, rather they seemed to focus on what they perceived as inadequate housing (dormitories and fraternity houses), and needs specific to their own areas of study (Music and Business) as indications that UTK was not addressing their needs adequately. Further, students did not appear to be aware of the fact that athletic buildings were constructed using money generated from the athletic program. Another student compared the UTK campus with her institution of choice, the University of Chicago. The student visited both campus sites before enrolling at UTK for financial reasons. She related:

I actually went to the University of Tennessee and it didn't seem like a very beautiful place. But Chicago's campus is beautiful. Chicago's architecture and this may be superficial, but it was better organized than UT's architecture. Like with the quad set up. I don't think UT really has a plan. I guess it would be hard as UT is so old, but it just seems like they just stick buildings where they have room. (#3)

State Funding

Sixteen participants mentioned the lack of funding and suggested that better funding would aid in the recruitment of National Merit Scholars by providing more funding for programs, faculty salaries, smaller classes, better facilities and less tuition for students. Five participants suggested that to attract more National Merit Scholars, UTK needed more state funding for continuation and improvements of programs, additional course offerings, and to retain high quality instructors. One participant, whose brother is also a National Merit Scholar, reported:

My brother is a junior and he wants to go into civil engineering. It's natural for me to want him to go into engineering here because I know it well. But he's also applying to West Point and to the University of Texas and here. I wouldn't discourage [him] from going to either of those other two schools. A lot just because of the funding issues which is a big concern. If that doesn't get turned around quickly, I'm concerned about what that's going to do to the quality of his education over the next five years." (#9)

Scholarships

Six participants suggested changes should be made in the awarding and distribution of scholarships in order to make UTK more attractive to National Merit Scholars. Five participants reported that more scholarships for high quality academic students should be made available. One participant expressed the view that just being a National Merit Scholar should qualify students for more scholarships at UTK and suggested that more information about scholarships should be available to students and guidance counselors.

I think that [the] selection process [for other scholarships for National Merit Scholars] should replace the other selection process

for other scholarships. They [National Merit Scholars] should automatically qualify for the larger scholarships. I asked my guidance counselor [about other scholarships at UTK]. I don't know if you know, but to become a recipient of one of these big scholarships, your guidance counselor has to recommend you. And so I asked my guidance counselor from my high school if she would recommend me for one of the bigger scholarships, and she wouldn't do it. She just said, "Oh it's so hard to get a scholarship to UT." And then I never heard anything else about it. (#1)

Another participant expressed the opinion that new scholarships available for National Merit Scholars, instituted in the last two years were a positive improvement on the part of UTK. She commented:

Well, I guess the fact that the year after I came was the year they started a scholarship specifically for National merit Scholars. And that's not fair. I think that's a good improvement. National Merit Scholars have an automatic \$8,000 scholarship now that they didn't have when I applied! I would like to get that money! That's one thing. (#10)

Summary

Participants made suggestions in eight broad categories that they felt would enhance the attractiveness of the University of Tennessee to high ability students. These areas were UTK Personnel, UTK Academics, Student Satisfaction, UTK Programs, UTK Recruiting Techniques, UTK Facilities, State Funding and Scholarships. Students suggested publicizing the positive aspects of the university and some changes in other areas.

These National Merit Scholars suggested that the university should provide more publicity to potential high ability students, teachers, guidance counselors and parents about the high quality faculty, opportunities offered at UTK, Honors Program and superior academic programs. They suggested

changes be made in recruiting brochures, enhanced emphasis on academics, recruiting to guidance counselors and the use of high ability students as recruiters. They also suggested that more personal attention, improved facilities and increased levels of scholarships would attract high ability students. These participants suggested that changes be made in administrative policies to make them more student friendly and that more state funding was needed to provide the revenue needed to recruit and retain National Merit Scholars.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

Overview of the Study

One quantifiable measure of an academic institution's overall quality is the number of high ability students enrolling each year. National Merit Scholars are high ability students who have been recognized for their scholastic achievement. John W. Shumaker, current president of the University of Tennessee, has expressed the desire to implement improvements at the university that will enhance and strengthen the institution's image, academic reputation and overall quality. One data point in President Shumaker's "UT Scorecard" is the number of National Merit Scholars attending the university.

This research study was designed to describe the factors central to the decision to attend UTK by National Merit Scholars who had attended UTK for at least two semesters. In addition, the study sought to describe their perception of the university's quality and any change in perception that may have occurred following enrollment and attendance for at least two semesters. The study was guided by the following four research questions:

- ❑ What factors influenced National Merit Scholars to enroll at UTK?
- ❑ What indicators of institutional quality do National Merit Scholars use to assess the academic reputation and quality of an institution?
- ❑ What perceptions did enrolled National Merit Scholars have about the academic reputation and quality of UTK before they enrolled and did that perception change in any significant way after having attended for at least two semesters?

- What suggestions do National Merit Scholars offer for making the University of Tennessee more attractive to high ability students?

Twenty-five face-to-face interviews were completed during April, May, June and July 2002 and the data analyzed. After analyzing the data, a narrative was completed providing answers to the research questions and using quotes to illustrate major points. The following is a summary of the findings of the four research questions.

Summary of Findings

1. What factors influenced National Merit Scholars to enroll at the University of Tennessee, Knoxville?

The primary reason reported by National Merit Scholars influencing their decision to attend the University of Tennessee was the perception that the university offered an exceptional educational value. The financial aid/scholarship package offered, superior programs of study, opportunities offered, and the honors program were factors influential in this perception. In addition, a campus visit to UTK further increased the institution's attractiveness by providing potential students with first hand interaction with first-hand interaction with faculty, students and honors staff.

No student reported that their High School Guidance Counselors had encouraged them to apply to the University of Tennessee as their first choice institution, only as a backup. Indeed, eleven participants reported that their High School Guidance Counselors discouraged them from attending UTK, encouraging them to attend a "more prestigious institution." The Guidance

Counselor's attitude seemed to be viewed by these participants as an indication that the Guidance Counselor perceived UTK to be less prestigious and less academically challenging.

2. What indicators of institutional quality do National Merit Scholars use to assess the academic reputation and quality of an institution?

The National Merit Scholars participating in this study reported four broad areas of indicators of quality they would use to assess the quality and reputation of an institution: financial (financial aid/scholarship, funding, tuition); institutional (admissions standards, location, campus visit, recruiting brochures, library holdings, class size, emphasis on sports, and rank); academic (results after graduation, superior programs of study, and quality of faculty members); and personal indicators (family, former students, guidance counselors). Of these, academic indicators in conjunction with financial indicators were those reported to be most important.

The financial aid/scholarship package offered by the University of Tennessee was reported to be the factor that most influenced these National Merit Scholars to attend UTK. Although these National Merit Scholars were concerned about the academic quality and reputation of UTK before enrolling, the financial aid/scholarship package helped to override these concerns. Additionally, the scholarship/financial aid package and campus visit outweighed the recommendations of these students high school guidance counselors who recommended these high ability students attend another university guidance counselors perceived was more prestigious.

3. What perceptions did enrolled National Merit Scholars have about the academic reputation and quality of UTK before they enrolled? Did that perception change in any significant way after they had been in attendance for at least two semesters?

Sixty-eight percent (68%) of these National Merit Scholars reported that before enrolling at UTK, they perceived that the overall academic quality of the university was either poor or average. After enrolling and attending UTK, eight-four percent (84%) of these National Merit Scholars indicated a change in perception of the academic quality of the university. Twelve reported a positive change; five reported a negative change; four reported both positive and negative changes; four reported no change.

