ABSTRACT

TREVATHAN, VANESSA LORRAINE. A Profile of Psychosocial, Learning Style, Family, and Academic Self-Efficacy Characteristics of the Transition Program Students at North Carolina State University. (Under the direction of Dr. Stanley B. Baker).

The purpose of this study was to develop a profile of the University Transition Program (UTP) students who are categorized as being academically at-risk, and to make programming recommendations. Primary theorists of psychosocial factors (Arthur Chickering), student attrition (Vincent Tinto), and self-efficacy (Albert Bandura) were initially reviewed. The following are the proposed research questions: (a) What important characteristics need to be considered in putting together a profile of students who matriculated into the University Transition Program at North Carolina State University? (b) What value would the profiles be to programs like the University Transition Program at North Carolina State University? and (c) How can the University Transition Program at North Carolina State University better serve the students in the program?

The study included students (n=70) who were enrolled in the UTP and their parents (n=108). The students completed the Index of Learning Styles (ILS), College Academic Self-Efficacy Scale (CASES), and the Student Developmental Task and Lifestyle Assessment (SDTLA); and the parents completed the Family Characteristics Survey (FCS). Seventy students responded to the ILS and the CASES and 31 responded to the SDTLA. Of the 70 parent and parents that were contacted, 62 responded to the FCS.

ILS reports information across four dimension: Active vs. Reflective,

Sensing vs. Intuitive, Visual vs. Verbal, and Sequential vs. Global. The results are as follows: 53 (75.7%) were active learners and 17 (24.3%) reflective learners, 48 (68.6%) were sensors and 22 (31.4%) intuitive learners, 55 (78.6%) were visual learners and 15 (21.45%) verbal learners, 47 (67.1%) were sequential learners and 23 (32.9%) global learners.

The results of the Family Characteristics scale indicated that a majority of the students were from two-parent families with 1 to 2 children. Other findings indicated that the vast majority of the female and male parents are between 41-50 years and most of the parents in the study were of African American decent. A majority of the female parents were college graduates while a majority of the male parents were either a graduate school graduate or had some college experience. Half of the parents had a salary of $50,000 or above and held professional positions. The parents rated spirituality as their principal value, and most of the families were nuclear in nature.

Regarding CASES, that the male respondents 19 (54.29%) had 'high' confidence regarding their ability to complete a college program and the female respondents had 18 (51.43%) 'high' confidence about their ability to complete a college program. Overall, the class had 37 (52.9%) 'high' confidence about being able to complete a college degree.

The SDTLA indicated that the male respondents averaged within or above the normative mean of 50 on all eleven domains and the female respondents averaged within the normative sample range in all domains.

It was concluded and recommended that the University Transition Program can assist the students by helping them determine their learning style preference at the onset of the academic year so that the best match between the student and teacher can be made. It was further concluded that if students do not feel integrated into their academic institutions, they may not do as well academically because they do not feel supported or acknowledged. The UTP can assist students with helping them feel more integrated by encouraging students to participate in social and sporting events and student organizations. The present study also concluded that a series of parent workshops should be offered to parents of the students in the UTP. This is recommended in an effort to increase positive parental involvement which will more than likely contribute to less students discontinuing their college education.

A Profile of Psychosocial, Learning Style, Family, and Academic Self-Efficacy Characteristics of the Transition Program Students at North Carolina State University

By

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Dedication

I would like to thank some special individuals who assisted me with getting through my doctoral program. First, I would like to thank my parents for giving me the work ethics needed to endure many long nights of studying and reading, while preparing for school and work each day.

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Lastly, I would like to recognize God for waking me up each day and answering my prayers. Because of these recognized individuals, I now believe that any dream is possible.

Biography

Vanessa L. Trevathan has spent her life in Rocky Mount, North Carolina. She was born to Mr. and Mrs. Tommy Trevathan and was one of nine children. At eighteen, she went to school at Livingstone College in Salisbury, North Carolina, and graduated in 1990 with a Bachelor of Social Work Degree. Two years later, in 1992, she enrolled in North Carolina Agricultural and Technical State University, Greensboro, North Carolina and graduated with a Masters Degree in Agency Counseling in 1995.

After working as a school social worker for several years, she began making plans to start a doctoral program, and enrolled at North Carolina State University in the Counselor Education program in fall of 1998.

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Chapter 1

INTRODUCTION

The nature and purpose of this study will be to describe the students in the Transition Program at North Carolina State University relative to the following dimensions: academic self-efficacy, learning styles, psychosocial development, and family characteristics. The intended goal is to provide recommendations and strategies for enhancing services within the Transition Program and other programs that hold a similar practicing philosophy so that this population will be better served.

Rationale for Study

Attrition rates among at-risk college students have been noted to be especially high during their freshmen year (Pedrini & Pedrini, 1998). This finding is even more exaggerated if the university where the attrition is mostly occurring is a large, residential or non-residential, predominately white institution (PWI), with a major emphasis on research. Institutions designated as “research” colleges and universities, typically place a higher value on producing knowledge and identifying financial resources for this purpose moreso than institutions who recognize teaching as their primary, not secondary duty. This research emphasis may not allow at-risk students to find the needed additional support that is often required for degree completion, thus contributing to students leaving school before having completed their degrees.

Regardless of the reason, students as well as colleges and universities endure enormous cost when students are admitted for study and discontinue their education prior to degree completion. "For the student an error in admissions can be costly in money as well as in valuable time" (Chase & Jacobs, 1989, p. 403). This cost is then absorbed by taxpayers and future students whose tuition and student fees will most likely rise to meet the challenges brought on by attrited students. This high attrition rate among at-risk college freshmen indicates, in part, the extent to which research-oriented higher education institutions are failing to meet the needs of this population of students.

One reasonable rationale for this study is the attempt to help offset the energy and time that at-risk students could waste in school by starting and ceasing their education without having earned a degree. Officials charged with the responsibility of admitting students could benefit from a better and more complete profile of the at-risk student who could encounter greater challenges in completing their academic degree. More extensive profiles could lend to the development of more detailed plans to help advise individual students concerning their chances for success in college or in certain academic programs. Another benefit associated with this study is to make sure that the limited financial resources offered by college and universities are put to good use in graduating more diverse college graduates, thus aiding in the support

of the state and national economy. By initiating these efforts, services such as the Transition Program, here and elsewhere, can plan, allocate, and implement policies and services that are student focused, and centered more on getting a better profile of what is takes to retain students until they have successfully completed all requirements for their desired degree.

A Description of the Transition Program

The University Transition Program (UTP) was housed in the First Year College (FYC) at North Carolina State University for several years but is now independent, and seeks to serve at-risk students. The UTP at North Carolina State University started in 1985, as an institutional effort to enhance or increase diversity among students. It started as an affirmative action initiative in which students of color were the primary focus. African American and Native American students were first sought for admission. The University Transition Program's population is now comprised of 35% majority students. The primary goal of the program then and now is to assist students to overcome, or at least help them cope with, the many social and academic challenges that will arise in their transition from high school to college. The program helps with issues relating to academics, social integration, residential living, and personal issues affecting the students' ability to complete their program. The UTP offers a required orientation class during the fall and spring semester, which is supported by the Counselor Education program in the

Department of Educational Research and Leadership and Counselor Education. This year-long class teaches such topics as time management, study skills, stress management, how to prepare for tests, and how to use the library. In addition to these presentations, "life" topics such as career planning and how to problem solve have also been introduced. The students are also required to see a UTP counselor four times each semester for academic or personal related matters. Students also participate in mandatory study hall four nights per week.

For purposes of the present research, at-risk students are defined as students who have failed to meet minimum requirements for traditional admission to the university or college to which they have applied. These students are targeted as being less-prepared to succeed in many academic programs, and have less than desired average high school grade point averages (GPA) and comparatively low college entrance exam scores on examinations such as the Scholastic Attitude Test (SAT). Since these students have failed to meet the minimum academic potential prediction admission requirements, they are typically admitted through special programs at their institutions, such as the University Transition Program at North Carolina State University.

Generally speaking, these at-risk programs are commonly referred to as retention programs because the main goal is to retain all admitted students until degree completion. Most retention programs focus on course advisement, counseling, mentoring, and the development of social

support networks (Levin & Levin, 1991). Some are more academically based in nature, and the targeted audience is any student who is struggling and needs additional tutoring in order to maintain academic wellness. However, these students are self-directed, not sought, meaning that these students must take the initiative in recognizing their weaknesses to seek out the appropriate remedies.

Most retention programs are designed to serve at-risk students, which has traditionally meant serving students of color. Tinto (1993) stated that students of color are more likely than not to receive an inferior education prior to college, which can be interpreted to mean that students of color will face greater challenges at the college level than their white counterparts. As a result, more colleges and universities see the need to commit their institutions to establishing and maintaining programs and services whereby at-risk students of color can compete at a fair and equitable level for degree completion. However, speaking specifically to the UTP at North Carolina State University, the students are a cross mixture of races and cultures such as African Americans, Caucasians, Asians, Hispanics and Native Americans.

Challenges for Academically At-Risk Students

There are many factors associated with identifying students as at-risk; factors such as sex, marriage and children, age, employment, and financial assistance (Brown & Kurpius, 1997). The factors that are most frequently cited in research studies are: where one receives their

education, the availability of funds to the school district, social class of the family, ethnic group membership, intellectual ability, peer mentor, a sense of school belonging, and being able to meet physical, financial, and social needs (Donovan, 1984; Tracy & Sedlacek, 1984; Tinto, 1993).

Tinto (1993) argues that physical, financial and social needs only become a problem when students determine their college experience to be irrelevant or unrewarding. While these factors do impact whether or not at-risk students will continue or discontinue their education, they do so only when students have not committed themselves to completing their education.

When students begin to have more needs than they are able to satisfy, they become consumed with meeting the needs, and their education, while still important, is not as important as the needs they view as more immediate. Another way of looking at this is through the lens of life adjustment. Tinto (1993) stated that students who depart for reasons such as these were not successfully able to manipulate the adjustment from high school to college. Students are cared for by their parents or caregivers when residing at home, and many of their issues are resolved by people who have more life experience than they do. When leaving for college, many of them find themselves for the first time having to make decisions about their personal, social, and financial lives. This can seem overwhelming for students who have not matured to the point of rational and life long thinking.

The term mentor means an implied "relationship between a young person and someone older and more experienced who helps the younger person navigate the paths of personal and professional development" (Steele, 1991, p. 2). Though this could apply to many two-person relationships, it has real life meaning and purpose to at-risk students when confronted with difficulties in completing a college degree. Mentoring has been proven to be an effective tool among young adults, especially minorities. An often quoted phrase appearing in The Harvard Review (Collins, 1978, p. 8) stated that "everyone who makes it has a mentor". This is more true than not. Minority students often find refuge with people who look, think, speak, and share similar values. When this is absent, minority students may begin to feel that their chosen college or university is not serious about helping them complete their education or is not an appropriate setting, and they will withdraw from seeking educational and social nourishment and guidance all together. This is moreso the case when the chosen institution is predominately white. Like most students, there is an urgent need to feel integrated into their academic community so that that sense of school belonging will take a global effect, and the students will start to see a good fit between them and their institution. Once the students feel integrated, they know whom to turn to when problems arise and will not quit when faced with adversities.

To date, there is no known formula for absolutely determining who will

or will not succeed in college. At best, predictions are made based on high school grade point averages and scores received on college entrance examinations, the latter of which continues to be standardized to white, middle-to-upper class income families (Livengood, 1992). Therefore, individuals who do not fit into these criteria may find themselves at-risk of performing poorly on standardized tests.

Nettles, Millett, and Einarson (2001) stated that college admission tests, such as the SAT and ACT, are vitally important for higher educational institutions as they seek to identify prospective students and make admissions decisions based at least partially on predicted achievement. Since these instruments are the primary tools used in selecting potential college students, and African Americans and Hispanics more often fall short of meeting the required scores when compared to their white and Asian counterparts, therefore, the question remains how to even the gap between the races on standardized tests.

Chickering (1993) defines intellectual ability as: (a) the ability to engage in inquiry, abstract thinking, and critical analysis, (b) literacy [for purposes of writing, and critical analysis], (c) the ability to handle quantitative information, (d) historical consciousness, (e) exposure to science, art, and international and multicultural experiences, (f) the study of value formation, and (g) an in-depth study integrating this intellectual development. In order to master the above-named skills, all students must learn how to learn and be receptive to new knowledge and

ideas. Many members of the at-risk student population may not have been exposed to thinking abstractly in educational settings and may not have had many opportunities to engage in critical analysis. The fact that they are labeled at-risk implies that they're educational skills are below what is considered normal or average. This does not suggest that at-risk students are not capable of performing, it merely infers that students in this category will need extra assistance and tutoring to help even the gap between their skills and those students coming from a well advantaged background. When students of any intellectual capability, but especially at-risk students, believe that they are lacking necessary skills needed to compete in a demanding and competitive learning environment, where they are expected to supervise themselves and their own academic progress, they may succumb to their feelings of low academic self-efficacy and determine that college is not for them or not yet ready for college at the time of their struggle.

Becoming an Academically At-Risk Student

We can describe what it means to be at-risk, but where does the journey begin? Like all social problems, there is a foundation, and the foundation to becoming an at-risk student more than likely begins within the family. At-risk student characteristics begin at home largely due to the fact that parents are the first individuals children meet and begin to model. Parents are the first to set the rules and foundation to getting the child off to a good start, and to facilitate their growth. When families are

faced with children who exhibit a variety of problems, the family can become overwhelmed or consumed with those complications, and shut themselves off from society, and even the schools for that matter Bemak and Cornely's study (as cited in Coleman, 1987; Comer, 1990). However, it is then when parents should get more involved and ask for assistance when the first sign of problems shows itself. Often times, parents believe that their children are going through a "phase" in their lives and thus ignore crucial warning signs that something is wrong. While schools have a vital role on working with students and linking families who have been disengaged from their children's education, families have an even more important role when it comes to taking more of an initiative approach to supporting their children's academics.

A child's at-risk prospects begin when parents provide little or no participation in their children's educational pursuit. Children are being left to make life choices without having had the benefit of life experiences and lessons. Coleman and Comer's study (as cited in Bemak and Cornely, 2002) stated that "in many instances the paucity of social and emotional skills, coupled with a lack of parental involvement in the educational process, has created a generation of children who are unable to function successfully" p. 322. These deficits often manifest in non-productive behaviors thus permitting the student to become at-risk of academic and occupational failure. Parents should remove themselves from believing that

schools are responsible for raising their children and schools should remove themselves from believing that parents, especially minorities and low-income families do not care about their child's education or occupational outlook. Once these beliefs are curtailed, schools and families can begin a positive collaboration on student achievement

The parent and school partnership is essential, and therefore both entities should rethink their positions and start working as team members rather than oppositionists. Parents need not be concerned with how the schools will perceive them just because they are not fluent speakers, educated, or endowed with an enormous amount of wealth. This has been a long-lived and overused excuse of parents for not being more involved in their child's education. By the same token, teachers, school administrators, and school counselors can help eliminate the feeling of unwelcomeness by creating physical and social space for parent programs that are centered around the needs of the families and what the schools can do to help accommodate these needs. More on this resolution is found in the discussion section.

What Works for Academically At-Risk Students?

To answer this question, one must start with an institutional approach. Retention programs have gained a great deal of respect over the last decade (Martin, 1991). While most of these programs are shaping and reshaping, they have helped a great many students to succeed in colleges who otherwise would not have. As previously stated,

when students discontinue their education before degree completion, it implies that the institution, in part, failed to meet their needs. So it is important for the at-risk student population, and for colleges and universities to realize that all students do not approach learning in the same manner.

Tinto (1993) stated that higher education institutions should commit themselves to a diverse campus where all students can feel at home and a vital part of the campus survival. This, in part implies that colleges and universities should make an aggressive effort to seek qualified minority applicants in key positions where students can see their cultures and have their needs and voices represented. By taking this action, students will come to feel that their academic institution views them as a valued customer because efforts were made to have all members of the student body and university communities represented.

In addition to recruiting minority applicants in key decision-making positions, institutions should put their money where their mouth is. That means that it is not enough to say that at-risk students are welcomed on campus, but financial resources should be made available and kept available for this specified population. All too often, when learning institutions start to feel the financial pinch, these types of programs are always the first to go. When this happens, students may feel that they are not wanted or valued and will find themselves, once again, questioning their ability to complete a college

program, especially at research institutions.

When students are not making good grades, not feeling socially accepted, lack mentors and are receiving little to no financial support from their institutions, they assume that they are fighting a losing battle and will more likely than not, discontinue their education. Tinto (1993) stated students leaving school under these circumstances do not transfer to other institutions, they just quit all together creating a loss to the student as well as the institution. It is for these reasons that programs designed to serve at-risk students need to have a complete profile of the population.

Research Questions

In order to accomplish the stated goal in the opening paragraph of this chapter, data will be collected from a sample of at-risk students attending North Carolina State University in the University Transition Program and from the parents of these students. These data will be reported descriptively and analyzed for recommendations about programming and further research. The following are the proposed research questions:

1. What important characteristics need to be considered in putting together a profile of students who matriculated into the University Transition Program at North Carolina State University?

2. What value would the profiles be to programs like the University Transition Program at North Carolina State University and others alike?
3. How can the University Transition Program (UTP) at North Carolina State University better serve the students in the program?

Limitations of the Present Study

It will be difficult to generalize these findings across all higher educational institutions because the study was conducted at one university using only the students in their University Transition Program. Since retention programs are getting more attention in higher educational systems across the nation, and each institution is delivering services based on their financial ability and academic commitment; it cannot be expected that all retention programs will have the same results, even if modeled after the retention program at North Carolina State University.

This study suggests that institutions in the same category as NCSU may share similar success assuming all other characteristics are alike.

Definitions of Terms

In order to gain a better understanding of the terms used in this study, the following definitions are provided.

Academically At-risk Students	Students who have failed to meet the minimum requirements for traditional admission to the university/ college to which they have applied.
At-risk Families	Families who do not take an active role and who are generally disengaged from their children's education.
Academic Integration	Students who are making satisfactory progress towards degree completion and whom are bonded with at least one faculty member and feel supported by their program.
Dropout	Students who leave school before degree completion with no plans for returning or transferring to another college or university.
Social Integration	Students who are satisfied with the social activities and take an active role in at least one event.
Academic Student Performance	Students who have maintained minimum grade point average (GPA) as required by the institution.
Academic Student Difficulty	Students who are not equipped with the intellectual demands required to successfully complete a college degree.
Incongruence	Refers to the lack of fit between the needs of the students and that of the institution.