Three factors were reported as influencing a positive change in perception. For some, interaction with the UTK faculty in classroom experiences, research projects, reading groups and other academic related clubs was largely responsible for this change in perception. For others, superior programs of study and the challenging coursework offered through the Honors program contributed to their positive change in perception.

Participants who reported a negative change in perception indicated that the factors that influenced the change in perception were the UTK administration (low admissions standards, poor resource management, perceived emphasis on sports, inefficiency in handling student records), class size and lack of state funding.

4. What suggestions do you have for ways of improving the University of Tennessee, Knoxville to make it more attractive to National Merit Scholars?

National Merit Scholars made suggestions in eight broad areas that they felt would enhance the attractiveness of the University of Tennessee to high ability students. These areas were UTK Personnel, UTK Academics, Student Satisfaction, UTK Programs, UTK Recruiting Techniques, UTK Facilities, State Funding and Scholarships. Students suggested publicizing the positive aspects of the university and changing others.

The students suggested that the university should provide more publicity to potential high ability students, teachers, guidance counselors and parents about the high quality faculty, opportunities offered at UTK, Honors Program and superior academic programs. They suggested changes be made in recruiting brochures so that academics is highlighted, placing less emphasis on student life and athletics. Students also suggested recruiting to guidance counselors and using high ability students and UTK faculty as recruiters to improve the university's attractiveness to high ability students. They also suggested that more personal attention, improved facilities, and increased levels of scholarship awards would attract high ability students. Finally, participants suggested that changes be made in administrative policies to make them more student friendly and that more state funding was needed to provide the revenue needed to recruit and retain National Merit Scholars.

Discussion

Researchers have studied the college choice decisions of students since 1957 to determine factors affecting a student's college choice. Research in the past twenty years has identified institutional characteristics, financial constraints, student ability, family income, personal factors, parents' educational attainment, timing of scholarship offers and expected benefits of education as factors affecting all students in their college choice decisions.

For academically gifted students, including National Merit Scholars, past research has reported that institutional factors like rank, reputation, admissions standards and perceived prestige were the most important factors in attracting National Merit Scholars. (Conn and LeBay, 1996; THEC, 1985; Wanat, 1989; Wanat and Bowles, 1992; Senecca and Taussig, 1987; Flint, 1992; Coccari and Javalgi, 1995) The findings of the current study differ from these findings.

This research study suggests that while institutional factors do play a significant role in the designation of a first choice institution, financial factors (scholarships, tuition, and financial constraints) may play an even bigger role in the decision of which institution to attend. Financial factors (scholarship offered, financial constraints, cost of tuition), in addition to the perception of a superior program of study in student's intended major, were the most influential factors reported by these students. Interestingly enough, the majority of these participants reported that their parent's income was above \$60,000 per year.

This study concurs with the findings of Litten (1982) who reported that net cost was more influential than amount of scholarship offered. While all students

reported that they had received scholarship offers from other universities, twenty-one reported that they chose to attend the University of Tennessee because they perceived it was an exceptional educational value. Students reported that at other institutions they would not have been awarded enough scholarship money to cover tuition, books, and room and board, whereas at UTK they reported up to \$2,500 per year in excess of their expenses.

The findings in this study also concurs with the 1985 THEC findings that financial aid was the most important factor to National Merit Scholars attending a Tennessee public university, but differs from Wanat's findings (1981), that the scholarship award was not a determining factor for National Merit Scholars. Further, in contrast to the THEC study which reported that superior programs of study were a secondary factor, in this study scholarships offered in conjunction with a program of study were the primary factors influencing attendance.

Past research has suggested that personal factors (parents, guidance counselors, teachers, friends, distance from home, size of university) play an important role in the decision of National Merit Scholars in selecting an institution. (Hossler, Braxton, Coopersmith, 1989; Wanat, 1989) While this study found that parents do exert some influence financially in these National Merit Scholar's college choice, they did not appear to be strongly influential otherwise. The study also found that, while high school guidance counselors do serve as a source of information about an institution, students do not always follow their advice. Interestingly, no participant reported that their high school guidance counselor suggested that they apply to UTK as a first choice institution, only as a

backup institution, and indeed, eleven students reported that their high school guidance counselors discouraged them from attending UTK and encouraged them to attend a “more prestigious institution.” It is significant to note that these students chose to attend UTK against the advice of their high school guidance counselors.

The 1989 Wanat study found that friends were not important in influencing National Merit Scholars in their choice of institutions to attend. While Wanat noted that high ability students do not necessarily select schools because their friends are attending, they do seek information about an institution from friends. This study concurred with that finding. Additionally, the study reported that current and past UTK high ability students might be effective in recruiting high ability students.

Prior research (Senecca and Taussig, 1987; Flint, 1992) has reported that academic prestige was the most important factor in a high ability student's college choice attendance. While these students reported that they desired to attend a prestigious university, perceived prestige was not a deciding factor in their attendance. In addition, eleven students stated that, in their opinion, all undergraduate education is essentially the same.

During the course of the interviews, several perceptions about the university emerged about the UTK Athletic Department, UTK administration's support of the Greek system, and the recruitment of National Merit Scholars by the Honors Program.

These National Merit Scholars perceived that recruitment of National Merit Scholars was solely based through the Honors Program at UTK. However, upon speaking with Dr. Tom Broadhead, Head of the Honors Program, he reported that recruitment of National Merit Scholars is administered through the Admissions Office. Participants perceived that most of the information they received about UTK academics came directly from the Honors Program staff even though Dr. Broadhead stated that Admissions was directly responsible for recruiting and distribution of information. One participant stated that it was difficult to find the Honors Program on the UTK web site and should be afforded a more prominent, accessible place on the web site. The University of Tennessee web site was revised in April 2003. The researcher accessed the current web site and found that finding the Honors Program was still somewhat difficult.

The participants perceived that the Athletic Department did not provide any financial support to the academic programs at the university. In addition, students reported that they perceived that the State of Tennessee, as part of the university's appropriations from the state, funded money for buildings in support of the athletic program. The UTK Athletic Department web site, however, reports that the UTK Athletic Department appropriates approximately \$1.6 million annually to the university, contributed \$800,000 to academic scholarships in the last academic year, and made a one-time donation of \$1,000,000 to the building fund for the new Hodges Library. (www.utk.edu/athletics)

Finally, two students reported that they perceived that the University of Tennessee administration did not adequately support the UTK Greek System, although this is not the perception of the heads of the UTK Fraternity and Panhellenic Affairs centers.

Finally, these National Merit Scholars, after having attended the University of Tennessee, reported that the University of Tennessee's faculty was its best asset. The students applauded the caring, personal attention they received from UTK faculty repeatedly. Not only did students report that the academic and professional credentials of the UTK faculty had impressed them, but students suggested that the best way to attract and retain National Merit Scholars was to involve the UTK faculty more directly in recruiting. Furthermore, when asked to relate a memorable academic experience while attending UTK, the majority of these students related an experience directly related to a UTK faculty member.

Conclusions

Based on the findings and discussion of the data from this study, it is reasonable to conclude the following:

- ❑ Pre-enrollment concerns about the academic reputation and quality of an institution from high ability students can be overcome with an attractive scholarship/financial aid package.
- ❑ While high school guidance counselors are strongly suggesting that high ability students attend other "more prestigious" universities, these suggestions are not always followed.