Chapter 2

LITERATURE REVIEW and CONCEPTUAL FRAMEWORK

Introduction

This chapter will provide a detailed synthesis of the literature regarding student success in retention programs. Specifically, this chapter will cover literature about different learning styles or patterns, academic self-efficacy, family involvement and family characteristics, and psychosocial factors affecting the social adjustment and ability needed to successfully navigate through a college program.

A discussion of these topics will contribute to helping higher educational officials better understand how to serve under-prepared and un-prepared students who enter their institutions at a disadvantage. Each above listed variable will be discussed in terms of its relationship to the at-risk population.

Learning Styles and Strategies

Learning styles have been the focus of a considerable number of studies, and more and more colleges and universities have made it a vital part of their mission relative to teaching and learning (Brunner & Majewski, 1990; Ferrell, 1978; Honinsfeld, 2000; Keefe & Ferrell, 1990; Keyser, 1980; Koshuta & Koshuta, 1993; Smith, 1977). The many approaches to learning styles can be examined at four levels, (a) personality, (b) information processing, (c) social interaction, and (d) instructional methods (Claxton & Murrell, 1998).

Personality

Personality development influences learning styles through attention. This means that we take interest and learn in ways that are congruent with our personality, emotion and values. Understanding and studying these differences allows us to forecast or guess how we will react and feel about situations in which we find ourselves.

Information Processing

Information processing theory was first developed to help social learning theorists and others understand how humans learn and problem solve. Kirby (1979) uncovered two basic principles of information processing. They are: *splitters,* who tend to analyze information logically before breaking it into smaller and manageable pieces and *lumpers,* who tend to watch for patterns and noted relationships before consuming and defining the information.

Social Interaction

Social interaction refers to the interaction between individuals and the environment in which they live. It is most commonly thought of as rules, laws, procedures, authority figures as well as consequences when the dominate groups in a community deems one as being a nonconformist. This type of learning often takes place through consequences in that it is when a law has been violated or when a community rejects an individual because of the way he or she behaves is when that individual learn or realize what is and is not acceptable behavioral activity.

Instructional Methods

Current college students represent a broad spectrum in terms of race, age, socioeconomic, readiness, culture/ethnicity, and family characteristics. However, teaching methods and styles have not caught up with these increasing changes. In fact, (Claxton & Murrell, 1988, p. 2) stated that "matching is particularly appropriate in working with poorly prepared students and with new college students, as the most attrition occurs in those situations." Most learning style theorists would agree that once students learning styles have been identified and kept in mind by the instructor, students would more than likely experience a more satisfying learning environment, and are much more likely to continue their education. Other researchers such as, Entwistle (1990) also agree that academic success depends on the interaction between the students and the learning environments and the match between the way the material is presented and how students process it.

Learning styles or strategies refer to a student's consistent way of responding to using stimuli in the context of learning (Hergenhahn & Olsen, 1993). This term, "learning styles" is only used when recognizing individual learning differences. Hiemstra and Sisco (1990) define learning style as the cognitive, affective, and physiological traits that indicate how learners perceive, interact with, and relate to their learning environment. Sewall (1986) refers to learning style as an individual's unique way of interacting with their environment. As one can see, there are many

interpretations and meanings of learning style, however, the one basic ingredient in all the meanings is that learning styles are unique, flexible, and that it should be consistent with one's environment. This is more evidenced by the Dunn and Dunn (1993) Learning Styles Model, which will be the principle model used to conceptualize student learning styles in the present study.

Because colleges and universities are admitting students who represent a broad spectrum in terms of age, ethnicity/culture, work and life experience, and intellectual ability, learning can no longer be referred to as a simple act of processing information. The Dunn and Dunn Learning-Style Model has gained acceptance by researchers and learning style theorists as evidenced in its use. The model examines 21 elements across strands that affects learning styles or patterns.

Dunn and Dunn Learning Style Model

In this model, learning style is defined as an "individual's personal reactions to 21 elements when concentrating on new and difficult academic knowledge or skills" Dunn & Dunn's study (as cited in Searson and Dunn, 2001, p. 22). The elements are classified into five categories of stimuli—environmental, emotional, sociological, physiological, and psychological, and are described below.

A. *Environmental:* students respond differently according to sound, light, and temperature within their community (Dunn & Dunn, 1993; 1999).

B. *Emotional:* The elements here are motivation, persistence, and responsibility. Some students are highly motivated to begin and remain focused on a task until the task has been completed. Some students take initiatives and rely on their own structure to complete a task while other students in this category rely on directives from their teachers before beginning a task (Dunn & Dunn, 1993, 1999).

C. *Sociological*: The elements in this category focus on whether a student decides to study alone, with peers, or with a collegial or authoritative adult. Some students prefer learning in a variety ways while others prefer to follow patterns or routines (Dunn & Dunn, 1993, 1999).

D. *Physiological*: These elements describe ways in which students process information. Some students learn best by hearing (auditory), others by reading or seeing (visual), others when able to manipulate items with their hands (tactual, as when taking notes), and still others learn most effectively while they are concentrating.

E. *Psychological:* These elements describe the way in which a student processes information. Analytic learners, for example, focus on facts or details in step-by-step fashions gaining understanding while the facts build up. Global learners, on the other hand, need to understand how what they learn relates to them and their lives before they can begin to focus on the facts.

The Dunn and Dunn Learning Style Model (Searson & Dunn, 2001) is based on the tenets that:

- Most individuals have the ability to learn.
- Everyone has different strengths and styles.
- Students with diverse learning-style strengths and styles respond differently to instructional environments, resources and approaches.
- Most students can capitalize on their learning style-strengths when concentrating on new and difficult information.
- Most teachers can use learning styles as a cornerstone of their instruction.
- Given environments, resources, and approaches, students attain statistically higher achievement and attitude test scores in congruent, rather than in incongruent treatments. They also behave better in style-responsive environments.
- Individual preferences exist and can be measured reliably.

Family Characteristics of Academically At-Risk Students

There is a prevailing notion in higher education that students whose parents are college graduates will outperform or perform better than first generation college students. However, Brown and Burkhardt (1999), found no strong relationship between parental education level and student success. This section will discuss five commonly recognized characteristics, which address families of academically at-risk students and how these risks lead to rearing at-risk children.

First generation college students are simultaneously referred to as at-

risk because of the number of risk factors associated with their enrollment. These risk factors include family income, values, academic readiness, academic integration, social integration, and perceived family support. These risk factors, are also cited by Tracey and Sedlacek (1984) and Tinto (1975) as non-cognitive variables, that directly impact whether a student will persist in her or his educational pursuit or cease before degree completion. These non-cognitive variables have all been established as a common theme when describing at-risk students. However, there are also commonly noted family characteristics that make at-risk students at-risk academically.

A number of sources have been focused on the idea of parent participation (or lack of) in their child's education (Obiakor, 1992; Turnbull & Turnbull, 1990; Shumow, 1997, Bemak & Cornely, 2002).
While each researcher has his or her own position, the following is the most agreed upon description of factors in or characteristics of families who have at-risk children.

Trust

It is reasonable to believe that if a parent did not attend PTA (Parent Teacher Association) meetings or volunteer their personal time in their child's school when the child was residing at home full-time, it cannot be expected that that norm will change once that child has entered college. That lack of attendance is directly tied to trust or cooperation (as referred to by many) and is the precise reason why parents do not, particularly

the at-risk family (meaning parents), get heavily involved in their child's academic life.

Most at-risk students are minorities who come from minority families, and there has been a strained history between the public school system and minority parents (Bernal, Cabrera & Terenzini, 2000; Harry, 1992). It began with the U.S. Supreme Court's 1954 decision in Brown vs. Board of Education. This victory, although not viewed as such by many minorities, was a landmark decision striking down the doctrine of "separate but equal" public schools. Since desegregation, many minority families do not believe that their culture and values are respected, and thus parents tend to separate themselves from their child's learning institution because of the lack of trust they believe the schools have in their ability to learn and socially integrate in a majority environment (Harry, 1992; Tinto, 1987).

Stressful Life Circumstances

Munday (1976) stated that at-risk families have many commitments, responsibilities, and personal characteristics that monopolize their energy, time, and mental stamina. This is often misunderstood by school personnel who view this type of behavior as apathetic or being uncaring parents. Often times, these parents are confronted with issues relating to the survival of their families, making them emotionally unavailable to dealing with school related issues; unless the issues are directly tied to behavior. At-risk families more often are comfortable dealing with issues relating to their son's or daughter's behavior because they are

comfortable having this type of interaction with their child's school. In this type of situation, they feel they have a voice and can contribute some level of understanding to their child's learning environment.

Low Paying Jobs

Income has been a long-standing predictor of student success (Brown & Burhardt, 1999). This predictor once indicated that students who have parents in low-income paying jobs don't succeed because the parents have little or no education. This indicator led school officials to believe that children who come from a disadvantaged environment do not have access to technological equipment, libraries, and the best educators, therefore, placing them in a vulnerable educational position. Since there appears to be a recognized correlation between income and education (Munday, 1976), at-risk families prefer not to interact with school officials fearing that they will be discounted intellectually because of their employment status (Bemak & Cornely, 2002).

Inability to Communicate

There is a set of expectations that school officials have for parents. One of those expectations involves having the ability to communicate about their child's academic initiatives and ongoing progress. One way this occurs is through PTA meetings and individually scheduled parent/teacher conferences. Some parents do not feel integrated into their child's education because they are not accustomed to speaking the language nor are they familiar with the schools' educational process (Bemak

& Cornley, 2002). Harry (1992) used the term discourse to refer to the entire body of communication between parents and school officials; this infers both orally and written communication. This term is especially usefully when discussing school officials and parents on the low income and educational scale when they have failed to participate in this discourse.

Lack of Power or Feeling Helpless

Coleman (1991) stated that educators often cling to rules and policies that keep activist parents and community groups at arm's length. At-risk families often times lack the information and support necessary to be involved in their child's education. When parents believe that they cannot change the situation or do not possess the skills needed in making appropriate decisions regarding their child's education, they remove themselves from the equation thus giving all power to the higher source. Parents also need to feel empowered—providing them the opportunity to be involved and have an active and inviting role in their child's life as well as the school system. Bemak and Cornely (2002) state that " empowerment necessitates a redistribution of power, meaning that as family members gain power, school staff and administration relinquish power, thus creating a more equitable balance of power" (p. 326).

One other association with students who are at-risk of being academically challenged is their belief about how they view themselves intellectually. Students need to have some awareness of how they compare to groups

similar to them. This awareness may bring about some comfort if they are perceived normal learners and may even bring about some discomfort if they perceived themselves to be low achievers. The next discussion will relate this matter of self-efficacy to that of academically at-risk students.

Self-Efficacy

The Concept of Self-Efficacy and its Meaning

The construct of self-efficacy has a relatively brief history that began with Bandura's (1977) publication of "Self-Efficacy: Toward Unifying Theory of Behavioral Change." The concept of self-efficacy has since been used in varied disciplines and settings and has received support from diverse fields (Maddux & Stanley, 1986; Multon, Brown & Lent, 1991). Self-efficacy currently receives increasing attention in educational research, mainly in the area of academic motivation (Pintrich & De Groot, 1990). Atkinson (1978) stated the "most lasting contribution of all the work that has been done on achievement motivation is the way in which it is changing our ideas about how motivation influences behavior" (p. 2).

Bandura (1977) originally defined self-efficacy as a specific type of expectancy concerned with one's belief in one's ability to perform a specific action or set of behaviors required to produce an outcome. Bandura (1989) expanded the definition to also refer to people's beliefs about their capabilities to exercise control over events that affect their lives, as well as beliefs in their capabilities to mobilize the motivation, cognitive resources, and courses of action needed to exercise control over

task demands (Bandura, 1990).

Self-Efficacy Theory

Bandura (1977, 1986) posits that beliefs about personal competence (such as degree completion) are rooted in four primary sources: performance experiences or inactive attainments, vicarious experiences, verbal or social persuasion, and emotional arousal. Performance experiences or enactive attainments "provides the most influential source of efficacy information because they are based on authentic mastery experiences" (Bandura, 1982, p.196). The more successes individuals experience, the higher their perceived self-efficacy. The effects of failure on personal self-efficacy has greater value depending on the time and the importance of the experience. This means that when an individual fails to meet a goal and the goal was a highly valued one, that along with the timing of the failure will have a huge impact in that person's life. Success strengthens self-efficacy beliefs and makes individuals more likely to try other activities. Failure in a particular task will decrease self-efficacy beliefs for that particular behavior. Bandura (1982) finds that people who experience easy successes come to expect quick results and are more easily discouraged by failures. In order to overcome obstacles, a resilient sense of self-efficacy is required.

Vicarious experiences or vicarious learning occurs when an observer witnesses a person of similar characteristics perform a task that she or he feared. The observer overcomes his or her fear by saying essentially

that if this person who is equal to me can achieve success in this task, then I can too. This is a belief that is formed by the observer after seeing others perform the task. Bandura (1986) states that competent models must teach the observers how to deal with their feelings of disbelief about their capabilities. He notes, however, that this has weaker effects on self-efficacy beliefs than does the actual performance of the experience.

Verbal or social persuasion is a skill that is often used to get people to do things they believe, for whatever reason, that they cannot do. This has a moderate effect on self-efficacy because it has a subjective nature. This means that its effect can depend on who is doing the influencing and the importance of the task as defined by the individual. These are often tasks that people want to do but fear they do not possess the skills that are needed to complete the task. Again, Bandura cautions that verbal persuasion is limited in its power because it is tied into one's perception of realistic bounds. In other words, no matter how strong the persuasion, individuals must still believe that they can achieve the intended goal, which means they must posses the appropriate faculties needed to achieve the task (Bandura, 1982).

Emotional arousal is important because individuals' physiological state have been correlated with their performance. High arousal usually debilitates performance. People are more inclined to expect success when they are not beset by aversive arousal rather than if they are tense and viscerally agitated (Bandura, 1982). Unfortunately, individuals often

equate physiological arousal with poor behavior performance, perceived incompetence, and failure. This can often be experienced before the task has even begun (Bandura, 1982).

Academic Self-Efficacy Beliefs

There have been many self-efficacy studies, which have investigated the relationship among self-efficacy beliefs, related to psychological constructs, and academic motivation and achievement. It has been prominent in studies that have explored the relationship between self-efficacy and achievement (Schunk, 1981, 1982), setting goals (Wood & Locke, 1987; Lock & Latham, 1990), modeling (Schunk, 1981; Bandura, 1982), reward contingencies (Schunk, 1983), and self-regulation (Zimmerman, Bandura, & Martinez-Pons, 1992). Self-efficacy beliefs influence behavior through mediating processes: goal setting and persistence, cognition, affect and selection of environments and people's choices of goals and goal-directed activities, the amount of effort expanded on task completion, and the level of persistence when faced with adversities (Bandura, 1982, 1986, 1989). Students typically do not exert a great amount of effort on tasks they perceive they cannot accomplish, nor on tasks in which they share no personal interest, since interest has been shown to motivate learning (Schunk & Swartz, 1993).

Students most often believe that their academic successes are related to ability, effort, task difficulty, and luck (Weiner, 1979, Frieze, 1980; Weiner, 1983). When students attribute high successes to these causes,

they learn to have higher expectancies for future successes moreso than students who attribute their successes to unstable causes (Fontaine, 1974; Mchahan, 1973; Weiner, Nierenberg & Goldstein, 1976). At-risk students are particularly vulnerable when it comes to identifying their attributions because employing the incorrect strategy (such as studying alone when they best learn in groups) could further complicate their learning experiences and create a false sense of their skills and academic abilities. When students employ the appropriate learning strategies, more often than not they will accept new and more challenging tasks that will facilitate a higher self-esteem and a more controllable feeling of being able to accomplish any goals they choose.

Bandura (1981) and Schunk (1981) stated that "teaching at-risk or low-performing students to set proximal (immediate) goals for themselves enhances their sense of cognitive efficacy, their academic achievement, and their intrinsic interest in the subject matter" (p. 41). This will allow the students to experience some immediate and positive results and feedback which then moves them toward persisting in their degree attainment. Zimmerman, Bandura and Martinez-Pons (1992) noted that using a "variety of self-regulated learning strategies such as planning and organizing academic activities, transforming instructional information using cognitive strategies to understand and remember material being taught, resisting distractions, motivating themselves to complete school work, structuring environments conducive to study, and participating in class are

all effective learning strategies that any student can use to increase their academic self-efficacy" (p.665).

In addition to using these strategies, the at-risk student will need to pinpoint the exact cause to any past failed tasks before securing any one of the above listed strategies. This should probably be done in conjunction with a peer advisor or instructor so that the student will have an objective understanding of what caused him or her to fail. The fact that these students have been labeled at-risk asserts some belief about their lacking the needed strategies, or having not yet recognized what interventions work best for them.

Psychosocial Factors

Student Development Model

In 1969, Arthur Chickering introduced a model of student development that initially received slow acceptance, yet, later proved to be one of the most widely used and acknowledged student development models. Although there have been some changes in the original model to reflect the new types of students now entering college, and taking longer than four years to complete their education, the fundamental principles of the model have not been comprised.

This student development model was formed through observation, research and interviews with students, faculty, and staff members. The model describes seven vectors of student development that Chickering believes all undergraduates experience at some point in their

undergraduate career. They are: (a) developing competence (b) managing emotions (c) moving through autonomy toward interdependence (d) developing mature interpersonal relationships (e) establishing identity (f) developing purpose and, (g) developing integrity.

He further notes that the order of the vectors is just as important as the vectors themselves. "Each step from 'lower' to 'higher' brings more awareness, skill, confidence, complexity, stability, and integration but, does not rule out an accidental or intentional return to ground already transversed" (Chickering, 1993, p. 34). Students who have reached the highest level of their development may return to one of the lower levels due to some unfortunate mishap. Chickering (1993) assumes that higher is better than lower, and the skills and strengths stated in the vectors allow students to grow in versatility and strength as they develop the ability to adapt to crisis situations or when unexpected barriers appear.

Defining Psychosocial Factors

In this present research, the investigator has chosen to define psychosocial factors as being any out-of-class experience, whether negative or positive, that impacts student success. This includes but is not limited to: (a) family support, (b) finances, (c) health and wellness, (d) level of desired commitment, (e) social and interpersonal relationships, (f) social network systems, (g) crisis management and control, (h) the ability to forecast unpleasant situations, (i) self-beliefs about their ability, (j) residence

versus. independent living and, (k) age. Inadequate amounts of or absences of these factors can lead to students dropping out, decreased well-being, and even severe illness.