- Pre-enrollment concerns about academic quality can be altered if high ability students have a good experience before enrolling with a UTK faculty member. Almost as important in changing pre-enrollment concerns are the amount of emphasis placed in recruiting brochures on academics and a campus visit highlighting academic achievements.
- Before attending a public university, National Merit Scholars perceive them to be academically inferior to private institutions, except in their intended area of study.
- After enrolling at a university, perceptions of inferior academic quality can be altered through academic experiences with faculty and challenging coursework through an honors program.
- High ability students view a lack of sufficient funding for public institutions by a state as evidence that that state does not value higher education.

Recommendations for the University of Tennessee for Attracting More National Merit Scholars

As a result of the findings, the following recommendations are made:

1. Given the financial commitment required in recruiting and retaining high ability students, the University of Tennessee should decide whether it is reasonable to devote this amount of money at this time to the recruitment of National Merit Scholars.

2. Since National Merit Scholars reported that they were not aware of the UTK faculty accomplishments, UTK should make efforts to increase awareness of the UTK faculty's credentials, awards and achievements.
3. Before attending UTK, National Merit Scholars perceived the university to be a large, impersonal university. Students reported that the faculty and Honors Program staff helped change this perception. The university should explore ways to publicize its caring faculty and staff.
4. Participants reported that their high school guidance counselors did not recommend UTK as a first choice institution for high ability students, nor consider it to be an academically superior institution. UTK should develop a plan to publicize its high quality faculty and superior programs to high school guidance counselors in an effort to change the perception of UTK as a school where emphasis is placed on academics.
5. Since students perceived that the UTK Athletic Department does not contribute financially to the university's academic support, the UTK Athletic Department should determine how it can more strongly support and reinforce the UTK academic program and how best to publicize these efforts.

Recommendations for Higher Education

The following recommendations are pertinent not only to the University of Tennessee, Knoxville, but appropriate for other higher education institutions.

1. National Merit Scholars are a small percentage of those students who attend higher education institutions each year. Those in higher education should consider whether a one-shot test is a valid yardstick by which high ability

students are measured. Should universities be devoting so many of their resources to the recruitment of National Merit Scholars?

2. Higher education institutions should examine the image of the institution conveyed in recruiting efforts and make sure these reflect the academic quality and image they hope to convey.
3. An institution's faculty is a powerful recruiting tool in efforts to recruit high ability students. Additionally, an institution's faculty can be very effective in changing the academic image of an institution. Institutions should determine ways to utilize its academic faculty to recruit and retain high ability students. Institutions should consider ways to restructure its reward system to reflect excellent recruiting and teaching efforts by faculty.
4. In order to establish academics as a priority in higher educational institutions, collegiate athletic departments must make every effort to emphasize the highest academic standards and ethics for all involved in the athletic program. One impropriety on the part of any athlete or staff member causes the image of all collegiate athletics to suffer.

Recommendations for Further Study

On the basis of the findings in this study, research should be conducted in the following areas:

1. A comparative research study should be undertaken comparing current UTK recruiting practices for National Merit Scholars with those of other institutions more successful in recruiting National Merit Scholars.

2. A survey of high school guidance counselors should be conducted to determine their perceptions of the academic quality of the University of Tennessee, Knoxville.
3. Given the perceived image of the University of Tennessee as a party school, a study should be conducted to determine what factors contribute to the UTK party school image and detract from its academic reputation.
4. A large-scale quantitative student should be implemented to determine why National Merit Scholars choose one particular institution over another. This study should include other institutions in different areas of the country and should compare private and public institutions to see whether factors influencing the decision to attend are different or similar.

These are but a few suggestions for possible areas of further study stemming from this present study. As Bogue and Saunders state in their book *The Evidence of Quality* (1992), "...each college and university has the potential for excellence within its own mission." (p. 11) The challenge for the University of Tennessee at the present time is to define its mission and utilize resources effectively to meet its mission to be the best it can be.

REFERENCES

- Alexakos, C. E., & Rothney, J. W. (1967). Post-high school performance of superior students. **The Personnel and Guidance Journal**, **46**, 150-155.
- Anderson, Richard E. (1975). "Private/Public Higher Education and the Competition for High-Ability Students." **Journal of Human Resources** **10** (4): 500-11.
- Anderson, Richard E. (1976). "Determinants of Institutional Attractiveness to Bright Prospective. College Students." **Research in higher Education** **4**: 361-71.
- Arnold, Karen D. (1995) **Lives of promise : what becomes of high school valedictorians: a fourteen-year study of achievement and life choices**. San Francisco: Jossey-Bass Publishers.
- Arnone, Michael. (2003) "The Wannabes." **The Chronicle of Higher Education**, **49**, No. 17, A18 – 21.
- Astin, Alexander (1965). **Who Goes Where to College?** Chicago: Science Research Associates.
- Astin, A. W. (1965). "College preferences of very able students." **College and University**, **40**, 282-297.
- Astin, A. W. (1964) "Socioeconomic Factors in the Achievements and Aspirations of the Merit Scholar." **Personnel Guidance Journal**, February, 1964: 42, 581-586.
- Astin, A. (1985) **Achieving Educational Excellence: A Critical Assessment of Priorities and Practices in Higher Education**. San Francisco: Jossey-Bass.
- Atkinson, P. (1992) "The ethnography of a medical setting: Reading, writing And rhetoric." **Qualitative Health Research**, **2**, 452-474.
- Barton, David Jr., ed. (1993) "Marketing Higher Education." **New Directions for Higher Education No. 21**. San Francisco: Jossey-Bass.
- Bickman, Leonard and Debra J. Rog. (1998) **Handbook of Applied Social Research Methods**. Thousand Oaks, California: Sage Publications.
- Blumenfeld, W. S. (1967). "College preference of able Negro students." Paper presented at American Personnel and Guidance Association, Dallas, TX.

- Bogdan, R. C., & Biklen, S. K. (1982). **Qualitative research for education: An Introduction to theory and methods**. Boston: Allyn and Bacon, Inc.
- Bogue, E. Grady. (1998) "Quality Assurance in higher education: The evolution of systems and design ideals." **New Directions for Institutional Research**, 99, Fall, 1998.
- Bogue, E. Grady, and Jeffery Aper. (1999) **Exploring the Heritage of American Higher Education: The Evolution of Philosophy and Policy**. American Council on Education/Oryx Press. Westport, Conn.
- Bogue, E. Grady, and Robert Saunders. (1992) **The Evidence for Quality**. San Francisco, California: Jossey-Bass.
- Bradley, Mike. (2002) "UT Moves Up in College Rankings." **Tennessee Today**, September 13, 2002.
- Brubacher, John S. and Willis Rudy. (1997) **Higher Education in Transition**. New Brunswick, NJ: Transaction.
- Cain, Paige P., and McClintock, John.(1984) "The ABC's of Choice." **Journal of College Admissions**. Fall: 15-21.
- Campbell, R. and B. Siegel. (1967) "The Demand for Higher Education in the United States, 1919-64." **American Economic Review**, 57, p, 482-94.
- Carstensen, Peter. (2001) "Colleges and Student Aid: Collusion or Competition." **Chronicle of Higher Education**, 47, B24.
- Carnegie Foundation for the Advancement of Teaching. (1986) "How Do Students choose a college?" **Change**, 18, 29-32, 1986.
- Cartter, A. (1964) **An Assessment of Quality in Graduate Education**. Washington, D.C: American Council on Education.
- Chaffee, E. (1985) "The Concept of Strategy: From Business to Higher Education." In J. Smart (ed), Higher Education: **Handbook of Theory and Research**, Vol. 1. New York: Agathon Press, 1985.
- Chapman, David W. (1981) "A Model of Student College Choice." **Journal of Higher Education** 52: 490-505.

- Chapman, R. G & Jackson, R. (1987) **College Choice of academically able students: The influence of no-need financial aid and other factors.** New York: College Entrance Examination Board.
- Chronicle of Higher Education. **1999 Almanac.** Washington, D. C. 26, no. 1, 1999.
- Clark, Edward O., (1997) **Survey of College Plans of Maryland High Ability Students.** Annapolis, Maryland: Maryland State Higher Education Commission.
- College Entrance Examination Board (1976). **A Role for Marketing in College Admissions.** New York: College Entrance Examination Board. (Online www.collegeboard.com)
- College Entrance Examination Board (1980). **Marketing in College Admissions: A Broadening of Perspectives.** New York: College Entrance Examination Board.
- Coccari, R. and Javalgi, R.(1995) "Analysis of Students' Needs in Selecting a College or University in a Changing Environment," **Journal of Marketing for Higher Education**, 6 (2).
- Cook, R. W., Jr. and Zallocco, R. L. (1983) "Predicting university preference and attendance: Applied marketing in higher education administration." **Research in Higher Education**, 19 (2), p. 197-211.
- Corazzini, A., D. J. Dugan, and H. Grabowski. (1972) "Determinants and distributional aspects of enrollment in U. S. higher education." **Journal of Human Resources** 8 (1), p. 39-59.
- Craig, Diane D. (2000, 2001, 2002) "*Educational Statistics*" The Center, Gainesville, Florida. The University of Florida, 2000. (www.thecenter.com and www.thecenter.ufl.edu/data)
- Creech, Joseph D. (2000) **Student Achievement in SREB States.** Atlanta, Georgia: Southern Regional Education Board, 2000.
- Creswell, John W. (1994) **Research Design: Qualitative and Quantitative Approaches.** Thousand Oaks, California: Sage.
- Crosby, P. (1984) **Quality Without Tears.** New York: McGraw-Hill.

- Cronbach, L.J. (1975) "Beyond the two disciplines of scientific psychology." **American Psychologist**, 30 (2), 116-127.
- Delaney, Anne Marie (1998) Paper presented at the 38th Annual Forum of the Association for Institutional Research, Minneapolis, Minnesota, May 17-20, 1998.
- DeSalvo, J. and N. P. Ritchey. (1996) "The University Scholars Program: A Case Study in the Recruitment and Retention of High-Caliber Students." **College and University**, 71 (4), p. 21-25, spring.
- Douglas, P. and Powers, S. (1985) "Factors in the choice of higher educational institutions by students with high ability." **Journal of College Student Personnel**, 26, 552-553.
- Dunn, R. M. and H. Galper. (1969) "A Short-Run Demand Function for Higher Education in the United States." **Journal of Political Economy**, September/October.
- Educational Benchmarks** (2000, 2001, 2002) Atlanta, Georgia: Southern Regional Education Board, 2000. (www.sreb.org)
- Eisen, E. W. (1991). **The enlightened eye: Qualitative inquiry and the enhancement of educational practice**. New York, NY: Macmillan Publishing Company.
- Erdmann, D. G. (1983) "An Examination of Factors Influencing Student Choice in the College Selection Process." **The Journal of College Admissions**, Summer.
- Fact Book on Higher Education**. (2000, 2001, 2002) Atlanta, Georgia: Southern Regional Education Board, 2000. (www.sreb.org)
- Fidler, Paul and Eileen M. Bucy (1976). "A Descriptive Study of USC's Appeal to Academically Talented Students." Research Notes No. 31-76. Columbia, South Carolina: South Carolina Division of Student Affairs, 1976.
- Firestone, W. A. (1987) "Meaning in method: The rhetoric of quantitative and qualitative research." **Educational Researcher**, 16 (7), p. 16 – 21.
- Flint, T. A. (1992) "Parental and Planning Influences on the Formation of Student College Choice Sets." **Research in Higher Education**, 33 (6), p. 689-708, December.

- Freeman, R.B. (1975). "Over investment in college training?" **The Journal of Human Resources**, 10, 3, 287-311
- Freeman, H. B. (1984) The Impact of no-need scholarships on the matriculation decision of academically talented students." Paper presented at the Annual meeting of the American Association of Higher Education, Chicago, Illinois
- Fuller,W., Manski, C., and Wise, D. (1982). New evidence on the economic determinants of postsecondary schooling choices. **Journal of Human Resources** 17(4): 472-498.
- Gaines, Gale. "Higher Education State Legislation – Merit-Based Awards and Grants: 1999 Final Legislative Actions." Southern Regional Education Board. Atlanta, Georgia. (www.sreb.org)
- Ganderton, P. T. (1992). "The effect of subsidies in kind on the choice of a college." **Journal of Public Economics** 48: 269-292.
- Gardner, John W. (1984) **Excellence: Can We Be Equal and Excellent too?** New York: W. W. Norton and company.
- Gelin, Frank and Jardine, Doug (1990). "On Becoming an Institution of First Choice." Paper presented at the Annual Convention of the Association of Canadian Community Colleges, Charlottetown, Prince Edward Island, Canada, May, 1990.
- Gilley, J. Wade. (2001) "U.S. News rank does not define goals." **The Dally Beacon**. 86 (12), January 26, 2001.
- Gilmour, J., et al. (1978). **How High School Students Select a College**. Pennsylvania State University: Penn State Press.
- Gourman, J. (1983) **The Gourman Report: A Rating of American and International Universities**. Los Angeles: National Education Standards.
- Grant, D. F., Heggoy, S. J., & Battle, D. A. (1995). **Cases of rural gifted college females: Socialization barriers and career choices**. (ERIC Document No. Ed 387 730)
- Guaspari, J. (1985) **I Know When I See It: A Modern Fable About Quality**. New York: AMACOM.

- Guba, E. G. (1978) Toward a methodology of naturalistic inquiry in Educational Evaluation. Monograph 8. Los Angeles: UCLA Center for the Study of Evaluation.
- Guba, E. G., and Lincoln, Y.S. (1989) **Fourth Generation Evaluation**. Newbury Park, California: Sage.
- Hachiya, Kim (ed). (1999) "National Merit Finalists Up Two-Thirds Since 1994." **Scarlett**. Lincoln, Nebraska, University of Nebraska Press, January 15, 1999.
- Handa, Madan L. and Skolnik, Michael L. "Unemployment, Expected Returns, and the Demand for University Education in Ontario: Some Empirical Results," **Higher Education**, 4, 1975, pp. 27-43.
- Hearn, J. C. (1984). The relative roles of academic ascribed and socioeconomic characteristics in college destinations. **Sociology of Education**, 57: 22-30.
- Hearn, J. C. (1991). "Academic and nonacademic influences on the college destinations of 1980 high school graduate." **Sociology of Education**, 64: 158-71.
- Higgins, A. S. (1982). "Academic champions: The 1981 National Merits from Indiana." **The Journal of Student Financial Aid**, 12, 22-36.
- Higgins, A. S. (1984). "The search for real scholarships for our academic champions." **Indiana Social Studies Quarterly**, 17, 5 –26.
- Holland, J. L. (1957) "Undergraduate Origins of American Scientists." **Science**, 129, 433-437.
- Holland, J. L. (1958) "Student Explanations of College Choice and Their Relation to College Popularity, College Productivity, and Sex Differences." **College and University**, 33, 313-320.
- Hood, Albert B. and Edward O. Swanson. (1965) **What Type of College for What type of Student?** Cooperative Research Project No. 2182. Minneapolis, Minnesota: University of Minnesota.
- Hossler, D., J. Braxton and G. Coopersmith. (1989) "Understanding Student College Choice." In John C. Smart (ed), **Higher Education Handbook of Theory and Research V**. New York: Agathon Press.