A Description of the Seven Vectors

Developing competence involves three categories: intellectual, physical/manual, and interpersonal competence. Intellectual competence means having the ability to comprehend, reflect, study and synthesize any given situation. Having the ability means that individuals are able to solve problems on their own, think critically before making hasty decisions, and know when they need to gather additional information so that they can make an informed choice. This is especially important because increasing intellectual development has become a top priority for most colleges and universities (Chickering, 1993).

Physical and manual competence mainly addresses the relationship between the exceptional athletes and their physical/manual maturity. Chickering (1993) explained that as student athletes move upward in their development, they learn how to redirect their aggression and anger. They are not as likely to get involved in risky behaviors, such as having unprotected sex, abusing drugs and alcohol and fighting or engaging in illegal social activities. Also, the more competent student athletes feel, the more likely they are to learn how to cope in aggressive situations. They come to see themselves as role models and understand the social responsibility that comes with this role.

These students have also learned how to excel in the classroom. They set side time for studying and preparation of class assignments. Mature student athletes come to realize that it is not winning that determines their self worth, but rather the intensity of their efforts that become the driving force that moves them from an immature level to a more sophisticated level of development.

Interpersonal competence involves the use of concrete skills such as listening skills, providing feedback, asking appropriate questions, and positive communication that fosters a sense of joy and unity. Internal competence is not just becoming familiar with the skills, but knowing when to appropriately apply them (Chickering, 1993).

Managing emotions. New and returning students enter college with many emotions. These emotions must be managed if students are to excel in school. This is especially true when emotions crop up unexpectedly and small problems suddenly become unmanageable. Chickering (1993) explained that students must learn how to channel their energy into positive actions so that their primary goals are not jeopardized.

The higher individuals maturity and goals, the more aware of their emotions they become. When students learn to identify and accept certain feelings or emotions as a normal part of life, they can adapt more easily, and this fosters their interpersonal and communication skills as discussed in the previous vector.

Moving through autonomy toward interdependence. This vector involves the mastery of three components: Emotional independence, instrumental independence and interdependence. Students must learn to free themselves from seeking outside approval. They should be able to assure themselves of their own goals, and rely less on others for approval. They should learn how to conduct activities and solve problems in a self-guided manner (Chickering, 1993).

Finally, students should understand their role in the larger community. They should realize the contributions of their skills and actions and ideally behave in ways that promote the general welfare of all citizens. "When students can rely on their own ability to get the information they need, move toward goals of their own choosing, and navigate from one place to another, physically and psychologically, they can function as responsible adults with the will to survive and succeed" (Chickering, 1993, p. 148). This vector offers students the opportunity to think critically and independently about personal judgements and learn to rely realistically on individual confidence.

Developing mature interpersonal relationship. Relationships can be viewed as a tool to help students manage feelings, develop deeper interpersonal skills, and gain a better sense of what is important to them. One necessary component for developing mature relationships is appreciating and embracing the differences that are brought into

relationships. Respecting the differences individuals bring into relationships help students to broaden their horizons and value world-wide cultures. Once this has been accomplished, students reduce bias and ethnocentrism, and they learn the rules of polite society (Chickering, 1993).

Established identity. Chickering (1993) states that developing an individual identity depends on all of the previously stated vectors. If they have not been mastered, then students will not know enough about themselves to have a clear understanding of their own identities. Developing identity means that individuals learn to be comfortable with their own bodies, appearance, gender and sexual orientations. They must have a sense of self-historical and cultural context, and have clarification of self-concept through lifestyles. They must understand how to value feedback when given and maintain personal stability Chickering, 1993). One way that students can learn how to master developing a sense of identity is to have a clear understanding of who they are and their life purposes. By first understanding this, students will not be confused when some may reject them or make them feel devalued.

Developing purpose. "Dressed-up with no place to go" is how Chickering (1993) describe students who have no sense of purpose. Developing purpose means that students have to be clear on what their interests are and how they plan to achieve their life plans. Once the goals have been determined, students must practice this lifestyle each

day of their lives. Students should also focus more on the future and not just the day in which they currently live. Doing this helps students stay committed to themselves and to the plans they have developed. This allows them to come to grips with what they value.

Developing integrity. This vectors involves three stages: humanizing values, personalizing values, and developing congruence. Humanizing values means that individuals understand the connections between rules and the purposes these rules serve. As a society, individuals come to realize that no individuals have absolute power to do whatever they want. Individuals understand that there are consequences to socially unacceptable behaviors, and all are subject to some degree of conformity.

When individuals personalize values, they are actually deciding which ones are important enough to make a part of their identity. For each student, this process will be different due to variations in upbringings, family lifestyles, religious beliefs, educational background, culture and status in society. Once students become aware of these factors, they can then begin to match their personal values with socially responsible behaviors (Chickering, 1993)

Related Research on Psychosocial Factors

A study undertaken by Grosset (1997) cited several reasons why some students are able to beat the odds and achieve educational success while

others do not. The theoretical underpinnings for her research drew from

psychological, societal, and academic institutions using specific models of student persistence. Her definition of the at-risk student agrees with the position in the present study in that it states " 'at-risk' has been used in educational circles to describe students who have a less than normal chance of realizing a successful educational outcome" (Grosset, 1997, p. 2). She found in her research that students who beat the odds were extremely tenacious in the pursuit of their degree.

Aspects of the successful student personality were cited to be confidence, determination, discipline, diligence, and perseverance. In another study by Thieke (1994), designed to validate Chickering's model of student development, he discovered that students who are involved in their institution, including participation in extracurricular activities, will likely show greater development than peers who are not as involved. Likewise, this study also revealed that students who participate in activities and interact with faculty, will experience greater affective development. This means that these students characterized their interactions with faculty and their activities as being a pleasurable relationship, thus facilitating a sense of school membership, belongingness, and purpose. Astin (1984) stated that the mature and personally directed student upon entering college has a higher level of faculty and staff interaction and will participate in extracurricular activities. These students tend to take full advantage of all college resources thereby ensuring student degree completion.

Bandura (1981) posited that only when students, have a high self-efficacy, or are reaching optimal development, can they understand the importance of taking some initiatives to create a supportive academic learning environment.

Another study conducted by Lee and Frank (1989) focused on student characteristics that facilitate transfer from a 2-year community college to a 4-year academic institution. They found the following reasons why students completed the transfer: (a) academic preparation, (b) social integration, and (c) family background. The degree to which students transferred and completed their education proved to be important factors when deciding to transfer. The degree or amount refers to the support systems or beliefs the student now holds about their academic ability in respect to their being able to complete a four-year college education. The investigator thought this point was especially vital, due to there being a limited amount of research to date about how the family influences students' decision to stay in school or transfer.

Terenzini, Pacarella, and Bliming (1996) further support Chickering's idea of social integration. They noted that students who lived in single sex-halls are more likely to become socially involved with members of the opposite sex in an effort to build a relationship or as an effort to develop a different activity interest. This alone has given some credence to the notion that being socially involved and integrated makes for a positive and rewarding relationship that ultimately leads to an incontestable

educational experience (Terenzini, Pascarella & Blimling, 1996; Thieke, 1994).

In support of the residence factor, Tinto (1993) noted that students residing at home are not as socially integrated as those living on campus. These types of students find it more difficult to manage a college program because their time is shared with their career, family, community, and other social obligations. These students believe that they are first an adult and a student second, making studying and other related school activities secondary. This is important for college officials to know because students over the age of 24 years who live off-campus represent almost half of the undergraduate students enrolled in college today (Hirschon, 1988). Although this student population is rapidly growing, relatively little is known about the college adjustment of nontraditional students (Chartrand, 1992). Blimling (1993) found that students who live in a dorm with other students from the same discipline perform better academically than students residing in a conventional dormitory (p. 250).

Giving further validation to the model is a study by Martin (2000) who measured competence and purpose in Chickering's model. She found that students who had a clear relationship with faculty had a greater sense of purpose and deeper sense of competence about their skills. The reason for this was thought to be that students who interact with faculty are going to be persuaded to take an active role in campus government, clubs and organizations, and lead group seminars on

student related matters. Students with a greater sense of purpose and competence understand their role, and are more likely to seek assistance when they find themselves in hard to resolve situations. These students also see themselves as a role model for other students and tend to take their education more seriously.

Academic Index

The academic index takes into account several factors regarding the decision to admit a student or not. It considers the size of the school, the rank of the student, the number of classes taken and passed, and the level of the classes in which students have enrolled. Maloff (1983) stated that since the passing of the academic index more students are taking and accepting more advanced classes. Advanced classes are weighted more heavily than mild or moderate classes, and these types of classes are more favorable among research institutions. "More favorable" means that students who are have taken the higher level of the basic classes (i.e. English, math, science, and foreign language) stand a better chance of getting admitted to a research institution than students who did not. One reason why this is true is because having these classes will better prepare the students for standardize tests such as the American College Test (ACT) or Scholastic Aptitude Test (SAT). At North Carolina State University, the academic index is not the only factor that is taken into account for admission, nor is it weighted very heavily when compared to the whole admission standard.

A study by Hosford, Johnson and Atkinson (1984) indicated that academic indexes should be reviewed carefully and without a lot of emphasis because they do not necessarily predict how successful a student will be. Students may be lacking in one area yet more than make up for it in other supportive areas such as experiential background, GPA, personal interviews, and graduate record examination scores when applying to graduate programs.

For the students in the present study, the average academic index was 2.34 on a scale from 0.00-4.00. By gender, the average index for male participants was 2.36, and for females it was 2.33. All indexes were below the minimum requirement for acceptance to the university in their respective program of choice.

Summary

A review of these studies indicated the importance of family involvement, a sense of belief about one's self and academic ability, awareness of how one best learns, and the importance of knowing which psychosocial factors will not impede academic success. While it is important that parents assume and active role in their child's education, it aids greatly when the child has been determined a "child with special needs". As noted, the parents who are more than likely not to be involved in their child's education are the same parents struggling to meet the daily challenges of proving for their families. Ironically enough, these parents still may not take time to visit their child's school in hopes that their child will become inspired to do as well as they can so that

they will not have to endure the same hardships that their parents are having to endure. This continues to be a vicious cycle with no seemingly immediate end.

The two variables, learning styles and self-efficacy support each other in that when students have properly identified their learning style and a competent learning strategy, they will have a higher sense of belief or self-efficacy about their school performance. This leads to increase or better study habits because students already believe that they are capable of succeeding, even in their most feared subjects. Further belief in self-efficacy supports a higher sense of self-awareness and socialization skills.

There are so many psychosocial factors that can affect one's academic performance. Once realized, it is left up to the individual student to determine the best route to curtailing academic failure. The out of class experiences can and do have the same and sometimes greater impact on whether a student will persist in their educational pursuit or not. That is why the leaders in this research phenomenon have echoed the importance of psychosocial factors over an over so that students will understand enough about themselves to know when, how and where to resolve issues that could impinge degree completion.

Academic indexes and grade point averages will continue to be tools used when selecting potential students. Because of the way the different schools weight them and determine their use, these two criterions may

continue to keep many qualified students out of the higher educational system that otherwise may have succeeded with the right type of support systems. They continue to be used, not as sole predictors but rather as best predictors given all other factors are in placed. The research indicated here has shown how important it is for admissions coordinators to view these scores discreetly, especially when the applicant has shown poor academic ability, but gifted in other areas.

Chapter 3

METHOD

Participants

A total of 70 students (35 females and 35 males) in the University Transition Program (UTP) were selected for the present study. Students in this program range in age from 18 to 19 (M=18) (SD=.3), and all are considered to be at-risk of discontinuing their education because of their admittance status. The students in this program were denied admission into their preferred academic program because their SAT scores or high school Grade Point Average (GPA) were not competitive in comparison with other applicants in the same field. They were given an opportunity to prove or enhance their academic capabilities through the UTP before re-applying to their preference area in hopes of being admitted.

The Transition Program students are both, males and females. Eighty-two students were initially assigned to the UTP, but only 70 students enrolled when the semester began. According to the highest represented culture groups, the current make up of the students is as follows: African Americans (N=45) (64.29%), Caucasians (N=19) (27.14%), Native Americans (N=4) (5.71%), Asian Pacific Islander (N=1) (1.43%) and Hispanic (N=1)(1.43%). Traditionally, the University Transition Program students are diverse in socioeconomic status. Descriptive information about the present sample appears throughout chapter 4.

Study Variables and Measures

Learning styles. Learning styles is the process of understanding the way an individual thinks and processes information. This involves receiving, processing and making intelligent interpretations about received information. The Learning Style Index (LSI) (Soloman & Felder, 2002) was selected for this purpose. This LSI has been used with entering college freshmen in an effort to start them thinking about the ways in which they best learn. It is a 44-item multiple choice questionnaire which describes learning situations and asks the participants to choose from two options. The scores can range anywhere from 1a to 11a to 1b to 11b. The letter helps to distinguish which of the learning methods is preferred according to the number of a-responses or b-responses.

The scores help the respondent understand how she/he best learn with recognition of four learning dimensions, they are: active vs. reflective, sensing vs. intuitive, visual vs. verbal, sequential vs. global. Active learners tend to retain and understand information best by being involved with their learning experience. This means that they prefer to discuss it, apply it in their everyday life situations, or maybe prefer explaining it to others believing that that will increase their level of understanding. Reflective learners prefer to reflect or think it through before trying it out. Active learners most prefer group work while reflective learners like to work alone (Soloman & Felder, 2002).

Sensing learners tend to like learning the facts before taking action while intuitive learners prefer discovering their own possibilities and relationships and how it all interconnects. Sensors like to solve problems by well-established methods while intuitive learners prefer to solve problems using new and innovative ideas, and dislike repetition (Soloman & Felder, 2002).

Visual learners learn by what they remember. Remembering in terms of pictures, diagrams, flow charts, time line, films, and project demonstrations. Verbal learners best learn from words—written and spoken (Soloman & Felder, 2002).

Sequential learners best understand when it is digested in small and orderly steps. It must make sense before it can be accepted and each step must follow sequence with the one before. Global learners are just the opposite, they digest in large chunks. These learners like to see the entire picture before making sense of it (Soloman & Felder, 2002).

The developer of this instrument administered this scale to several hundred people, and the data were subjected to a factor analysis. Items that did not load heavily on one and only one item was replaced with new items to obtain the current version of the instrument. Additional reliability and validity studies are currently being performed at several institutions, however data on the validity or reliability is not currently available. A copy of the instrument is in appendix A.

Family characteristics. Family characteristics are all the components

that makes that family unique. They include the family's income, educational background of the parents, the type of school the parents attended; if are college graduates, the number of children, marital status, and family values. This survey also included the type of jobs held by the parents. This is important information because research has shown children tend to have higher educational goals when their parents have achieved high paying positions, and students are less likely to discontinue their education when faced with difficulties (Hinderlie & Kenny, 2001).

An 11-item family characteristic survey was designed by the investigator. This questionnaire solicited information revalent only to the family. The questions were developed based on the need of the present study. Since the investigator was most interested in compiling information on the students' parents and their value system, the investigator came up with questions that would reflect that intent. After the questions were written, the investigator asked a member of the advisory committee, who is also a parent, to review the questions to ensure that the questions she wanted to asked were being asked. Also, the investigator wanted to make sure that the questions did not appear judgmental or intimidating. Further, the investigator wanted to make a friendly questionnaire to prompt a high return rate, which is one reason why the questionnaire only contained 11 questions. Each item of the questionnaire stands alone and is reported accordingly. A copy of

the questionnaire is in appendix B.

Academic self-efficacy. As originally defined by Bandura (1977), self-efficacy is a specific type of expectancy concerned with one's belief in one's ability to perform a specific action or set of behaviors required to produce an outcome. Bandura (1989) expanded the definition to also refer to people's beliefs about their capabilities to exercise control over events that affect their lives, as well as beliefs in their capabilities to mobilize the motivation, cognitive resources, and courses of action needed to exercise control over task demands (Bandura, 1990).

This is important because self-efficacy beliefs have been proven to influence cognitions in many ways. They influence how people set goals for themselves and the strategies they select for achieving the goals. Self-efficacy beliefs can also have a negative impact when one does not believe in their capabilities to perform a certain task. In the present study, self-efficacy beliefs were examined with reference to academic ability beliefs. The College Academic Self-Efficacy Scale (CASES) (Owen, 1988) was selected to measure the students' academic self-efficacy beliefs.

This is a 33-item, 5-point likert type scale, which measures the amount of confidence a student has in relation to taking notes, answering questions, writing, attending class on a regular basis, using a computer, and the like. The students responded to the questions by circling letters a, b, c, d, or e, which ranged from high confidence to low

confidence. Each letter of the alphabet corresponds with a value ranging from 5, which means quite a lot of confidence to 1, which means no confidence at all.

Three university faculty members in education and psychology developed the questions based on frequent student pattern of behaviors (Owen, 1988). The pool of questions was then examined by 7 graduate teaching assistants, and was revised based on their suggestions. The revised scale was then administered to 93 undergraduate educational and psychology students. They were asked to rate each question using a 5-point likert response. Owen (1988) established reliability for this scale by administering the scale twice over an 8-week interval to another group of 88 educational and psychology students. Alpha internal consistency estimates for the two occasions were .90 and .92. The 8-week stability estimate was .85

Concurrent validities were estimated using two different criteria, each suggested by self-efficacy theory: frequency of performing each task, and enjoyment of each task. In separate studies, the students were asked for 5-point self-ratings on frequency and enjoyment for each of the 33 academic behaviors on CASES (Owen, 1988). These studies were arranged as incremental validity research. In predicting mean item frequency, grade-point average (GPA) was forced into the regression equation, followed by the CASES score. The analyses, each carried out on different samples of educational psychology students from those described above, gave very

similar results. The academic self-efficacy showed very strong incremental validity beyond that explained by GPA alone. In a variation of these concurrent validity studies, the two samples were combined, and of course grade was regressed hierarchically on GPA, then CASES score. The addition of CASES increased from r from .62 to .81 (Owen, 1988). A copy of the instrument is in appendix C.