- Hossler, Don, and Gallagher, Karen S. (1987) "Studying Student College Choice: A Three-Phase Model and the Implications for Policymakers." **College and University** 62 (3): 207-21.
- Hossler, D. (1984). **Enrollment management: An integrated approach.** New York: College Entrance Examination Board.
- Huddleston, T., and Karr, M. (1982). "Assessing College Image." **College and University**, 57 (4): 364-70.
- Hurtado, Sylvia, et al. (1997). "Differences in college access and choice among racial/ethnic groups: identifying continuing barriers." **Research in Higher Education** 38(1): 43- 65.
- Ihlanfeldt, William. (1980) "Achieving Optimal Enrolments and Tuition Revenues." Eric document ED184494.
- Jaschik, S. (1987, July 1) "States are offering inducements to prevent "brain drain" of talented college students." **Chronicle of Higher Education**, 37,13, 16.
- Jackson, Gregory A. (1978) "Financial student aid and student enrollment." **Journal of Higher Education**, 49 (6): 548-573.
- Kammen, W. B. and M. Stouthamer-Loeber. (1998) "Practical Aspects of Interview Data Collection and Data Management." In L. Bickman and D. J. Rog, (eds.). **Applied Social Research Methods.** Thousand Oaks, Ca: Sage.
- Keller, M. J. and McKeown, M. P. (1984) "Factors contributing to the post-secondary enrollment decisions of Maryland National Merit and National Achievement Semifinalists." Paper presented at the annual meeting of the Association for the Study of Higher Education, Chicago, Illinois, March.
- Kerr, B. A., and Colangelo, N. (1988) "The College plans of academically talented students." **Journal of Counseling and Development**, 67, 42- 48.
- Krakower, Jack Y., and Zammuto, Raymond F. (1987) "Enrollment Projections: The Case Against Generalizations." **Review of Higher Education** 10 (4): 333-56.
- Kuh, George D., et.al. (1991) **Involving Colleges.** San Francisco: Jossey-Bass Publishers.

- Kuntz, Steven S. (1987) "Students' Academic Orientations and Their Perceptions of and preferences for colleges: Applied Market Research Using the Ideal Point Preference Model and Multidimensional Scaling." San Diego: Paper presented at the annual meeting of the Association for the Study of Higher Education. Eric Document ED 281470
- Lay, R., and Maguire, J. (1980). "Identifying the competition in higher education." **College and University** 56(1): 53-65.
- Lay, R., and Maguire, J. 1981). "Coordinating market and evaluation research On the admissions rating process. **Research in Higher Education** 14(1):71-85.
- Levy, Sidney J. (1978) **Marketplace Behavior – Its Meaning for Management**. New York: AMACOM, 1978, pp. 170-171.
- Lewis, G. H., and Morrison, J. (1975). **A Longitudinal Study of College Selection Technical Report No. 2**. Pittsburgh: School of Urban Public Affairs Carnegie- Mellon University.
- Lillard, Dean and Jennifer Gerner. (1999) "Getting to the Ivy League: How Family Composition Affects College Choice." **Journal of Higher Education**. 70: no. 6, p. 706, November, 1999.
- Lincoln, Y.S. and Guba, E. G. (1985) **Naturalistic inquiry**. Beverly Hills, Ca: Sage.
- 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., et al. (1983). **Applying Market Research in College Admissions**. New York: The College Board.
- Lundstedt, Sven B. and Arthur D. Lynn, Jr. 1984. "Social and Economic Factors Affecting Participation in Higher Education." **Journal of Higher Education** 55(5): 590-608.
- Manski, C. F., and Wise, D. A. (1983) **College Choice in America**. Cambridge: Harvard University Press.
- MacDermott, K. G. et al. (1987). "The influence of parental education on college choice." **Journal of College Admissions** 115: 3-10.

- Mangione, Teri. (2000) "An Interim Report: Commission on the Undergraduate Student Experience." Unpublished manuscript.
- Manski, C. F. and Wise, D. A. (1983). **College Choice in America**. Cambridge, Massachusetts: Harvard University Press.
- Martin, N. K. and Dixon, P. N. (1991). Measuring factors that influence college choice. **NASPA Journal** 29: 31-6.
- Mathes, S. A. and Gurney, G. (1985). Factors in student athletes' choice of colleges. **Journal of College Student Personnel** 26: 327-33.
- Mattila, J. P. (1982) "Determinants of Male School Enrollments: A time-series analysis." **Review of Economics and Statistics**, 64, p. 242-251.
- Maxwell, J. A. (1996) **Qualitative research design: An interactive approach**. Thousand Oaks, Ca: Sage.
- McDonough, Patricia M. (1997) **Choosing Colleges: How Social Class and Schools Structure Opportunity**. New York: State University of New York Press.
- McDowell, Amber. (2003) "UT Chiefs tell where budget knife will cut." www.knoxnews.com, March 6, 2003.
- Mentkowski, Marcia. (2000) **Learning that Lasts**. San Francisco: Jossey-Bass Publishers.
- Merriam, Sharon B. (1998) **Qualitative Research and Case Study Applications in Education**. San Francisco: Jossey-Bass Publishers.
- Miles, Matthew B. and A. Michael Huberman. (1994) **Qualitative Data Analysis**. Thousand Oaks, California: Sage Publications.
- Murphy, P. E. (1981) "Consumer Buying Roles in College Choice: Parents' and Students' Perceptions." **College and University**, 56 (2), p. 140-50, Winter.
- Paulsen, Michael B. (1990) "College choice: Understanding Student Enrolment behavior." ASHE-ERIC Higher Education Report No. 6. Washington, D.C: The George Washington University, School of Education and Human Development.

- Paulsen, M. B. and T. F. Pogue. (1988) "Higher Education Enrollment: The Interaction of Labor Market Conditions, Curriculum, and Selectivity." **Economics of Education Review**, 7 (3), p. 275-98.
- Powers, Stephen. (1982) "Factors in the Choice of Higher Educational Institutions by Academically Gifted Seniors." Paper presented at the annual meeting of the California Educational Research Association. Sacramento, California.
- Ragin, C. C. (1987) **The comparative method: Moving beyond qualitative and quantitative strategies**. Berkley: University of California Press.
- Reisman, David. (1980) **On Higher Education: The Academic Enterprise in an Era of rising Student Consumerism**. San Francisco: Jossey-Bass.
- Rehnke, Mary Ann. (1987) "Concluding Notes and Further Readings." **New Directions for Higher Education**, 15 (1), p. 103-06, Spring.
- Ruben, Brent, ed. (1995) **Quality in Higher Education**. New Brunswick: Transaction Publishers.
- Rickard, C. E., and Walters, J. C. (1984) "Attract academically strong students: Market the faculty." **The Journal of College Admissions**, 105, 35-37.
- Richards, J. M., Jr. and J. L. Holland. (1965) "A Factor Analysis of Student 'Explanation' of their Choice of a College." Report No. 8. Iowa City: American College Testing Program. ERIC Document.
- Rowse, Glenwood, and Wing, Paul. (1982) "Assessing Competitive Structures in Higher Education." **Journal of Higher Education** 53 (6); 656-86.
- Sanders, M. (1997). Betty's story: A life history. **Journal of Secondary Gifted Education**, 8, 87-95.
- Schaeffer, Bob. (2000) "National Merit Scholarship Semifinalists High School Class of 1999: State by State Breakdown by Gender." Public Policy Commission. Belmont, Ma.
- Shumaker, John W. (2003) "Governor's Budget Proposal." Open letter to faculty, staff and students, e-mail communiqué. March 11, 2003.