Psychosocial factors. The Student Developmental Task and Lifestyle Assessment (SDTLA) (Winston, Miller & Cooper, 1999) was selected as a measure of psychosocial factors. The student developmental task and lifestyle assessment is composed of statements shown to be typical of some students, and is designed to collect information concerning college students activities, feelings, attitudes, aspirations, and relationships. This assessment was designed to help students learn more about who they are, and how they can be effectively assisted while being in college. The designing of this instrument was done to measure certain aspects of Chickering's theory of psychosocial development of traditional-age college students. The SDTLA is composed of both developmental tasks (subtasks) and scales. For the purposes of the SDTLA, "developmental task is defined as an interrelated set of behaviors and attitudes that the culture specifies should be exhibited at approximately the same time by a given age cohort in a designated context" (Winston, Miller & Cooper, 1999, p. 4).

To score this instrument, the investigator added the values of all the

responses to each of the 153 questions in the 11 categories and subcategories. Some of the questions could not be given a value because the students had not been in a collegiate environment long enough to respond. So while the students may have replied to those questions, the investigator omitted their responses. Once the scores were catalogued, that score then had to be divided by the number of questions the participants responded too, not the number of questions that were being asked. This gave a raw score, which then had to be converted into a t-score. There was a formula used to make that conversion. Once the t-score was obtained, that could then be compared to the standard deviation of 50 for suggestive comparisons and interpretations. Winston, Miller & Cooper (1999) suggested when scoring the instrument because of measurement error, scores that fall within one-half of a standard deviation should be treated as substantially equivalent to the mean, so any scores ranging from 45 to 55 will be considered normal achievement level.

This assessment consists of 153 questions, and is made up of three developmental tasks (Establishing and Clarifying Purpose, Developing Autonomy and Developing Mature Interpersonal Relationships, each of which is further delineated by subtasks and two scales (Salubrious Lifestyle and Response Bias).

Establishing and Clarifying Purpose Task (PUR) is composed of four subtasks: educational involvement, career planning, lifestyle planning, and cultural participation. Educational involvement means that students

have well-defined and thought out educational goals as well as plans to achieve these goals. They are resourceful when it comes to achieving their goals and are actively involved in the college community. These students are not passive learners; they take initiatives to make sure that the type of experiences they are getting are in line with their educational plans. These students will make and keep regular appointments with their faculty advisors, they will do extra projects if they see the benefit, and they will attend non-required lectures without being influenced to do so. (Winston, Miller & Copper, 1999).

Career planning means students have an accurate knowledge of their skills, abilities, and commitment to secure success in certain occupations. These students are aware of the work world and their level of career readiness. They have made plans to find the appropriate job or thinking about graduate school to make themselves more marketable (Winston, Miller & Copper, 1999).

Lifestyle planning domain suggests that students have established a personal direction and one's life orientation, taking into account their values, religion, and educational objectives, family/personal relationships, and ethical issues. They must have specific plans about achieving their goals and understanding how they identify themselves leads to achieving future plans (Winston, Miller & Copper, 1999).

Cultural participation means that students are actively involved in a wide range of activities meant to broaden their cultural experiences. They

attend plays, museums, art exhibits, and musical events all in an effort to learn more about groups and races from which they hold no membership. They spend their leisure time reading and volunteering in student organizations (Winston, Miller, Copper, 1999).

The Developing Autonomy Task (AUT) is defined by four subtasks: emotional autonomy, interdependence, academic autonomy, and instrumental autonomy. Emotional autonomy means that students are self-sufficient. These students have less of a need for constant reassurance and guidance. They are self-guided and feel confident about the decisions they make. These students take risks and have little to no reliance on their parents for guidance (Winston, Miller & Copper, 1999). Interdependence means that students recognize their responsibility in their community. They recognize the reciprocal nature between them and their community. They are involved in activities that promote health, growth, and positive living among all concerned citizens. They have a genuine concern for others, and what they do is reflected in the concerns they have for their community (Winston, Miller & Copper, 1999).

Academic autonomy means that students understand how to manage their time in order to get the academic results they desire. These students have identified their goals and realize the commitment it takes to achieving those goals. They are independent learners, but will seek help when needed. They do not require a lot of direction and are considered self-disciplined (Winston, Miller & Copper, 1999).

The instrumental autonomy domain means that students have the ability to structure their lives and manipulate their environment in ways that permit them to satisfy their daily needs and meet their daily responsibilities without a great deal of direction or support from others. The students would be described as being independent, goal-directed, resourceful, and self-sufficient (Winston, Miller & Copper, 1999).

The Mature Interpersonal Relationships Task (MIR) is defined by two subtasks: peer relationships and tolerance. Peer relationship means that students have developed a trusting, independent, and frank relationship. They have less of a need to conform to their friend's standards and do not mind letting their weaknesses be known. They know the difference between friends and acquaintances. Disagreements are easily resolved or simply acknowledged (Winston, Miller & Copper, 1999).

Tolerance means that students have respect and are accepting of other races and cultures. Students do not use racial, sexual or negative stereotypes when making references about individuals. They have an openness to individual ideas and embrace diversity. Students will not reject students who are different from them or have different ideas (Winston, Miller & Copper, 1999).

Salubrious Lifestyle Scale (SL) measures the degree to which a student's lifestyle is consistent with or promotes good health and wellness practices, including moderating (or abstaining from) consumption of alcohol and abstaining from use of tobacco products. The Response Bias Scale (RB)

means that the student is attempting to portray himself/herself in an unrealistically favorable way.

Test-retest reliability gives an estimation of the stability of a measure over time. The SDTL was administered to three classes of students at two different institutions. The students completed the SDTLA again four weeks later. The total number of students from which both pre and post measures were acquired was 52. Correlations cluster around .80 (the lowest being .70 and the highest being .89). All correlations were statisically significant at $p<.01$. Overall this means that the SDTLA has adequate temporal stability, that is, results would not be expected to vary greatly over short periods of time for individuals completing the instrument and is more than adequate for group data (Winston, Miller & Copper, 1999). A copy of the instrument is in appendix D.

Academic index. Academic Index (AI) is the estimated grade point average (GPA) that the students will earn in their first and second semester of their freshmen year. The academic index is a prediction formula derived from one's high school GPA and college entrance examination scores. At North Carolina State University, the AI is determined by the university planning and analysis committee. It brings together various high school factors such as class rank, GPA, and a combination of math and verbal SAT scores. This may account for 20% of the total consideration. Other factors such as gender, community service, and ethnic membership are only taken into account when the student falls in the middle. The

Academic Index is only used as a starting point for the admission process. It does not ensure admission to the university. The formula for the AI changes yearly.

This information helps university officials estimate early on who is going to be at-risk and will require additional support compared to students who are entering the university under traditional circumstances. It also aids in helping the admissions office to decide whom to accept and whom to reject. The prediction formula for the academic index is predicted GPA, which ranges from 0.00 to 4.00 with higher predicted GPAs indicating better chances of academic success at North Carolina State University. The academic index was reported to the investigator by the admissions office at the time the students entered the University Transition Program.

Procedure

Data collection. The investigator sought the help of the director of the UTP to get a list of the students who had been accepted and agreed to enter the university as a Transition Program (TP) student. As stated earlier, a total of 82 names and addresses of the TP students' parents were provided, however, 12 students changed their minds about coming to North Carolina State University, leaving the program with 70 students. A letter was first mailed to the parents of the participants letting them know that their son/daughter will be involved in a study, and that they, too, would be receiving a survey for them to complete.

The letters, along with a self-addressed stamp envelope, were mailed the third week in July. The Family Characteristics Survey was mailed one week later. We asked that the surveys be returned by August 9, 2002. By this deadline, the investigator had received only 29 surveys. So in an effort to secure a greater response, the investigator spent three weeks on the telephone calling all the parents who had been sent surveys to ask if they received and returned the survey. The investigator had to call all the parents from the original list of 82 students because the surveys were completely anonymous, so there was no way to determine who had returned them and who had not. For those parents who did not return the survey, the investigator completed the survey over the telephone. This was a lengthy process because parents gave more information than needed. All calls were made between the hours of 9:00p.m. to 10:00p.m., giving parents a chance to get home and get settled. One parent did not feel comfortable answering the questions over the telephone because she felt that she would be identified. The investigator ensured all parents participating in the study that the surveys required no names and they in no way would be identified. This was not a planned procedure, however, it turned out to be a valuable experience that will be discussed in chapter 5.

An informed consent letter was mailed to the parents along with the survey. The letter informed them of their rights to participate or not, and indicated that their returned response would served as verification for

wanting to participate. The parents were told that returning the consent form was not necessary, and the parents who answered the survey over the telephone was read the informed consent form, and their willingness to participate also served as verification for participation.

The students were given the remaining instruments two weeks after school resumed, and the instruments were distributed in a campus facility by the investigator. All of the TP students are required to enroll in a 50-minute weekly orientation class designed specifically for the program. This class is set up so that the students will learn how to become more efficient. They learn how to study, use the library, negotiate with professors, manage stress, make decisions, and organize their time. The students were all given an inform consent form which required their signature before distributing any instruments. This form made them aware of their rights as participants. The investigator emphasize that they would not be unfavorable looked upon if they decided that they did not want to take part, and that by signing the form, they understood their rights, and are willingly participating. The forms were taken up and then the investigator then distributed the instruments. The following is a description of how each instrument was distributed.

The investigator visited the four sections of the orientation class during a one week period. Since the classes are taught back-to-back on Tuesdays and Thursdays, the instructors in each class allowed the investigator to disseminate the instruments during the last 30 minutes of the class and

at the beginning of the second class. The index of learning style was given first because it required the least amount of time for completion, followed by the college academic self-efficacy. Once the students completed the instruments, the investigator passed around a bag full of snacks and treats, and was told to take as much as they wanted. This was done just as a small token of appreciation for completing the instruments.

The SDTLA instrument was given in a one-night study hall which the students are required to attend four nights each week for two hours. The director believed that this would be the best time to complete this assessment because no other time was available and because this instrument would require 35 minutes to a full hour for completion. Since the students are in study hall, they are permitted to roam about the library freely. Some of the students sit in clusters if they are being tutored or receiving some common educational assistance. The director assigned a senior mentor to walk with the investigator in the library to identify students in the program. Once the students were identified, the investigator explained the instrument and asked them to complete it. Some of the students, while wanting to participate, did not think they could devote the time needed to complete this 153-item questionnaire during their study hall. Many wanted to take it back to their dorms and turn it in at a later time. Although not recommended, this was permitted in an effort to get as many back as possible. Due to this added procedure, a total of only 31

SDTLA scales were received representing a 44% return rate. Some of the students could not be found in the library and were thus not given the opportunity to participate. The director, because of the time it took to locate students and time needed to complete the instrument, decided he would take a few blank instruments and ask for volunteers during class the following week. This was done as an attempt to increase the return rate due to the importance of this scale. There were no takers.

Since the other two scales were given during class, the investigator was pleased to get them all back representing a 100% return rate for the Learning Styles Index and Academic College Self-Efficacy Scale Inventories.

Data analysis. The data was analyzed by using the Software Package for Social Science (SPSS), which is a statistical software used primarily for surveys, scales, and the like. The investigator, over a three-week period, hand scored the instruments and then rechecked the calculations to ensure accuracy. A statistician was consulted to help set the data up before entering the data into the program. The data were run for percentages, means, and standard deviations. Some of the instruments were analyzed from a gender perspective as well as collectively, which is illustrated in chapter 4.

Chapter 4

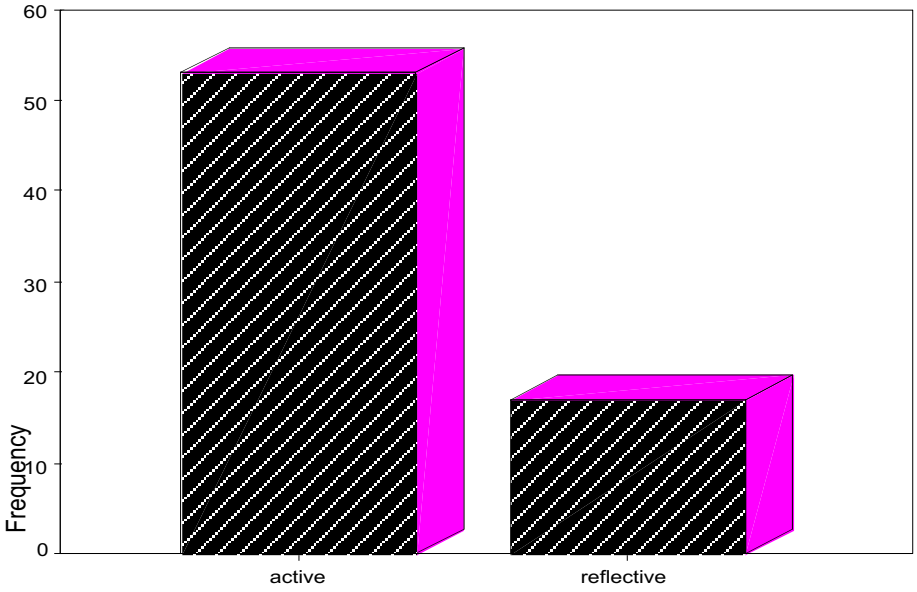
RESULTS

This chapter presents the findings of the profile of students currently in the University Transition Program. It will present findings from the four variables: learning styles, family characteristics, college academic self-efficacy, and psychosocial factors.

Learning Styles

Active vs. Reflective. Learning style is divided into four dimensions, they are: Active vs. Reflective, Sensing vs. Intuitive, Visual vs. Verbal, and Sequential vs. Global. A description of each dimension has been provided in chapter 3. Of the 70 participants, 53 (75.50%) were categorized as active learners and 17 (24.30%) were categorized as reflective learners. Figure 1 presents this information graphically.

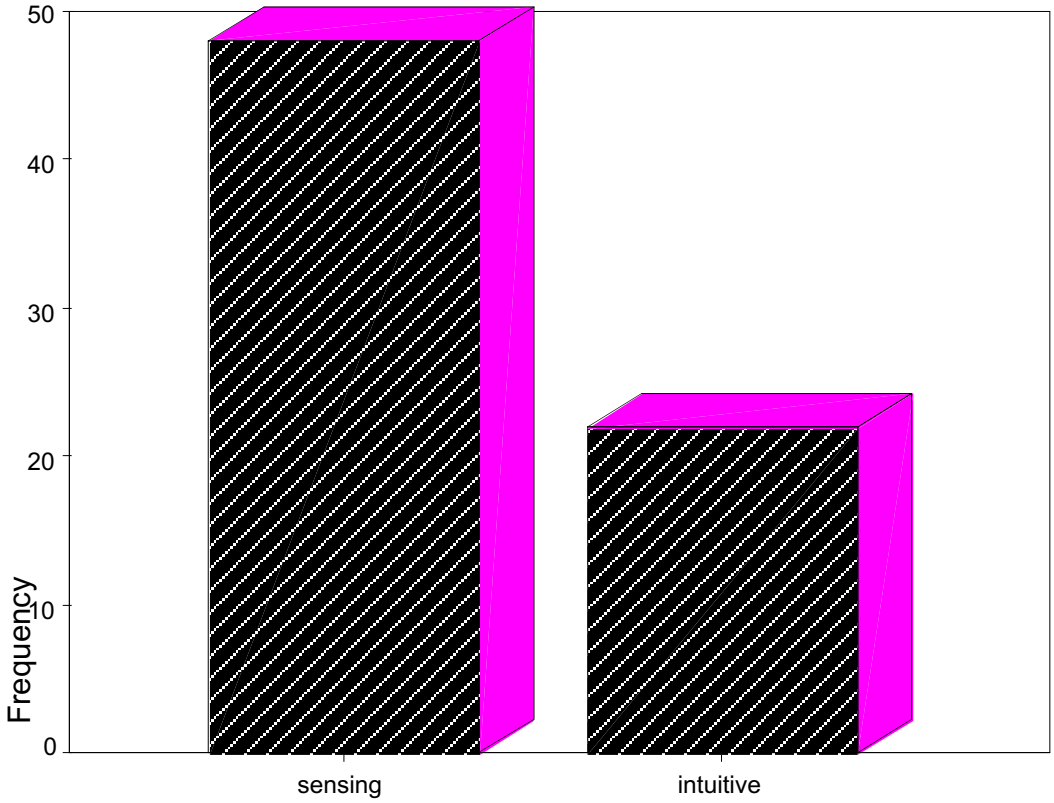
Figure 1. Active vs. Reflective



Active vs. Reflective

Sensing vs. Intuitive. Of the 70 participants, 48 (68.57%) are categorized as sensor learners, 22 (31.43%) were categorized as intuitive learners. Figure 2 presents this information graphically.

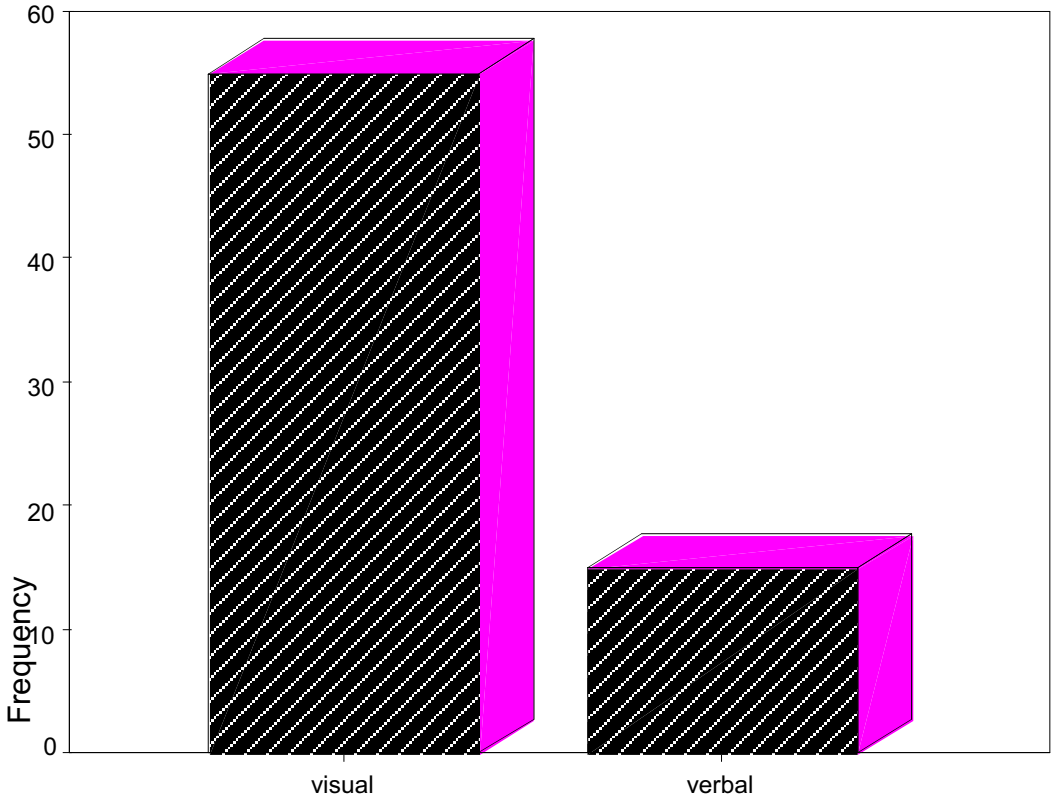
Figure 2. Sensing vs. Intuitive



Sensing vs. Intuitive

Visual vs. Verbal. Of the 70 participants 55 (78.57%) were categorized as visual learners, 15 (21.43%) were categorized as verbal learners. Figure 3 presents this information graphically.