- Shumaker, John W. (2003) E-mail communiqué to students, faculty and staff. January 2003, March 2003.
- Seneca, J. J., and Taussig, M. K. (1987) "The effects of tuition and financial aid on the enrollment decision at a state university. **Research in Higher Education**, 26, 337-362.
- Seymour, Daniel. (1992) **Causing Quality in Higher Education**. Phoenix, Arizona: American Council on Education, Oryx Press.
- Snyder, William. (2001) "The University of Tennessee Plan for Academic Excellence." Unpublished report, May.
- Spies, R. (1978). **The Effects of Rising Costs on College Choice: A Study of the Application Decisions of High Ability Students**. New York: The College Entrance Examination Board.
- Sproull, N. (1995). **Handbook of Research Methods: A Guide for Practitioners and Students in the Social Sciences**. NJ: The Scarecrow Press
- Stadtman, Verne. (1980) **Academic Adaptations: Higher Education prepares for the 1980s and 1990s**. Berkeley, Ca: Carnegie Council on Policy Studies in Higher Education.
- Southern Regional Education Board. (2000) "State-funded Merit-based Scholarship Programs: Factors Influencing establishment of state-funded merit-based programs." Atlanta, Georgia. (www.sreb.org)
- Stern, G. G. (1961) "The Ecology of the American College Student: Varieties of Constraint in American Education." Quoted by T. R. McConnell in Problems of Distributing Students among Institutions with Varying Characteristics." **North Central Association Quarterly**, 35, 226-238.
- Struckman-Johnson, Cindy, and Kinsley, Steven. (1985) "Assessment and Comparison of College Image Among High School Seniors, College Students, and Alumni." **College and University** 60: 316-27.
- Tannen, M. B. (1978) "The Investment Motive for Attending College." **Industrial and Labor Relations Review**, 31 (4), p. 489-97, July.

- Tennessee Education Commission. (1985) "Report of the survey of Tennessee's academically-talented students: factors influences the choices of high school graduates entering college." Nashville, Tennessee.
- Tierney, M. L. (1983) "Student college choice sets: Toward an empirical characterization. **Research in Higher Education**, **18**, 271-284.
- Tierney, M. L. (1984). "Competitive Structure of Selected College Student Markets." **College and University** **59**: 229-44.
- University of Tennessee web site. www.utk.edu.
- US News and World Report**, (2000, 2001, 2002) "*America's Best Colleges*," 2000, 2001, 2002
(www.usnews.com/usnews/edu/college/rankings/primer.htm)
- Westerman, W. Scott, Jr. (1993) "College/University Choices Kansas National Merit Semifinalists: The Class of 1993." Policy Analysis, Paper No. 2" Jones Institute for Educational Excellence: Emporia, Kansas.
- Wright, David and Randy Nelson. (1996) **The 1994 College Choice Survey**. Santa Cruz, California: 1996.
- Yin, R. K. (1989) **Case study research: Design and methods**. Newbury Park, Ca.: Sage.
- Zemsky, Robert and Penney Oedel. (1983) **The Structure of College Choice**. New York: College Entrance Examination Board.

APPENDICES

APPENDIX A

INVITATION TO PARTICIPATE

Date:

Address:

Dear (National Merit Scholar)

I am a doctoral student at the University of Tennessee, Knoxville. My doctoral dissertation is concerned with National Merit Scholars at the University of Tennessee, Knoxville. As a part of my research, I am conducting a limited number of interviews with National Merit Scholars who have attended the University of Tennessee, Knoxville for at least two semesters. I will use these interviews in gathering information about your perception of the University of Tennessee, Knoxville. I will explore your views on the academic quality of UTK and factors that influenced your decision to attend UTK. By participating in this study, you can be of great assistance to me in this endeavor. Your help will be invaluable in exploring these issues.

If you are willing to participate in this study, please read the enclosed informed consent and return to me one signed copy of the enclosed informed consent form in the enclosed self-addressed, stamped envelope. Please keep the other copy of the informed consent for your own records. Additionally, please fill out the demographic survey enclosed and return with your signed informed consent form. Your interview responses will be completely confidential – neither your name nor classification will be revealed without your permission. All interviewees will be assigned a coded number; transcripts will be available only to the chair of my doctoral committee and myself. I request that you allow me to tape record interviews in order to insure accurate reporting of your responses. Tape-recorded responses will be secured in a locked box at my home and destroyed after three years.

Participation in the study is voluntary. If at any time you wish to withdraw your participation, you may do so without penalty. If you have any questions regarding the research, I can be reached at (865) 774-5810. My e-mail address is dhicks3@utk.edu. The University of Tennessee's Institutional Review Board can also be reached at (865) 974-3466.

I look forward to hearing from you and speaking with you about your perceptions of the University of Tennessee, Knoxville and factors that affected your decision to attend UTK.

Sincerely,

Deborah J. Hicks
Doctoral Student, University of Tennessee, Knoxville

APPENDIX B
DEMOGRAPHIC SURVEY

DEMOGRAPHIC SURVEY

As early as 1959, researchers in higher education began to study factors leading to the college choice of high ability students. You have, by virtue of your selection as a National Merit Semi-finalist or Finalist joined the ranks of high ability students.

As part of my doctoral dissertation, I am interested in interviewing National Merit Scholars who have attended the University of Tennessee, Knoxville for at least two semesters. If you are willing to participate in this study, please fill out the information below. Additionally, please read the enclosed inform consent, sign it and return to me.

Name _____

E-Mail address _____ Phone Number _____

Address _____

Gender M _____ F _____

I have attended the University of Tennessee for _____ semester(s).

My ethnic origin is (please check one)

African American _____

Caucasian _____

Native American _____

Oriental _____

Hispanic _____

Other _____

Please specify

My parent's educational background is:

FATHER:

High School Graduate _____ College Graduate _____ Graduate Degree _____

MOTHER:

High School Graduate _____ College Graduate _____ Graduate Degree _____

My parent's annual household income is:

\$15,000 - \$24,999 _____

\$25,000 - \$34,999 _____

\$35,000 - \$44,999 _____

\$45,000 - \$60,000 _____

Over \$60,000 _____

APPENDIX C

INTERVIEW PROTOCOL

INTERVIEW PROTOCOL

Thank you for agreeing to participate in this study about the perceptions of National Merit Scholars regarding the University of Tennessee, Knoxville. I would like your permission to tape this interview. May I do so?

QUESTION 1: What factors influenced you to select UTK over other institutions?

PROBE: Which other institutions did you apply to?

PROBE: What was your top choice in an institution of higher education?

PROBE: How do you think these institutions compare academically with UTK?

PROBE: Why did you decide not to attend _____(other institutions named)?

PROBE: Why did you decide on UTK?

PROBE: How long have you been attending the University of Tennessee?

PROBE: After having attended for _____, how do you think UTK compares with _____ (other institutions mentioned)?

QUESTION 2: What criteria do you use to assess the quality of an academic institution?

PROBE: What are the top three criteria you would use?

PROBE: How do you think UTK rates in these areas?

PROBE: How do you think UTK compares with your other choices in these areas?

PROBE: What evidence did you use to reach these conclusions?

QUESTION 3: What was your perception of the academic quality of the University of Tennessee, Knoxville before you enrolled?

PROBE: What was the basis of this perception?

PROBE: Where did you get your information?

PROBE: Before you enrolled how did you think UTK compared academically with your top choice institution?

QUESTION 4: Has your perception of the academic quality of the University of Tennessee, Knoxville changed in any way since you have attended?

PROBE: If yes, how did it change? How long after you were here did your perception begin to change? What factors led to the change?

PROBE: Do you think other students are aware of the factors you just cited?

PROBE: How could the university make National Merit Scholars aware of these qualities?

QUESTION 5: Please give me one example of a memorable academic experience you have had since you have attended UTK.

PROBE: Were these experiences ones you expected?

PROBE: Have you been surprised at any of your experiences here at UTK?

QUESTION 6: What suggestions do you have for ways of improving the University of Tennessee, Knoxville to make it more attractive to National Merit Scholars?

PROBE: How could these be communicated to National Merit Scholars?

QUESTION 7: Is there anything else you would like to tell me about your experiences at the University of Tennessee, Knoxville?

Thank you for taking the time to participate in this study. I would be interested in anything else you could tell me about your experiences at UTK and how you feel the university can better enhance and recruit National Merit Scholars.

APPENDIX D

INFORMED CONSENT

INFORMED CONSENT

PROJECT TITLE: "Perceptions of Image and Academic Quality of the University of Tennessee, Knoxville by National Merit Scholars who have attended the university for at least two semesters and factors influencing their decision to attend: A qualitative research study"

PURPOSE: The purpose of this study is to describe the perceptions of the University of Tennessee by National Merit Scholars concerning the University of Tennessee's academic reputation and prestige and to determine whether these perceptions change after students have been enrolled in the University of Tennessee for at least two semesters.

Several research questions have been formulated. These questions in no way limit the intent to provide the description indicated, but provide guidance for the study. These questions are:

- What factors influenced National Merit Scholars enrolling at UTK to select UTK over other institutions?
- What perceptions did enrolled National Merit Scholars have about the academic reputation and prestige of UTK before they enrolled? Did that perception change in any significant way after they have been in attendance for at least two semesters.
- What factors do National Merit Scholars use to define quality that contributes to the perception of academic reputation and prestige?
- What suggestions do National Merit Scholars offer for ways of improving the University of Tennessee to make it more attractive to high ability students?

Your participation in this research will involve an interview that will last approximately one half hour to forty-five minutes. As a participant, your identity will be kept confidential unless you give your permission otherwise, thus placing you at minimal risk of identification. Therefore, unless your permission is given to reveal your name, comments made during the interview will only be identified in the narrative report as those made by a member of a generally identified group: senior, junior, sophomore, National Merit Scholar.

Your agreement to participate in this study will be evidence through the signing and returning of one of the enclosed consent forms to the researcher

in the self-addressed, stamped envelop provided. **Please keep the second consent form for your records.**

This study may provide no personal benefits for you. However, participation in the study at a minimum will assist in providing administrators and recruiters with valuable information on how you view the University of Tennessee, Knoxville. Your opinions can aid in the development of brochures, campus visits, courses, and recruiting. Your suggestions for improvements will provide administrations with much needed information about National Merit Scholars and their needs.

Confidentiality of the material from the interview will be maintained by limiting access to the interview transcripts to the researcher and her faculty advisor. Following transcription, all interview tapes will be destroyed. The signed consent forms will be stored in a locked filing cabinet for three years in the College of Education, Educational Administration and Policy Studies, at the University of Tennessee, Knoxville. The interview transcriptions will be stored in a locked filing cabinet at the home of the researcher and will be maintained for a period of three years after the conclusion of this study. After this time, they will be destroyed. The results from this study will be presented in a narrative form and may be utilized in other published research later.

Your participation in this study is voluntary. Choosing not to participate will involve no penalty to you and you may withdraw from the research project at any time without penalty. If you have questions about the research please contact Deborah J. Hicks, (865) 774-5810. If you have questions about your rights as a participant, contact the Compliance Section of the UTK Office of Research at (865)974-3466.

**I HAVE READ AND UNDERSTOOD THE EXPLANATION OF THIS STUDY
AND AGREE TO PARTICIPATE**

NAME (Please print)

Date

Signature

Telephone Number

APPENDIX E
STATISTICAL COMPARISONS
UNIVERSITY OF TENNESSE
AND THEC DESIGNATED PEER INSTITUTIONS

COMPARISON STATISTICS

1999			2000	
	Size UG Class	Average SAT Scores Entering Freshmen	Size UG Class	Average SAT Scores Entering Freshmen
U. Tennessee, Knoxville	20,259	1110	25,890	1115
U. Florida	31,633	1265	45,114	1210
U. Georgia	24,040	1195	31,288	1210
U. Kentucky	16,841	1125	23,114	1125
U. Maryland, College Park	24,717	1240	33,189	1250
U. Oklahoma, Norman	18,019	1110	24,205	1140
U. S. Carolina	15,551	1110	23,728	1110
U. Texas/Austin	15,796	1195	49,996	1195
U. Virginia	13,570	1310	22,411	1305
Virginia Polytech	15,434	1165	27,869	1175

1999			2000		2001	
	# Merit Scholars Entering	Rank	# Merit Scholars Entering	Rank	# Merit Scholars Entering	Rank
U. Tennessee, Knoxville	31	64	35	68	37	64
U. Florida	208	5	194	6	197	6
U. Georgia	52	42	51	51	53	45
U. Kentucky	65	33	60	39	49	50
U. Maryland College Park	49	48	46	54	47	53
U. Oklahoma, Norman	148	10	145	15	116	20
U. S. Carolina	40	60	44	56	42	56
U. Texas/Austin	249	3	250	2	236	3
U. Virginia	40	60	53	47	49	50
Virginia Polytech	20	100	24	91	30	74