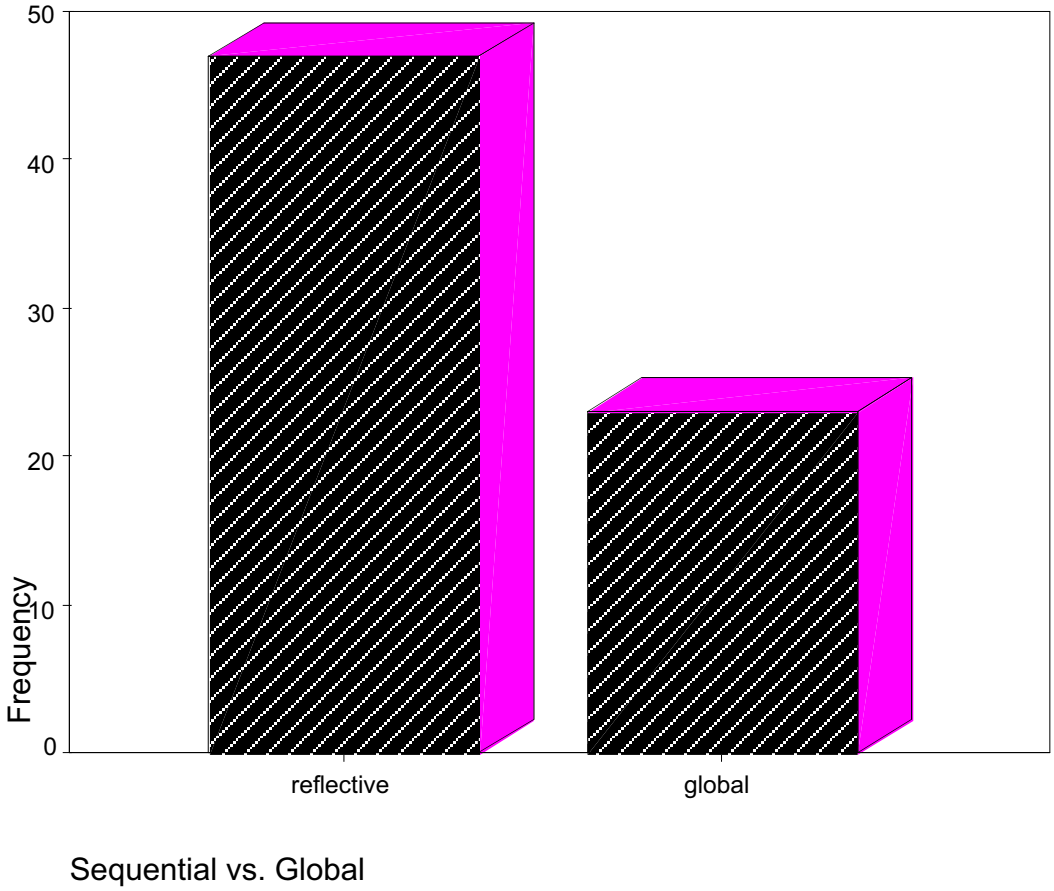
Figure 3. Visual vs. Verbal



Visual vs. Verbal

Sequential vs. Global. Of the 70 participants, 47 (67.14%) were categorized as sequential learners, 23 (32.86%) were categorized as global learners. Figure 4 presents this information graphically.

Figure 4. Sequential vs. Global



Family Characteristics Survey

Of the 70 students in the study, the parent or parents of 62 responded to the Family Characteristics Survey. The following headings each represent specific questions on the Family Characteristics survey (FCS) which is found in appendix B.

Gender of single Parents. There were 10 single parents in the sample. Nine were females and 1 was a male.

Marital Status of Parents. Table 1 present a summary of the responses to this question.

Table 1. Marital Status of Parents

Marital Status	Number	Percentages
Single	10	16.13
Married	46	74.19
Separated	3	4.84
Divorced	3	4.84
Total	62	

Age range of parents. Tables 2 and 3 presents a summary of the responses to this question.

Table 2. Age Range of Female Parents

Age Range	Number	Percentages
30-40	19	31.15
41-50	32	52.46
51-60	10	16.39
Over 60	0	0
Total Responses	61	

Table 3. Age Range of Male Parents

Age Range	Number	Percentages
30-40	8	16.67
41-50	24	50.00
51-60	13	27.08
Over 60	2	4.17
No Response	1	2.08
Total Response	48	

Number of Children in a Household. Table 4 presents a summary of the responses to this question.

Table 4. Number of Children in a Household.

Number of Children	Number	Percentages
1-2	32	51.61
3-4	23	37.10
5-6	4	6.45
7-8	2	3.23
9 or more	1	1.61
Total Responses	62	

Race and ethnicity. Table 5 presents a summary of the responses to this question.

Table 5. Race and Ethnicity of Parents

Race/Ethnicity	Number	Percentages
White	18	29.03
African American	38	61.29
Native American	2	3.23
Asian	2	3.23
Other	2	3.23
Total Responses	62	

Interracial Marriages. Table 6 presents a summary of the responses to this question.

Table 6. Interracial Marriages

Member of Same Race	Number	Percentages
Yes	44	70.97
No	3	1.61
No Responses	15	24.19
Total Responses	62	

Level of Education. Tables 7 and 8 presents a summary of the responses to the questions.

Table 7. Level of Education for Female Parents

Level of Education	Number	Percentages
Junior High School	0	0
High School	9	14.75
Some College	15	24.59
Community College	7	11.48
College Graduate	16	26.23
Graduate School	13	21.31
Enrolled in College	1	1.64
No Response	0	0
Total Responses	61	

Table 8. Level of Education for Male Parents

Level of Education	Number	Percentages
Junior High School	1	2.08
High School	9	18.75
Some College	12	25.00
Community College	1	2.08
College Graduate	10	20.83
Graduate School	12	25.00
Enrolled in College	1	2.08
No Response	2	4.17
Total Responses	48	

Type of College Attended. Table 9 presents a summary of the responses to this question.

Table 9. Type of College Attended

College Type	Number	Percentages
Historical Black College	9	8.33
Predominately White Institution	40	37.04
Did not Graduate from College	52	48.15
No Response	4	3.70
Neither	3	2.78
Total Responses	108	

Average family income. Table 10 presents a summary of the responses to this questions.

Table 10. Average Family Income

Average Family Income	Number	Percentages
less than $15,000	1	1.61
$15,000-20,000	6	9.67
$21,000-25,000	1	1.61
$26,000-30,000	4	6.45
$31,000-35,000	9	14.52

Table 10. (continued)

$36,000-40,000	1	1.61
$41,000-45,000	5	8.06
$46,000-50,000	2	3.23
$51,000-55,000	0	0.0
$56,000-60,000	3	4.84
$61,000-65,000	3	4.84
$66,000-70,000	3	4.84
$71,000-75,000	2	3.23
$76,000-80,000	2	3.23
$81,000-85,000	0	0.0
$86,000-90,000	2	3.23
$91,000-95,000	2	3.23
$96,000-100,000	4	6.45
$100,000 or over	9	14.52
Did not respond	3	4.84
Total Responses	62	

Family values. Table 11 presents a summary of the responses to this questions.

Table 11. Family Values

	Education	Spirituality	Family	Trust	Communication
High	17	31	26	19	15
Some what high	7	9	16	7	10
Average	21	4	8	12	4
Less than average	10	5	7	15	8
Low	4	10	2	5	22
No Rank	3	3	3	4	3
Total	62	62	62	62	62

Type of Families. Table 12 presents a summary of the responses to this question.

Table 12.Type of families

Type of Families	Number	Percentages
Extended	5	8.06
Nuclear	51	82.26
Blended	5	8.06
Two or More Categories (Extended & Blended)	1	1.61
Total Responses	62	

Type of Work. Tables 13 and 14 presents a summary of the responses to this question.

Table 13. Type of Work for Female Parents

Type of Work	Number	Percentages
Professional	29	47.54
Semi-Professional	5	8.19
Trade Skills	2	3.27
Administrative	7	11.48
Service	6	9.84
Retired	4	6.56
Disabled	1	1.64
Factory	3	4.92
Unemployed	4	6.56
No Response	0	0
Total Responses	61	

Table 14. Type of Work for Male Parents

Type of Work	Number	Percentages
Professional	22	45.83
Semi-Professional	0	0
Trade Skills	12	25.0
Administrative	0	0
Service	7	14.58
Retired	2	4.17
Disabled	2	4.17
Factory	0	0
Unemployed	2	4.17
No Response	1	2.08
Total Responses	48	

Academic Self-Efficacy

In order to get the needed results from SPSS regarding this scale, codes had to be given to each category. The codes used to get the results are as follows: 1=very low (33-65), 2=low (66-98), 3=high (99-131), and 4=very high (132-165). The possible range of scores is 33-165. In the sample, the actual range was 132-165. Tables 15 and 16 presents summaries of the academic self-efficacy scores in the sample.

Table 15. Mean and Standard Deviations for Academic Self-Efficacy (N = 70)

	Number	Mean	Standard Deviation
Males	35	127.14	15.60
Females	35	125.25	16.75

Table 16. Gender * Class Cross Tabulation (N= 70)

Gender	Very Low	Low	High	Very High	Total
Male	0	1	19	15	35
Female	0	2	18	15	35
Total	0	3	37	30	70

Student Development Task and Lifestyle Assessment

Table 17 presents a summary of the data for each of the 11 scales and sub-scales of the SDTLA.

Table 17. SDTLA

Domains	Gender	Mean	Standard Deviation
Tolerance	Male (N=13)	57.7	10.1
	Female (N=18)	44.5	15.0
	Total	50.1	14.6
Emotional Autonomy	Male (N=13)	52.4	10.1
	Female (N=18)	47.7	15.8
	Total	49.7	13.7
Salubrious Lifestyle	Male (N=13)	51.6	11.7
	Female (N=18)	50.7	15.2
	Total	51.1	13.6
Academic Autonomy	Male (N=13)	57.8	8.3
	Female (N=18)	51.1	16.2
	Total	53.9	13.7
Interdependence	Male (N=13)	52.7	11.9
	Female (N=18)	47.9	17.2
	Total	49.9	15.2
Educational Involvement	Male (N=13)	49.6	12.3
	Female (N=18)	47.2	16.6
	Total	48.2	14.8
Career Planning	Male (N=13)	50.2	11.3
	Female (N=18)	44.1	13.1
	Total	46.7	12.6
Lifestyle Planning	Male (N=13)	49.5	13.7
	Female (N=18)	44.7	14.8
	Total	46.7	14.3
Instrumental Autonomy	Male (N=13)	52.3	11.3
	Female (N=18)	49.3	15.6
	Total	50.5	13.9
Cultural Participation	Male (N=13)	50.8	11.3
	Female (N=18)	44.6	14.8
	Total	47.2	13.6
Peer Relationship	Male (N=13)	51.6	11.2
	Female (N=18)	49.3	15.5
	Total	50.2	13.7

Chapter 5

DISCUSSION

The purpose of this study was to develop a profile of the Transition Program students at North Carolina State University. This profile would help to determine what type of services and programs are best suited for students who are academically at-risk. The profile was based on the following variables: learning styles, family characteristics, college academic self-efficacy, and psychosocial factors.

One major rationale for this study was the high attrition rate among college freshmen. Its primary focus was students who were specially admitted and labeled at-risk because they did not gain admission through traditional means. In the present study, at-risk refers to students who failed to meet minimum requirements for traditional admission to the university or to the college to which they applied.

Several instruments were employed in this study to gather the needed data. All instruments were distributed by the investigator during late August 2002 to 70 students who were enrolled in the University Transition Program and their parents. The student instruments were distributed over a course of two days during an orientation class and one study hall. The study hall posed some problems since the students were not centrally located. This resulted in a return rate of 44% for the psychosocial factors scales. There was, however, a 100% return rate for College Academic Self-

Efficacy Scale and the Learning Styles Index. The return rate of the family characteristic survey, which was completed by parents, was 89%. The data gathered from parents were retrieved through the mail and from telephone interviews.

Limitations

There were several limitations to this study. The first limitation is that this study took place at only one southern land-grant university using only the participants from their University Transition Program. The students were all pre-selected because of their affiliation with the transition program.

The population size was a total of 70 students and the parents of these students. The sample size is too small to make generalizations across campuses, therefore, the results found in this study should be viewed with caution when making program recommendations for academic institutions not similar to North Carolina State University.

Discussion of Findings

Index of Learning Styles (ILS)

While all the participants indicated a learning preference, the majority of the students were active, sensing, visual, and sequential learners. Based on the investigator's experience with past Transition Program students, these learning preferences were expected. Because the learning preferences ranged in variability, it indicates the role that diversity can have in the learning process. For instance, active vs. reflective learners can employ a

number of diverse learning methods when finding that their classroom instructor is not teaching according to their learning preference. Students can use hands on projects to help facilitate their learning. Learning not only occurs within the classroom but outside of the classroom as well. This can be another useful method when difficult subjects become hard to digest. Since active learners learn best by being involved (Soloman & Felder, 2002), students can join together for group discussions on class topics. This type of diversity presents students with many ways of learning. Belenky, Clinchy, Goldberger and Tarule (1986) stated that it is okay to invent what one cannot see so that one may be able to create their own learning discoveries.

Solomon and Felder (2002) suggest rating the learning preferences as strong, moderate, or mild, although, a balance between the active and reflective domain is most preferred. When students are balanced between the two learning preferences, they're chances for academic excellence increases because they have indicated a flexible, more balanced way of learning. Twenty-four and twenty-nine one hundredth percent of the participants in this study, stated they were balanced between being active and reflective learners. That implies that these students may have less academic stress due to their learning flexibility. However, 75.71% of the participants indicated either a moderate or strong preference for being either an active or reflective learner. That implies that these students may

have some learning challenges when they are in classrooms where the instructor does not teach according to their learning preference.

Solomon and Felder (2002) stated that sensing learners learn best when they are taught facts while intuitive learners prefer uncovering their own facts and possibilities. Sensory learners prefer using well-established methods, are good at memorizing facts, enjoy hand-on projects, and can appreciate being tested only on information that has been covered in class (Solomon & Felder, 2002). Intuitive learners like to create their own learning scenarios, are abstract thinkers, and dislike repeating the same steps (Solomon & Felder, 2002). Students in the UTP are mostly sensing learners which means that they must see a real world connection to what is being taught before they can grasp some meaning of the subject. Subjects like math, can be taught using examples where the applications would most likely occur or be useful. Since most of the students in the program are not abstract learners, it may be that they need to first appreciate why the subject matter is important, how learning this information is going to help them, and where it can be utilized.

Solomon and Felder (2002) indicated that students should also be balanced when it comes to being a visual and verbal learner. A large number of the students indicated their learning preference to be visual rather than verbal, and 7 (10%) of the students were balanced between the two while 63 (90%) of the participants indicated a moderate or strong

preference for the visual or verbal style. Not being a balanced learner could pose some problems for UTP students because most college classes are not presented visually (Solomon & Felder, 2002). Because most of the students were visual learners, the students will prefer some sort of visual aid in their classes. This visual aid can be any object that demonstrates learning the objective (i.e., plays, charts, movies, figures, etc.). These students need to visualize learning while it's taking place. Verbal learners, while only a small percentage in this study, are in the preferred learning environment at North Carolina State University because they learn best by what is being told to them, not showed to them, and can benefit in group discussions when they are given explanations (Solomon & Felder, 2002). Verbal learners may experience a greater success in social science classes like psychology and sociology because these classes are often taught using lectures and vignettes, and with little to no visual aids.

Students who indicated a sequential learning preference may experience less academic stress relating to learning because most college courses are taught in sequential order (Solomon & Felder, 2002). These students like to see the connection from one lesson to another. Mathematical classes are typically taught this way and may be appreciated more by sequential learners moreso than global learners because the steps to reaching the conclusion is first taught. Global learners will need to move more rapidly through the material before digesting it piece by piece in an effort to get a

better understanding of its real life application use (Solomon & Felder, 2002).

Although, students may benefit from having a variety of teaching styles, they should also learn how to be flexible learners. By this I mean, that students should not expect their instructors to totally accommodate their learning patterns. Students may have to learn how to adjust when they are in classrooms where their learning preference is not utilized. Students who are able to accommodate their learning style through self-adjustment will more than likely persist in their degree pursuit and complete their college education. This may possibly be the case at North Carolina State University, so it is imperative that the students in the transition program learn how to adjust or integrate themselves into the teaching environment for that subject matter.

In essence, when students understand how they best learn and are serious about learning, they begin to see the benefits of having diverse methods of learning. This appreciation for diversity in learning styles will more than likely lead to a greater success rate among academically at-risk students.

Family Characteristics Survey (FCS)

Based on the data generated by the FCS, a large number of the students in the transition program are members of two-parent households. Half of the parents were in a $50,000 dollar or higher bracket with most

parents having earned at least one college degree. This information contradicts the stereotype that many academically at-risk students come from low socioeconomic groups and from families with no education beyond high school (U. S. Department of Education, 1997). While this information may be true for some, it clearly does not represent many of the parents who participated in the study. Other characteristics of these families are that on average they only had 1-2 children and two parents totaling a family size of four. There has been some speculation that some parents are deciding to have smaller families to increase the family income. This seemed more evident during the telephone contacts with some parents.