*Diane D. Craig, TheCenter, 2003 online www.thecenter.ufl.edu

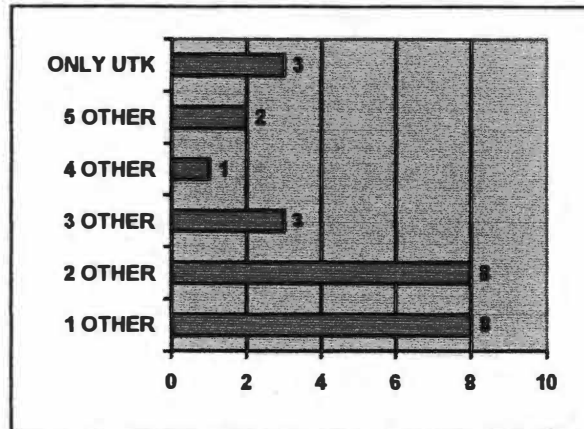
APPENDIX F

PARTICIPANTS

DEMOGRAPHIC AND STATISTICAL CHARTS

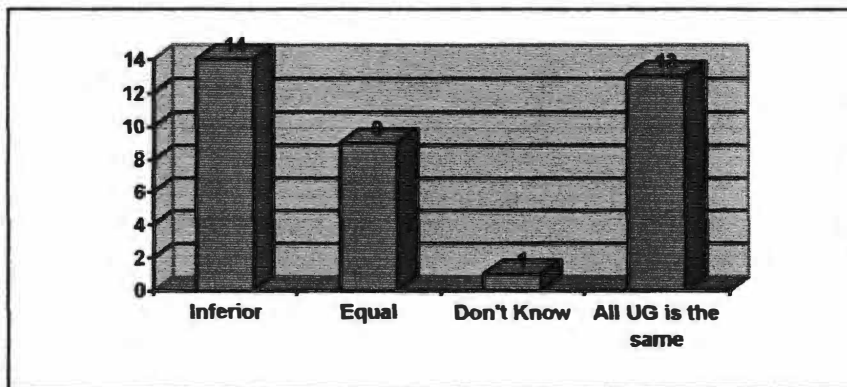
NUMBER OF INSTITUTIONS PARTICIPANTS

APPLIED TO



PRE-ENROLLMENT PERCEPTION OF UTK ACADEMICS

25 STUDENTS



PRE-ENROLLMENT REPORTED

TOP CHOICE INSTITUTION

TOP CHOICE INSTITUTION	
University of Tennessee	9
Vanderbilt (private instate institution)	3
Other private institution outside Tennessee (U of Chicago, Columbia, Boston University, Washington U – St. Louis, Wake Forest, Notre Dame, Duke, West Point, Carnegie Melon)	9
Other public institution (Virginia Tech, Univ. Kentucky)	2
Didn't have a top choice	3

REPORTED REASONS FOR

NOT ATTENDING

OTHER SCHOOLS TO WHICH THEY APPLIED

Financial Reasons	12
Location	11
Wanted real world experience	5
Lack of Personal Attention/Caring attitude by other institution	4
Specific Program of study	2
Wasn't admitted	2

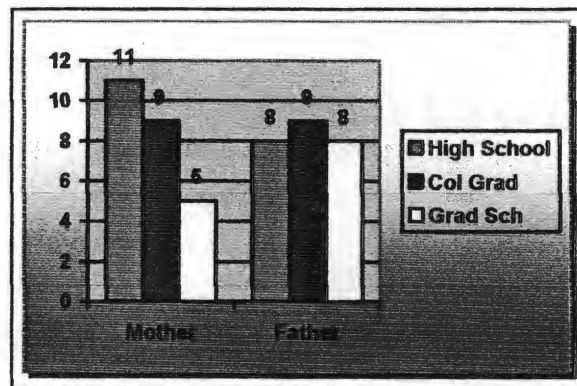
Factors affecting the decision to attend UTK*	
Scholarship offered by UTK	22 (88%)
Academics/Program of study	10 (40%)
Campus Visit	9 (36%)
Opportunities offered at UTK	7 (28%)
Distance from home	6 (24%)
1st choice too expensive	5 (20%)
People outside UTK	5 (20%)

*Students named more than one factor. Percentage indicates how many participants of the twenty-five mentioned that factor

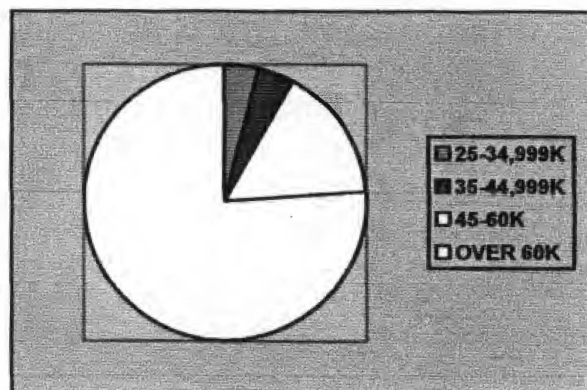
REPORTED CRITERIA USED TO ASSESS THE QUALITY OF AN ACADEMIC INSTITUTION

Criteria	Number reporting
Private Institution	17
Results after graduation	10
Personal Attention	7
Selectivity/Admission Standards	7
Superior Program of Study	7
People (Family, friends, guidance counselors)	5
Percentage of faculty with doctorates	5
Class size (smaller classes)	5
Overall academic reputation	4
Ranking	4
Less emphasis on sports	3
Location	2
Campus visit	2
Recruiting brochures	1
Library holdings	1
Scholarship awarded	1

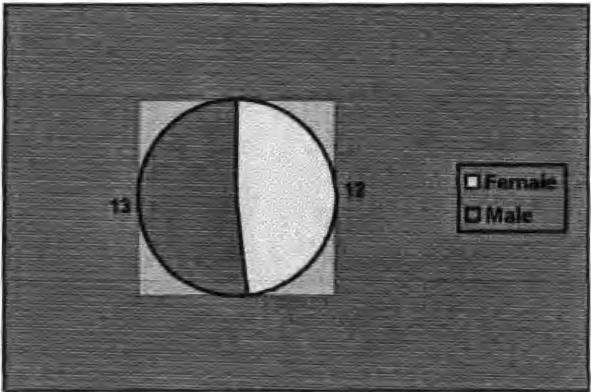
Reported Parental Educational Levels



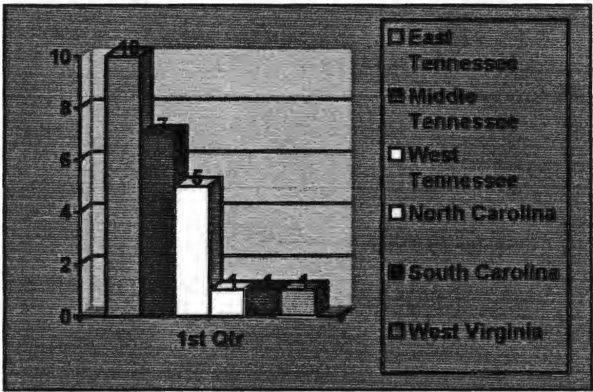
REPORTED FAMILY PER ANNUM INCOME



PARTICIPANT GENDER BREAKDOWN



PARTICIPANTS' HOME STATE/REGION



PARTICIPANT BY CLASS

Freshmen	4
Sophomore	7
Junior	7
Senior	7

APPENDIX G

PERCEIVED EFFECTS OF

INSUFFICIENT STATE FUNDING

**National Merit Scholars Perceived
Effects of Insufficient
State Funding**

Increased faculty attrition, fewer quality teachers	9
Poor faculty salaries	7
Lack of adequate support for and dedication to higher education by the state	7
Decline in the quality of education at UTK	7
Fewer classes offered	5
Lack of money available for facilities maintenance, repair and replacement	5

VITA

Deborah J. Hicks was born in Knoxville, Tennessee, May 25, 1951. She graduated from Madisonville High School and entered Hiwassee College in 1968. She graduated from Tennessee Technological University in 1973 with a Bachelor of Science degree in Music Education. After working in the field of music for several years, she entered the University of Tennessee, Knoxville and received a Master of Science in Communications in 1984, with an emphasis in advertising and marketing research. She completed the first qualitative research study at the University of Tennessee in 1984.

While serving at Hiwassee College, she began work on a graduate degree at the University of Tennessee, completing a Master of Music with emphasis in Piano Pedagogy in 1998. That same year, she was accepted into the doctoral cohort at the University of Tennessee for the doctoral degree in Educational Administration and Policy Studies, with emphasis in higher education. She is presently serving as the Head of the Music and Theater Department and Director of the Professional Entertainment Program at Walters State Community College.