While education was listed as a family value, it was not as high of a value as some of the others. The families mostly believed that education was the most important tool that a child could have but also believed that teaching their children the importance of having spirituality, trust, and the basic family principles, would facilitate getting a good education. In other words, the families believed that all of the other elements had to first be taught before their children could understand the value of earning a good education. Many of the parents stated that they planned for small families so that they could afford to give their children the best education possible in hopes that they will have as many career options as one could have. They did not want their children to have limited hiring opportunities, and having a limited education may decrease their chances of being able to select a

successful career.

The majority of the parents who did attend college, attended a Predominately White Institution (PWI), 37.04% while only 8.33% of the parents who graduated from college attend a Historical Black College or University (HBCU). This information is useful because it speaks to the type of motivation and information that is passed from the parents to their children. Since most HBCU's believe in nurturing their students and giving them as many chances as needed to perform as expected, parents who have students enrolled in these types of institutions may encourage their child to stay with the program, believing that mentors will take on the responsibility of helping students complete their program. This is almost expected at HBCU's while at PWI's the opposite may be true. While there may be some available mentors, they are less giving of themselves because of the research focused environment. Students are required to be more independent and in less need of one-to-one assistance, therefore, the faculty at PWI's may expect students to be able to think and reason on their own without a great deal of direction from them. When this type of behavior is present, parents who graduated from a PWI may intervene by talking with someone at the university about the difficulties their son or daughter is experiencing or by enrolling their son or daughter in another institution all together if they are not pleased with the outcome.

While all of the information gathered from the FCS was helpful in

recognizing and understanding the students in the program, the "family values" section ratings added more understanding to the way the UTP's staff members can expect students to behave and react in difficult situations. The results indicated that spirituality was the most highly favored family value followed by family, trust/honest, education, and communication. Based on past experiences with students in the program, this rating could imply that students are going to look more toward a spiritual guidance when faced with adversities, regardless of it being academically or personally. Students may feel that, if things are not going well for them at North Carolina State University, this may not be what God had in mind for them and may decide to take other steps in order to realize their true life mission. This may mean joining the armed forces, getting a job, transferring to a school where they may receive more nurturing and social support, or returning home to support a family business.

This information maybe helpful to the UTP staff because it informs them that the program did not necessary fail students who dropped out. Rather, there may have been a disconnection between their values and the way one values their education. Since program services are largely based on who the consumers are and their needs, this information is useful in tracking students when they do not succeed in retention programs and when administrators are struggling to determine the cause(s) for student attrition.

One of the most important findings from the family characteristics survey

was how to get the parents more involved in their child's education. Because so many of the parents were college educated and valued education, it was determined that if parents were more involved, the students may feel obligated to apply greater efforts to stay in school and perform as expected.

College Academic Self-Efficacy (CASES)

Since most of these students were academically successful in their various high schools, it was not surprising that they had high self-efficacy beliefs about their ability to perform academically at North Carolina State University. One of the ongoing challenges for the UTP has been to get the students to understand why they need transition program services and how these services will support their success at NCSU. This information suggests that they may believe they are already good enough to succeed and therefore cause them to resent being assigned to the University Transition Program.

The students were asked to complete this instrument during the beginning of their second week of school, in which case they had not yet been tested nor had they turned in any assignments. The students were feeling good about their academic ability because they were not yet aware of the demands that being full-time undergraduate students can place on them that are different from being full-time students in high school. It may have been difficult for some of the students to predict what academic

challenges they would meet because of the newness of the environment and the university. Students normally spend the first couple of weeks attending programs and seminars designed to help facilitate college success, especially those who are specially admitted, so they may not have thought much about what would be expected of them academically. These students may be more naive about how challenging the academic environment at the University will be, and the UTP will need to address the responsibilities associated with helping students understand the academic challenge they will face. This will need to be accomplished in a manner that will be neither too harsh nor too soft.

This is where the UTP can assist. The program has already identified the students as being at-risk because of the way they entered the university, now helping the students make the transition from high school to college begins. The UTP offers, and can continue to offer, academic and nonacademic support services to the students that will facilitate their success. Since the program is experiencing some success, although not 100%, the transition program students may feel better about the program if they did not feel they were being labeled. They are referred to as "TP" students at NCSU, not North Carolina State students. Maybe a name change for the program is in order to effectively demonstrate the mission of the program. A name which bears no negative labels or singles students out as being different or less capable is recommended. One North Carolina

university refers to their retention program as the Center for Student Success. Because they are labeled, they may believe they are not as smart or seen as a vital asset to the University, and because of this, they focus too much on the stigma attached to being labeled. It takes going through the program and taking advantage of the program's services to realize the true benefit to being a transition program student. Although families and students see and understand the benefit from being in the transition program, some students resent being told how to spend their time and being made to take classes that are not required by the larger college community. Some Transition Program students realize that they did not do as well as they could have in high school and are thankful to be given a second chance to demonstrate their true academic ability. So for these students, the Transition Program is an extension of high school and they feel better prepared than did their high school years.

Yet, 4.3% of the students indicated having 'low' self-efficacy beliefs about completing their programs. While this only represents a small percentage of the UTP students, these students may require special attention in addition to what they are already receiving so that they may have some opportunity for degree completion. Schwartz and Washington (1999) stated " if specific predictors could be found which indicated potential problems, early intervention and other types of assistance could be designed and implemented" (p. 177). A student who is first specially admitted and then

has a low self-efficacy belief about completing his or her program may decide to quit their program sooner rather than later when burdened with too many obstacles. That is why it becomes so important for students to understand their strengths and weaknesses so that they may consider all options before deciding that college is not for them.

Student Developmental Task and Lifestyle Assessment (SDTLA)

The average scores for the sample of participates who were assessed on the Emotional Autonomy, Salubrious Lifestyle, Interdependence, Educational Involvement, Career Planning, Lifestyle Planning, Instrumental Autonomy, Cultural Participation, and Peer Relationship scales were within the "normative sample range" of one half standard deviation above and below the mean. The means for the male participants were higher than for the females.

For the Tolerance and Academic Autonomy scales the same gender differences occurred with the mean for the males being slightly above the normative sample range while the average for females fell within the normative range.

Although the averages differed, it is important to note that the distributions overlapped, and there were greater differences within the male and female samples than there were between them. Therefore, it is imperative not to stereotype females in the UTP as being lower on these attributes than males because some females had higher scores than some of

the males.

Note also that the sample for this measure was only 31 of the 70 participants, and 18 were females with 13 being males. Consequently, the sampling for this variable may not have been as representative as for the others.

Even though these were mean differences, all of the means for both genders were within or hovered near the normative mean of one half standard deviation above and below the mean. Therefore, it appears as if the total sample, both males and females presented relatively normal responses on average across all of the SDTLA scales.

This scale provides some insight of how important out-of-the classroom experiences can be in determining how well a student will persist in their educational pursuit or not. Low scores on too many of the above stated domains can indicate that some students may wonder whether if college is right for them, is NCSU right for them, or do they belong in a different environment all together. Tracey and Sedlacek (1987) found that non-cognitive, psychosocial questionnaire items were better predictors of academic performance for minority students rather than cognitive abilities scores and even more important for predicting student success beyond the first year. The SDTLA findings indicated that on average, the UTP students may fall within the normal range on the psychosocial variables that were assessed. Therefore, their psychosocial needs appear to be similar to those

one might expect to find in the remainder of the student body. Consequently, the so-called academically at-risk UTP students seem to be similar to all students in the psychosocial or non-cognitive variables domain. It would appear that UTP personnel could employ strategies for emphasizing the importance of non-cognitive interventions and progress that were similar to those recommended for all students in the professional literature.

Anecdotal Findings that Relate to the SDTLA

Since the investigator had to make personal contacts with the parents participating in the study, other information became available that was useful. One vignette is shared herein.

One parent who resides in Charlotte, North Carolina helped her daughter move in her dorm the weekend before classes began. Two days following her moving in, the mother was contacted by the daughter to say that her meal card had not been activated and she wanted to come home because she was having a hard time figuring out what to do. The mother reported that her daughter was upset and had decided that she did not like the university environment. She did not know what to tell her daughter other than try to find someone to help her. She was asking the investigator what to do and where to direct her daughter. She had made plans to pick her daughter up on that Saturday if she saw no change in her situation. However, she did not want to do that because she believed that, if her daughter came home,

she would not be going back. A few days later, her daughter made a friend who showed her how to catch the university bus and travel throughout various shopping centers located near the campus. The mother wired her daughter some money to buy food until her meal card was activated.

This may seem less important to some students because they perhaps would have known how to respond in a situation like this. Perhaps this student has never been in a situation where she had to depend on herself to make crucial decisions. The fact that her mother was making arrangements to pick her up was not allowing her daughter an opportunity to show her mother that she was more than capable of taking charge of her life.

The investigator was pleased that the student was able to work her situation out, but felt that the mother should have told her daughter that she would not pick her up simply because she was having a difficult time figuring out how to eat. That may not be serious enough to warrant throwing away an entire year of education or maybe even longer. The daughter should have questioned someone in the UTP about taking the appropriate steps to getting her card activated so that she would not have to spend time worrying about her health or upsetting her mother. It appears that this could have been avoided if she had not panic about not being able to eat. The investigator was concerned about how this student resolved problems and her dependence on others to resolve her issues for her. This speaks to several of the psychosocial and learning style domains

listed above, and this student may suffer because of this if she does not learn how to approach making decisions in a rational and reasonable manner.

Recommendations for Professional Practice

The following recommendations are base on the findings from the present study, anecdotal data acquired from work experience in the UTP, and from the literature review in chapter 3.

Learning styles. The findings suggest that students in the UTP will benefit from interventions that help them understand their own individuals learning styles and how they compare and contrast them with the classroom styles at the University. This could be accomplished via units in ECD 101 or activities associated with the planned study halls. The intervention may be evaluated by monitoring student performance in order to determine how successful the intervention is and by assessing how easy or difficult it was to implement the intervention.

Family characteristics. The findings also suggest the UTP may benefit from enhanced parental involvement. The researcher recognizes that this is a delicate and challenging topic because students could resent too much parent involvement, and many parents are busy and live quite far from the University campus. One approach might be a series of workshops throughout the year on how parents might help and support their university students unobtrusively. Topics of interest might include managing

finances, appropriate ways for parents to communicate with university students, information about the curriculum and registration, and how to hold down a part-time job while being a successful student. Interactive ways of conducting the program could be on-campus meetings, teleconferences, and electronic mail. The UTP could also distribute newsletters, flyers, or other mailings for the parents to read.

This intervention might be evaluated by assessing students and parents attitudes about the program after it has been implemented, its impact on student performance and adjustment, and perceptions of UTP administrators about the effects and contributions of the interventions.

Academic self-efficacy. Several ideas for practice emerged from study findings. First, it was recommended that all incoming students complete the academic self-efficacy measure during the orientation program in August. Second, those individuals with low self-efficacy scores should receive individual and group counseling sessions designed to help them become more confident in their ability to succeed academically beginning in August and continuing throughout the year as long as it is necessary. The counseling interventions may consist of one or all of the following recommendations for enhancing self-efficacy: (a) provide participants with information about their strengths; (b) provide them with example students who are coping successfully; (c) refute and reframe their negative self-thoughts; and (d) offer instructions on how to relax physically when feeling

anxious about one's academic ability.

Third, inform those with average to high self-efficacy scores that they may experience new challenges in the university environment. This might be included as a unit in ECD 101. Fourth, monitor the progress of these students academically to determine whether or not they are maintaining the original levels of academic self-efficacy. Fifth, provide the same counseling interventions for those students in this group who experience decreasing self-efficacy scores as for those who had low scores initially.

Psychosocial variables. The findings indicate that most UTP students are within the normal range on the psychosocial variables that were addressed in the present study. Therefore, it appears as if much of what the UTP is doing presently is on target for the population being served. On the other hand, since the students are similar to much of the remainder of the university student body psychosocially, it appears as if they may resent being identified as at-risk students and treated in visibly different ways. This position is also supported by anecdotal observations the investigator made when employed by the UTP.

A program designed to get students more involved in, and less apart from, the remainder of the university is recommended. This should begin immediately during the first semester. An attempt to make these students feel more normal and integrated may enhance their self-esteem, eliminate feelings of being labeled negatively, and make them more appreciative of and

realistic about the opportunity provided them in the UTP. There are numerous ways to accomplish this goal: (a) change the name of program to something less demeaning to the students, (b) encourage program activities that cause integration with the larger study body, and (c) provide information about opportunities to get involved in the life of the university and acquire voluntary learning experiences on campus.

These interventions may best be evaluated by assessing the attitudes of the students toward being singled out as enrolled in the UTP and later how they feel after having opportunities to be more integrated.

Recommendations for Future Research about the Transition Program

The recommendations made herein are limited in part by the number of variables studies. Perhaps there are other descriptive variables of intent that will provide valuable descriptive data about the students and the program. Findings from assessing additional descriptive domains may lead to new ideas for improving the program and its services to the students enrolled therein.

Two sets of additional variables that come to mind are Holland's (1997) personality-environment typologies and Tracey and Sedlacek's (1984) non-cognitive variables. Holland's typologies are measured via The Vocational Preference Inventory (VPI) (1985), and the non-cognitive variables can be measured by The Non-cognitive Questionnaire (NCQ) (Tracey & Sedlacek, 1984).

Knowledge of the Holland typology structures of the students may be

helpful in the same way that the learning styles data are. Knowing their typology structure may help students adjust to the university environment and start making future career plans. Data from the NCQ may help the UTP personnel plan interventions designed to increase student involvement in university activities and programs. This may be a useful response to the recommendations above about integrating students moreso than what is currently happening.

Recommendations from Anecdotal Data

It appears as if the transition program will benefit from increasing the number of persons employed to serve these students. Currently, one full-time administrative employee and one half-time graduate assistant are serving 70 students and their families yearly. Budget constraints have caused a decrease in staffing with resultant constraints upon the services rendered.

Recommendations Based on Literature Review

The following recommendation is based on the findings of the present study. Tracey and Sedlacek (1984) cited a number of risk factors associated with student attrition. These risk factors, also known as non-cognitive variables, are: family support, health and wellness, social and interpersonal relationships, crisis management and control, beliefs about their academic ability, and residence versus independent living. Because of the contributions made by the above stated variables and how these variables relate to student persistence, the following recommendation is

being made. The investigator is recommending an incentive program for specially admitted students. First, assemble an incentive package where students can be motivated to stay in school and graduate within a desired length of time. This incentive package would represent a small portion of the student tuition and is paid back to the student upon degree completion or upon competing school within four years, since this is most preferred. The incentive package would provide academically at-risk students who might be challenged to stay in school because of either the above stated non-cognitive variables or any obstacles that may otherwise impinge the students' decision to continue their education. The incentive package will hopefully motivate students to continue their education even when faced with such hindrance.

The success of this recommendation can be evaluated by conducting a one-year experimental study. An incoming UTP freshman class can be randomly assigned to one of two conditions. One condition will receive the incentive package and the other will not. Measures of academic performance (GPA), attrition, academic self-efficacy, and attitude toward enrollment in UTP might be assessed and compared. Members of the control condition will need to receive some sort of benefit in order to address the compensatory equalization of the treatments threat to internal validity.

The present study provided a profile of students in the North Carolina State University Transition Program across several variables. The data appear to identify potential challenges for the program to address in order to

make it more effective while also pointing out strengths in the program. The information also suggests ways to improve the program if sufficient resources are available.

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APPENDICES

Appendix A
Index of Learning Style

August 1, 2002

Dear University Transition Program Student:

As a student in the North Carolina State University Transition Program (UTP), you will be requested to participate in a data collection program that is designed to help the UTP administrators learn more about the students who are enrolled. The information will be collected anonymously and used to develop programs that may help the students become successful in achieving their academic goals.

The data collection process will be conducted by Vanessa L. Trevathan, a doctoral candidate in the counselor education program under the direction of Herbert A. Exum and Stanley B. Baker of the counselor education faculty, and is a part of her doctoral dissertation. All data will be kept in a secure location and will be destroyed when the study is completed.

Your participation is voluntary. You may decline to participate without penalty. If you decide to participate, you may withdraw from the study at any time without penalty and without loss of benefits to which you are otherwise entitled. If you have any questions or concerns about this survey, Vanessa can be reached at (919) 515-2244/ v.trevathan@worldnet.att.net or you may contact Dr. Exum @ 919-515-6358/herbert_exum@ncsu.edu. If you believe you have not been treated according to the descriptions in this letter, or your rights as a participant in the research has been violated during the course of this project, you may contact the Chairperson of the NCSU Human Subjects Committee, Box 7906, NCSU Campus.

I have read and understood the above information. I have received a copy of this form. I agree to participant in this study.

_____ _____

(Participant Signature) (Date)

_____ _____

(Investigator's Signature) (Date)

Index of Learning Styles

DIRECTIONS

Select "a" or "b" to indicate your answer to every question. You may choose only one answer for each question.

If both "a" and "b" seem to apply to you, choose the one that applies more frequently.

1. I understand something better after I
   0 (a) try it out.
   0 (b) think it through.

2. I would rather be considered
   0 (a) realistic.
   0 (b) innovative.

3. When I think about what I did yesterday, I am most likely to get
   0 (a) a picture.
   0 (b) words.

4. I tend to
   0 (a) understand details of a subject but may be fuzzy about its overall structure.
   0 (b) understand the overall structure but may be fuzzy about details.

5. When I am learning something new, it helps me to
   0 (a) talk about it
   0 (b) think about it

6. If I were a teacher, I would rather teach a course
   0 (a) that deals with facts and real life situations.
   0 (b) that deals with ideas and theories.

7. I prefer to get new information in
   0 (a) pictures, diagrams, graphs, or maps.
   0 (b) written directions or verbal information.

8. Once I understand
   0 (a) all the parts, I understand the whole thing.
   0 (b) the whole thing, I see how the parts fit.

9. In a study group working on difficult material, I am more likely to
   0 (a) jump in and contribute ideas.
   0 (b) sit back and listen.

10. I find it easier
    0 (a) to learn facts.
    0 (b) to learn concepts.

11. In a book with lots of pictures and charts, I am likely to
    0 (a) look over the pictures and charts carefully.
    0 (b) focus on the written text.

12. When I solve math problems
    0 (a) I usually work my way to the solutions one step at a time.
    0 (b) I often just see the solutions but then have to struggle to figure out the steps to get to them.

13. In classes I have taken
    0 (a) I have usually gotten to know many of the students.
    0 (b) I have rarely gotten to know many of the students.

14. In reading nonfiction, I prefer
    0 (a) something that teaches me new facts or tells me how to do something.
    0 (b) something that gives me new ideas to think about.

15. I like teachers
    0 (a) who put a lot of diagrams on the board.
    0 (b) who spend a lot of time explaining.

16. When I'm analyzing a story or a novel
    0 (a) I think of the incidents and try to put them together to figure out the themes.
    0 (b) I just know what the themes are when I finish reading and then I have to go back and find the incidents that demonstrate them.

17. When I start a homework problem, I am more likely to
    0 (a) start working on the solution immediately.
    0 (b) try to fully understand the problem first.

18. I prefer the idea of
    0 (a) certainty.
    0 (b) theory.

19. I remember best
    0 (a) what I see.
    0 (b) what I hear.

20. it is more important to me that an instructor
    0 (a) lay out the material in clear sequential steps.
    0 (b) give me an overall picture and relate the material to other subjects.

21. I prefer to study
    0 (a) in a small group.
    0 (b) alone.

22. I am more likely to be considered
    0 (a) careful about the details of my work.
    0 (b) creative about how to do my work.

23. When I get directions to a new place, I prefer
    0 (a) a map.
    0 (b) written instructions.

24. I learn
    0 (a) at a fairly regular pace. If I study hard, I'll "get it."
    0 (b) in fits and starts. I'll be totally confused and then suddenly it all "clicks."

25. I would rather first
    0 (a) try things out.
    0 (b) think about how I'm going to do it.

26. When I am reading for enjoyment, I like writers to
    0 (a) clearly say what they mean.
    0 (b) say things in creative, interesting ways.

27. When I see a diagram or sketch in class, I am most likely to remember
    0 (a) the picture.
    0 (b) what the instructor said about it.

28. When considering a body of information, I am more likely to
    0 (a) focus on details and miss the big picture.
    0 (b) try to understand the big picture before getting into the details.

29. I more easily remember
    0 (a) something I have done.
    0 (b) something I have thought a lot about.

30. When I have to perform a task, I prefer to
    0 (a) master one way of doing it.
    0 (b) come up with new ways of doing it.

31. When someone is showing me data, I prefer
    0 (a) charts or graphs.
    0 (b) text summarizing the results.

32. When writing a paper, I am more likely to
    0 (a) work on (think about or write) the beginning of the paper and progress forward.
    0 (b) work on (think about or write) different parts of the paper and then order them.

33. When I have to work on a group project, I first want to
    0 (a) have "group brainstorming" where everyone contributes ideas.
    0 (b) brainstorm individually and then come together as a group to compare ideas.

34. I consider it higher praise to call someone
    0 (a) sensible.
    0 (b) imaginative.

35. When I meet people at a party, I am more likely to remember
    0 (a) what they looked like.
    0 (b) what they said about themselves.

36. When I am learning a new subject, I prefer to
    0 (a) stay focused on that subject, learning as much about it as I can.
    0 (b) try to make connections between that subject and related subjects.

37. I am more likely to be considered
    0 (a) outgoing.
    0 (b) reserved.

38. I prefer courses that emphasize
    0 (a) concrete material (facts, data).
    0 (b) abstract material (concepts, theories).

39. For entertainment, I would rather
    0 (a) watch television.
    0 (b) read a book.

40. Some teachers start their lectures with an outline of what they will cover. Such outlines are
    0 (a) somewhat helpful to me.
    0 (b) very helpful to me.

41. The idea of doing homework in groups, with one grade for the entire group,
    0 (a) appeals to me.
    0 (b) does not appeal to me.

42. When I am doing calculations,
    0 (a) I tend to repeat all my steps and check my work carefully.
    0 (b) I find checking my work tiresome and have to force myself to do it.

43. I tend to picture places I have been
    0 (a) easily and fairly accurately.
    0 (b) with difficulty and without much detail.

44. When solving problems in a group, I would be more likely to
    0 (a) think of the steps in the solution process.
    0 (b) think of possible consequences or applications of the solution in a wide range of areas.

Appendix B
Family Characteristics Survey

Dear Parent(s):

We are looking forward to this fall when your son or daughter will enroll as a freshmen member of the wolfpack family. Their admission into the Transition Program (TP) assures that they will be given every opportunity to become a successful graduate. Over the years this program has worked hard at enhancing the services that it offers to students. One student who graduated in May, Ahmad Harvey, started as a TP student. This fall he will enroll in a graduate program in mathematics at the University of Maryland on a full fellowship.

In order to continually assess our effectiveness, we need to periodically survey students and parents/guardians to assure that we are targeting the best predictors of student success. You will be contacted very shortly by Vanessa L. Trevathan, a doctoral candidate in the Counselor Education Program, who will ask you to complete and return the Family Characteristics Survey. Your participation is voluntary, and its does not affect the status of any student in the program. The survey contains no identifiers that would reveal the identity of those surveyed. The information that is gathered from this survey and other student assessment will contribute to bolstering program quality.

Thank you for taking the time to contribute to this important effort. If I can answer any questions please feel free to contact me at 919-515-3037. I look forward to meeting each and every one of you.

Sincerely,

James A. Anderson
Vice Provost for Undergraduate Affairs

July 29, 2002

Mr. and Mrs. Sample
1111 Peach Tree Street
Raleigh, North Carolina 30327

As a parent or guardian of a student enrolling in the North Carolina State Transition Program University (UTP), we are requesting your assistance. The information provided in the accompanying Family Characteristics Survey will help us to serve the UTP students better.

The data collection process will be conducted by Vanessa L. Trevathan, a doctoral candidate in the counselor education program under the direction of Herbert A. Exum and Stanley B. Baker of the counselor education faculty, and is a part of her doctoral dissertation. The data will be kept in a secure location and will be destroyed when the study is completed.

Your participation is voluntary. Your decision to complete and mail the accompanying survey in the stamp, addressed envelope after reading this letter will serve as consent to participate in the study. If you do not wish to participate, discard these materials. The information collected from this survey contains no identifiers of the participants. Therefore, your identity will be anonymous.

If you have any questions or concerns about this survey, Vanessa can be reached at (919) 515-2244/v.trevathan@worldnet.att.net or you may contact Dr. Exum @ (919) 515-6358/herbert_exum@ncsu.edu. If you believe you have not been treated according to the descriptions in this letter, or your rights as a participant in this research has been violated during the course of this project, you may contact the Chairperson of the NCSU Human Subjects Committee, Box 7906, NCSU Campus.

Sincerely,

Vanessa L. Trevathan
Counselor Education Program

Family Characteristics Survey

Directions: Place an X beside each item that best describes you.
Once you have completed the survey, please return it in the enclosed self-addressed stamp envelope by August 9, 2002.

1. If you are a single parent, what gender are you?

   Male_____ Female_____

2. Marital Status: Single _____ Married _____ Separated _____
   Widowed _____ Divorced _____

3. Age range?

You	Spouse
30-40 _____	30-40_____
41-50 _____	41-50 _____
51-60 _____	51-60 _____
over 60 _____	over 60 _____

4. How many children do you have?

   1-2____
   3-4____
   5-6____
   7-8____
   9 or more___

5. Race/Ethnicity

White_____	Asian _____
African American_____	Other _____
Native American _____	Other (specify) _____
Hispanic _____	

5a. Do you and your spouse share the same racial identity? Yes or No

6. Highest Level of Education

You	Spouse
Junior High _____	Junior High _____
High School _____	High School _____
Some College _____	Some College _____

College Graduate _____ College Graduate _____
Graduate/Professional School _____ Graduate/Professional School ___

7. If you graduated from college, what type was it?
   Historical Black College/University (HBCU) _____
   Predominately White Institution (PWI) _____

8. What is your family's average income?

   $15,000-20,000 _____
   $ 21,000-25,000 _____
   $ 26,000-30,000 _____
   $ 31,000-35,000 _____
   $ 36,000-40,000 _____
   $ 41,000-45,000 _____
   $ 46,000-50,000_____
   $ 51,000-55,000_____
   $ 56,000-60,000_____
   $ 61,000-65,000 _____
   $ 66,000-70,000_____
   $ 71,000-75,000 _____
   $ 76,000-80,000_____
   $ 81,000- 85,000 _____
   $ 86,000-90,000 _____
   $ 91,000-95,000 _____
   $ 96,000-100,000 ____
   $100,000 or over _____

9. Rank the following values according to your family from 1-5. (1 has low value; 5 has the highest value)

   Education _____ Spirituality _____ Family _____
   Trust/Honesty _____ Communication _____

10. What is your family structure?

    Extended (parents & grandparents reside in the same house)_____
    Nuclear Family (parents and children reside in the same house) _____
    Blended Family (stepparent and stepchildren)_____

11. What type of work do you do?

    Professional (i.e. teacher, nurse, doctor, social worker) _____
    Administrative (i.e. secretarial, receptionist) _____

Trade Skills (i.e. carpenter, masonry, farming, factory, assembly line) _____
Service (i.e. police officer, firefighter) _____
Other _____ (please specify)
*Please also list for spouse if you are married _____

Appendix C
College Academic Self-Efficacy

9 May 2002

Dear Vanessa,

Thank you for your inquiry about the *College Academic Self-Efficacy Scale (CASES).* You are certainly welcome to use *CASES.* I've attached a copy of the scale. Here area few summary points about the scale.

Items are scored as A, or "quite a lot" = 5...E, or "very little" = 1. On the other hand, because we read from right to left, data entry is faster letting A = 1, and so on. If you enter data with A = 1, then let the computer re-code the values so that A becomes 5.

In calculating an overall *CASES* score, we prefer calculating a mean rather than a sum. With missing data (e.g., omitted items), a sum score is incorrect; the mean considers missing data without penalizing the respondent. Also, the mean score is in the original metric of the scale, so there is a simple frame of reference for interpreting scores.

Also, you may wish to change the questionnaire instructions to best fit your application. For example, if you need informed consent, you might say something like "This questionnaire is completely voluntary and confidential. There are no penalties for not participating, and you may quit at any time. Answering the questionnaire shows your consent to let us use your responses in research." And, because there is increasing sensitivity about coding responses with Social Security numbers, you may want to use some other coding device. We have had good luck using simplified pseudo-anonymous codes (see Damrosch, S.P. [1986]. Ensuring anonymity by use of subject- generated identification codes. *Research in Nursing and Health, 9,* 61-63.)

Best wishes in your research, and please feed free to get in touch if you have other questions.

Sincerely,

Steven V. Owen, Professor and Senior Biostatistician
School of Nursing, and
Department of Preventive Medicine and Community Health
University of Texas Medical Branch
301 University Blvd. Galveston, TX 77555-1029
Ph: 409-772-8312
Fax: 409-747-1554
Email: svowen@utmb.edu

College Questionnaire

DIRECTIONS. We are interested in learning more about you to help us improve our program. Your responses are strictly confidential and will not be shown to others. Do not sign your name. We hope you will answer each item, but there are no penalties for omitting an item.

Social Security Number: N/A
Male_____ Female_____ Age_____
Estimate your current grade point average_____

How much confidence do you have about doing each of the behaviors listed below? Circle the letters that best represent your confidence.

A B C D E

QUITE a Lot ←——————→ **Very Little**

CONFIDENCE

How much confidence do you have...

Lot _____Little
A B C D E 1. Taking well-organized notes during a lecture.
A B C D E 2. Participating in a class discussion.
A B C D E 3. Answering a question in a large class.
A B C D E 4. Answering a question in a small class.
A B C D E 5. Taking "objective" tests (multiple-choice, T-F, matching).
A B C D E 6. Taking essay tests.
A B C D E 7. Writing a high quality term paper.
A B C D E 8. Listening carefully during a lecture on a difficult topic.
A B C D E 9. Tutoring another student.
A B C D E 10. Explaining a concept to another student.
A B C D E 11. Asking a professor in class to review a concept you don't understand.
A B C D E 12. Earning good marks in most courses.
A B C D E 13. Studying enough to understand content thoroughly.
A B C D E 14. Running for student government office.
A B C D E 15. Participating in extracurricular events (sports, clubs).
A B C D E 16. Making professors respect you.
A B C D E 17. Attending class regularly.
A B C D E 18. Attending class consistently in a dull course.
A B C D E 19. Making a professor think you're paying attention in class.
A B C D E 20. Understanding most ideas you read in your texts.
A B C D E 21. Understanding most ideas presented in class.
A B C D E 22. Performing simple math computations.
A B C D E 23. Using a computer.
A B C D E 24. Mastering most content in a math course.
A B C D E 25. Talking to a professor privately to get to know him or her.
A B C D E 26. Relating course content to material in other courses.
A B C D E 27. Challenging a professor's opinion in class.
A B C D E 28. Applying lecture content to a laboratory session.

A B C D E 29. Making good use of the library.
A B C D E 30. Getting good grades.
A B C D E 31. Spreading out studying instead of cramming.
A B C D E 32. Understanding difficult passages in textbooks.
A B C D E 33. Mastering content in a course you're not interested in.

Thanks for your help!

Appendix D
Student Developmental Task and Lifestyle Assessment

Items	Responses
1. I never regret anything I have done.	
	A. TRUE
	B. FALSE
2. I am currently involved in one or more activities that I have identified as being of help in determining what I will do with the rest of my life.	
	A. TRUE
	B. FALSE
3. I followed a systematic plan in making an important decision within the past thirty days.	
	A. TRUE
	B. FALSE
4.I have personal habits that are potentially dangerous for my health.	
	A. TRUE
	B. FALSE
5. I like everyone I know.	
	A. TRUE
	B. FALSE
6.It's important to me that I be liked by everyone.	
	A. TRUE
	B. FALSE
7. I would prefer not to room with someone who is from a culture or race different from mine.	
	A. TRUE
	B. FALSE
8. I never get angry.	
	A. TRUE
	B. FALSE
9. Within the past six months, I have experienced an unfamiliar artistic media or performances.	
	A. TRUE
	B. FALSE
10. During the past twelve months, I have acquired a better understanding of what it feels like to be a member of another race.	
	A. TRUE
	B. FALSE
11. Since beginning college, my friends have become more frequent sources of support than my parents.	
	A. TRUE
	B. FALSE
12. I only attend parties where there are plenty of alcoholic beverages available.	
	A. TRUE
	B. FALSE
13. I never say things I shouldn't.	
	A. TRUE
	B. FALSE

14. Within the past six months, I have learned about or experienced a culture different from my own through artistic expression.

A. TRUE
B. FALSE

15.I never lie.

A. TRUE
B. FALSE

16.I always take precautions (or abstain) to assure that I will not contract a sexually transmitted disease (STD).

A. TRUE
B. FALSE

17. Within the past twelve months, I have undertaken an activity intended to improve my understanding of culturally/racially different people.

A. TRUE

B. FALSE

1 8. I never get sad.

A. TRUE
B. FALSE

19. Within the past twelve months I had a conversation or discussion about the arts outside of class.

A. TRUE

B. FALSE

20. I avoid discussing religion with people who challenge my beliefs, because there is nothing that can change my mind about my beliefs.

A. TRUE
B. FALSE

21. I'm always satisfied with myself.

A. TRUE
B. FALSE

22. I satisfactorily accomplish all important daily tasks (e.g., class assignments, test preparation, room/apartment cleaning, eating, and sleeping).

A. Never (almost never) true of me
B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

23. I seek out opportunities to learn about cultural/artistic forms that are new to me.

A. Never (almost never) true of me
B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

24. It bothers me if my friends don't share the same leisure interest as I have.

A. Never (almost never) true of me
B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

25. I'm annoyed when I hear people speaking in a language I don't

understand.

A. Never (almost never) true of me
B. Seldom true of me

C. Usually true of me

D. Always (almost always) true of me

26. I have made conscious efforts to make this college a better place to attend.

A. Never (almost never) true of me

B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

27. I have a difficult time in courses when the instructor doesn't regularly check up on completion of assignments.

A. Never (almost never) true of me
B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

28. 1 pay careful attention to the nutritional value of the foods I eat.

A. Never (almost never) true of me
B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

29. I can clearly visualize the kind of lifestyle I anticipate having five years after completing my education.

A. Never (almost never) true of me
B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

30. I plan my activities to make sure that I have adequate time for sleep.

A. Never (almost never) true of me
B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

31. I seek to broaden my understanding of culture (e.g., art, music, or literature).

A. Never (almost never) true of me

B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

32. When I wish to be alone, I have difficulty communicating my desire to others in a way that doesn't hurt their feelings.

A. Never (almost never) true of me
B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

33. 1 avoid groups where I would be of the minority race.

A. Never (almost never) true of me

B. Seldom true of me

C. Usually true of me

D. Always (almost always) true of me

34. My classmates can depend upon me to help them master class materials.

A. Never (almost never) true of me
B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

35. I don't perform as well in class as I could because I fall short of requirements.

A. Never (almost never) true of me
B. Seldom true of me

C. Usually true of me

D. Always (almost always) true of me

36. I limit the quantity of fats in my diet.

A. Never (almost never) true of me
B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

37. Because of my friends' urgings I get involved in things that are not in my best interest.

A. Never (almost never) true of me
B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

38. A person's sexual orientation is a crucial factor in determining whether I will attempt to develop a friendship with her/him.

A. Never (almost never) true of me
B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

39. It's more important for me to make my own decisions than to have my parents' approval.

A. Never (almost never) true of me
B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

40. I conceal some of my talents or skills so I will not be asked to contribute to group efforts.

A. Never (almost never) true of me
B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

41. I have plenty of energy.

A. Never (almost never) true of me
B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

42. It's more important to me that my friends approve of what I do than it is for me to do what I want.

A. Never (almost never) true of me
B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

43. It's hard for me to work intensely on assignments for more than a short time.

A. Never (almost never) true of me
B. Seldom true of me

C. Usually true of me

D. Always (almost always) true of me

44. I am satisfied with my physical appearance.

A. Never (almost never) true of me
B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

45. I feel uncomfortable when around persons whose sexual orientation is different from mine.

A. Never (almost never) true of me
B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

46. When in groups, I present my ideas and views in a way that it's clear I have given them serious thought.

A. Never (almost never) true of me
B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

47. It's very important to me that I am successful both inside and outside the classroom.

A. Never (almost never) true of me
B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

48. My weight is maintained at a level appropriate for my height and frame.

A. Never (almost never) true of me

B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

49. My personal habits (e.g. procrastination, time management, assertiveness) get in the way of accomplishing my goals or meeting my responsibilities.

A. Never (almost never) true of me
B. Seldom true of me

C. Usually true of me

D. Always (almost always) true of me

50. I try to avoid people who act in unconventional ways.

A. Never (almost never) true of me
B. Seldom true of me

C. Usually true of me
D. Always (almost always) true of me

51. I accept criticism from friends without getting upset.

A. Never (almost never) true of me
B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

52. I get bored and quit studying after working on an assignment for a short time.

A. Never (almost never) true of me
B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

53. I eat well-balanced, nutritious meals daily.

A. Never (almost never) true of me
B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

54. I find it difficult to accept some of the ways my close friends have changed over the past year.

A. Never (almost never) true of me
B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

55. I have difficulty following through with decisions I have made when I discover others (e.g., parents or friends) ' disagree with these decisions.

A. Never (almost never) true of me
B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

56. I have difficulty disciplining myself to study when I should.

A. Never (almost never) true of me
B. Seldom true of me

C. Usually true of me

D. Always (almost always) true of me

57. I exercise for thirty minutes or more at least three times a week.

A. Never (almost never) true of me
B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

58. I do not socialize with people of whom my friends don't approve.

A. Never (almost never) true of me
B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

59. My study time seems rushed because I fail to realistically estimate the amount of time required.

A. Never (almost never) true of me
B. Seldom true of me

C. Usually true of me

D. Always (almost always) true of me

60. I plan my week to make sure that I have sufficient time for physical exercise.

A. Never (almost never) true of me
B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

6I. I feel confident in my ability to accomplish my goals.

A. Never (almost never) true of me
B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

62. I pursue some academic subjects or topics oh my own just because I am interesting in learning more.

A. Never (almost never) true of me
B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

63. I become inebriated from the use of alcohol on weekends.

A. Never (almost never) true of me
B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

64. I try to dress so that I will fit in with my friends.

A. Never (almost never) true of me
B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

65. It's essential that those important to me approve of everything I do.

A. Never (almost never) true of me
B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

66. Even when I am not particularly interested in a subject, I am able to complete course requirements satisfactorily.

A. Never (almost never) true of me

B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

67. It's important to me that I achieve to the limits of my abilities.

A. Never (almost never) true of me
B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

68. I use library materials, resources, and facilities effectively.

A. Never (almost never) true of me

B. Seldom true of me
C. Usually true of me
D. Always (almost always) true of me

69. I have arranged my living quarters in a way that makes it easy for me to study, sleep, and relax.

A. Strongly Agree
B. Agree
C. Disagree
D. Strongly Disagree

70. I have become more culturally sophisticated since beginning college.

A. Strongly Agree
B. Agree

C. Disagree

D. Strongly Disagree

7l. Learning to live with students from cultural or racial backgrounds different from mine is an important part of a college education.

A. Strongly Agree
B. Agree

C. Disagree

D. Strongly Disagree

72. Society has a responsibility to assist people who cannot sustain themselves.

A. Strongly Agree
B. Agree

C. Disagree

D. Strongly Disagree

73. As a citizen I have the responsibility to keep myself well-informed about current issues.

A. Strongly Agree
B. Agree

C. Disagree

D. Strongly Disagree

74. I wonder what my friends say about me behind my back.

A. Never
B. Seldom
C. Sometimes
D. Often

75. I dislike working in groups when there are a significant number of people who are from a race or culture that is different from mine.

A. Never
B. Seldom
C. Sometimes
D. Often

76. Within the past year, I have participated in activities that directly benefited my fellow students.

A. Never
B. Seldom
C. Sometimes
D. Often

77. Within the past three months, I engaged in activities that were dangerous or could be risky to my health.

A. Never
B. Seldom
C. Sometimes
D. Often

78. I have used my time in college to experiment with different ways of living or looking at the world.

A. Never

B. Seldom
C. Sometimes
D. Often

79. I am confident in my ability to make good decisions on my own.

A. Never
B. Seldom
C. Sometimes
D. Often

80. I participate in community service activities.

A. Never

B. Seldom
C. Sometimes
D. Often

81. I trust the validity of my values and opinions, even when they aren't shared by my parent(s).

A. Never
B. Seldom
C. Sometimes
D. Often

82. I express my disapproval when I hear others use racial or ethnic slurs or put-downs.

A. Never

B. Seldom
C. Sometimes
D. Often

83. I have an inner sense of direction that keeps me on track, even when I am criticized.

A. Never
B. Seldom
C. Sometimes
D. Often

84. In the past six months, I have gone out of my way to meet students who are culturally or racially different from me because I

thought there were things I could learn from them.

A. Never

B. Seldom
C. Sometimes
D. Often

85. I feel anxious when confronted with making decisions or taking actions for which I am responsible.

A. Never
B. Seldom
C. Sometimes
D. Often

86. I meet my responsibilities to my parents as well as I should

A. Never
B. Seldom
C. Sometimes
D. Often

87.Within the past twelve months, I have taken a public stand on issues or beliefs when many friends and acquaintances didn't agree.

A. Never
B. Seldom
C. Sometimes
D. Often

88. After a friend and I have a heated argument, I will.

A. Never (Almost Never) speak to him/her
B. Seldom speak to him/her
C. Usually speak to him/her
D. Always speak to him/her
E. I never have disagreements with friends.

89. In terms of an academic major or concentration,

A. I am uncertain about possible majors and am a long way from a decision.

B.I have thought about several majors, but haven't done anything about it yet.

C. I have made a tentative decision about what I will major in.

D. I have made a firm decision about a major, but I still have doubts about whether I have made the right decision.

E.I have made a firm decision about a major in which I am confident that I will be successful.

90. Thinking about employment after college,

A. I do not know how to find out about the prospects for employment in a variety of fields.
B. I have a vague idea about how to find out about future employment prospects in a variety of fields.

C. I know one source that could provide information about future employment prospects in a variety of fields.

D.I know several sources that can provide information about future employment prospects in a variety of fields.

91. When thinking about the kind of life I want five years after college, I have:

A. not come up with a very clear picture.

B. a vague picture, but have been unable to identify the specific steps I need to take now.

C. a clear enough picture that I can identify the steps that are though I haven't done very much about it yet.

D. a clear enough picture and identified the steps that are necessary for me to take now in order to realize my dream.

92. During this academic year,

A. I have organized my time well enough for me to get everything completed.

B. I sometimes had difficulty organizing my time well enough to get everything done.

C. I often had difficulty organizing my time well enough to get everything done.

D. I seldom seem able to organize my life well enough to do everything.

93. I participate in the arts (e.g., draw, write, play musical instrument, or sing) just for my own enjoyment.

A. I never (almost never) do this.

B. I seldom to this.

C. I occasionally do this.

D. I frequently do this.

94. When faced with important decisions this year, I have

A. relied on others--such as parent(s), friend(s), or teacher(s)-- to tell me what to do.

B. sought information and opinions, but made the final decisions on my own.

C. relied on myself alone in making the decisions.

D. attempted to avoid making decisions as much as possible.

95. I have identified, and can list, at least three ways I can be an asset to the community.

A. No, I haven't thought about that much.

B. No, I don't know what I can contribute.

C. No, that's not important to me.

D. Yes.

96. During this academic year,

A. I have tended to put off most school work, and assignments to the last minute and, as a result, don't do as well as I could.

B. I have often forgotten about assignments or put them off so long that I was unable to turn them in on time.

C. I have established a study routine that has enabled me to get most school work and assignments completed on time and to my own satisfaction.

D.I have established a study routine that has enabled me to get all work and assignments completed on time and to my own satisfaction.

97. When I have experienced stress or tension this term,

A.I have most often sought relief by listening to music, reading, or visiting friends.

B.I have most often had a few drinks or beers to relax.

C.I have most often exercised, worked out, or played a sport.

D.I have kept on going and ignored the stress.

E.I have had occasions when it became too much to handle and I had to take days off to relax or rest/sleep.

98.ln terms of the array of possible academic majors at this college I have ...

A. not spent much time investigating the possibilities.

B. talked to some students about their majors, but have not done any systematic investigation.
C. read the catalog and talked to some students and/or faculty/staff members about possible majors.

D.made a systematic effort to leam about possible majors and what they entail.
E.made a systematic effort to learn about possible majors and have carefully looked at my abilities and interests and how they fit different majors.

99. Within the past six months,

A. I haven't seriously thought about possible post-college jobs or career.

B. I have thought about possible post-college jobs or a career, but haven't done much about exploring the possibilities.

C. I have asked relatives, faculty members, or others to describe positions in the fields in which they are working.

D. I have taken definite steps to decide about a career, such as visiting a counselor, placement center, or persons who hold the kinds of positions in which I am interested.

I00. If something were to prevent me from realizing my present educational plans, I have

A. no any idea what else I might pursue.

B. a vague notion about acceptable alternatives.

C. several acceptable alternatives in mind, but I haven't explored them very much.

D. several acceptable alternatives in mind, which I have explored in some detail.

101. When I have heated disagreements with friends about matters such as religion, politics, or philosophy I...

A. am likely to terminate the friendship.

B. am bothered by their failure to see my point of view but hide my feelings

C. will express my disagreement, but will not discuss the issue

D. will express my disagreement and am willing to discuss the issue

E. don't talk about controversial matters.

102. I have made a positive contribution to my community (residence hall, campus, neighborhood, or hometown) within the past three months.

A. No, that isn't important to me.

B. No, I don't know what I could do to make a positive contribution

C.No, but I have tried to find ways.

D. Yes

103. In terms of an academic major/concentration, I have

A. determined what all the requirements are and the deadlines by which things must be done, for the major I have chosen.

B.investigated the basic requirements for graduating with a degree in my academic-dc major.

C. a general idea about the courses and other requirements needed in my major.

D.not paid much attention to the requirements for my major; depend on my advisor or others to tell me what to take.

E. yet to decide on an academic major.

104. I have decided the place (if any) that marriage has in my future.

A. No, I will just wait to see what develops.

B. No, I don't think about it.

C. No, but I know what I would like to have happen.

D. Yes, I have made a definite decision.

105. I am familiar with sources of help on campus (e.g., tutoring, counseling, academic information, library research tools and procedures, and computers).

A. I really don't know much about these things.

B. I know about a few.

C.I know about most of them.

D. I know about all of them. .

106. When I don't agree with someone in authority (e.g., professor, administrator), I ...

A. never express my opinion.

B. express my opinion only when I am angry.

C. express my opinion when asked.

D. express my opinion if given a chance.

E. avoid dealing with persons in positions of authority if possible.

107. Within the past three months, I have taken an active part in a

recycling activity/program.

A. No, recycling is too much trouble.
B. No, I don't know where to dispose of materials.
C. Yes, I have participated occasionally.
D. Yes, I have participated regularly.
E. Yes, I have participated and promoted recycling activities to others.

108. I use tobacco products (smoke, chew, or dip).

A. Never
B. Once a week or less
C. Several times a week
D. Most days
E. Everyday

109. In terms of the labor market demand for people with a degree in my major, in the career area in which I am most interested

A. I have yet to decide on a career area and/or academic major
B. I don't have much of an idea of what I will face upon graduation.
C. I have a general, though somewhat vague, picture of what I will face upon graduation..
D. I have investigated things enough to be pretty clear about what I will face upon graduation.

110. I can clearly state my plan for achieving the goals I have established for the next ten years.

A. No, because I have no specific goals for the next ten years.
B. No, because I don't like making detailed plans for long-range goals.
C. No, because I haven't worked out my plan completely.
D. Yes.

111. Within the past month,

A. I took the initiative to bring several people together to resolve a mutual problem.
B. I joined with several people to resolve to a mutual
C. I have not encountered a problem that needed a group effort to solve.
D. I have avoided situations that required me to work with other people in solving problems.

112. Within the last twelve months, I have attended a play or classical music concert when not required for a class.

A. Yes.

B. No, I don't like those kinds of things.

C. No, I just haven't gotten around to it.

D.No, there aren't such things available here.

113. If I thought my friends would disapprove of a decision I made would most likely...

A. try to keep them from finding out (keep it secret).

B. tell them and pretend I didn't care what they thought

C. tell them and explain my reasoning for this decision

D. make up something to mislead them from knowing the truth.

114. In the past twelve months, I have taken an active part in activities or projects designed to improve the community, such as a charity drive, clean up campaign, or blood drive.

A. Never

B. Once

C. Twice

D. Three times

E. Four or more times

115. I have more than one drink (i.e., 1.5 ounces of liquor, 5 ounces of wine, or 12 ounces of beer).

A. Never

B. Once a week or less

C. Two to three times a week

D. Most days

E. Everyday

116. Over the past twelve months at this college, I have

A. taken the initiative to set up conferences with an academic advisor.

B. kept appointments with an academic advisor when she/he scheduled them.

C. avoided dealing with my academic advisor.

D. not investigated how to obtain acad6mic advising.

E. not been at this college long enough to get involved in academic advising.

117. In the past year,

A. I have discussed my career goals with at least two professionals in the field that interests me most.

B. I have had minimal exposure to people in the career field that interests me most.

C. I know several professionals in the career field in which I am most interested, but I haven't talked to them about entering the field.

D. I have yet to decided on a career area.

118. My plans for the future are consistent with my personal values (for example, importance of service to others, religious beliefs, importance of luxuries, desire for public recognition).

A. No, my future plans are unclear and I am undecided about my personal values.

B. No, my future plans are clear, but I am undecided about my personal values.

C. No, my future plans are unclear, but I am clear about my personal values.

D. Yes, I have recently begun to think about how my values will shape my future.

E. Yes, I thought about this allot and have a clear understanding of how my values will shape my future.

II 9. Each day,

A. I depend on my memory to make sure that I get done what needs to be done, and that works for me.
B. I keep a calendar or make a "To Do" list of what needs to be done each day and that works for me.

C. I dislike planning what I need to do; I just let things happen and that works for me.

D. I don't make detailed plans about what I need to do each day, and as a result I forget important things.

120. Within the past twelve months, I have visited a museum or an art exhibit when not required for a class.

A. Yes.

B. No, I don't like those kinds of things.

C. No, I just haven't gotten around to it.

D. No, there aren't such things available here.

121. In regards to social issues, (e.g., homelessness, environmental pollution, or AIDS)

A.I don't think much about them.

B. I am concerned, but haven't taken any specific actions.

C. I contribute money to organizations that address the issue

D. I am actively involved in organizations that address the issues.

122. I have a mature working relationship with one or more members of the academic community (faculty member, student affairs/services staff member, administrator).

A. Yes.

B. No, I don't like dealing with them.

C. No, I have tried to form relationships, but haven't been successful yet.

D. No, I don't know any.

E. No, I don't have time for that kind of thing.

123. When thinking about occupations I am considering entering,

A. I don't know what is required in order to be competitive for a job.

B. I haven't decided which occupations interest me most.

C. I have a general idea of what is required.

D. I can list at least five requirements.

124. I have developed strategies to maximize my strengths and to minimize my weaknesses in order to accomplish my goals in life.

A. No, I don't know myself that well.

B. No, I haven't figured out how to do that.
C. No, I don't have a clear picture of my life goals.

D. Yes, I have done this, but I'm not very confident about my strategies.

E. Yes, I have done this, and I am confident that my strategies will be effective.

125. I have one or more goals that I am committed to accomplishing and have been working on for over a year.

A. No, I don't like making definite goals.

B. No, I have tried, but have been unable to follow through

C. No, I have difficulty making realistic long-range plans.
D. Yes.

126. Over the past year I have frequently participated in cultural activities

A. No, that isn't something that I enjoy or consider

B. No, there haven't been any cultural activities available in which I could participate.

C. I have attended when others have encouraged or invited me.

D. Yes, I have taken advantage of as many opportunities as I could manage.

E. Yes, only when required by the college.

127. Within the past twelve months, I contributed my time to a worthy cause in my community (campus or town/city).

A. No
B. I - 10 hours.
C. 11 - 20 hours.
D. 21 - 30 hours. .
E. 31 or more hours.

128. Within the past twelve months,

A.I haven't attended any non-required lectures, programs, or activities dealing with serious intellectual subjects.

B. I have attended one or two non-required lectures or I programs dealing with serious intellectual subjects.
C.I have attended three or four lectures or programs dealing with a serious intellectual subjects that were not required for any of my courses.
D. I have attended five or more lectures or programs dealing with serious intellectual subject which were not required for any of my courses.

129. In terms of practical experience in the career area I plan to pursue after college, I have

A. yet to decide on a post-college career area.
B. had no experience.
C. had very little experience.
D. had some experience.

E. had a great deal of experience.

130. I am involved in hobbies or leisure activities today that I see myself continuing to pursue 10 years from now.

A. Yes.
B. No
C. I don't know

13 1. In addition to my academic studies,

A. I spend much of my free time involved in organized activities on campus or in the community.
B. I spend most of my free time "goofing off' or watching TV.
C. I spend most of my free time with friends doing things we enjoy.
D. I spend most of my time working to support myself and/or caring for my family.

132. In regards to college organizations specifically related to my chosen occupational field, I have

A. yet to decide on a post-college occupational field.
B. investigated joining one or more, but have not actually joined.
C. joined one or more, but am not very involved.
D. joined one or more and am actively involved.

133. I have investigated what I must do in order to satisfy my need or desire for material goods, such as cars, clothes, and a home once I complete my education.

A. No, I'm unsure about how important material goods are to me.
B. No, I haven't thought much about what I will need to do.
C. No, I have given some thought to this, but things are still unclear.
D. Yes, I'm somewhat sure that I will be able to satisfy my needs/desires.
E. Yes, My current plans are unlikely to meet my needs or desires.

134. I have formed a personal relationship (friendly acquaintance-ship) with one or more professors.

A. Yes, but I find it difficult to talk to him/her (them).
B. Yes, we often enjoy interacting with each other.
C. No, I would like to but haven't taken any action.
D. No, I would like to and have tried unsuccessfully.
E. No, because that isn't important to me.

135. Considering beginning-level positions in business, industry, government, or education for which I would be eligible when I complete my education.

A. I can name three or more.
B. I can name only two.
C. I can name only one.

D. I cannot name any.

E. I haven't made a decision about my academic major/concentration; therefore, I don't know for what I might be qualified.

136. I have considered the kinds of tradeoffs (in areas such as family time, leisure time, job status, income, or time with friends) I will need to make in order to have the kind of lifestyle I want to have five years after completing my education.

A. I haven't thought about this at all.

B. I have thought about this in general.
C. I have a fairly clear idea of the tradeoffs required.
D. I have a very clear idea of the tradeoff required.

l37. I have been actively engaged in a student organization or college committee in the past 6 months.

A. Yes.

B. No, I don't have time because of my job(s) and/or family responsibilities.

C. No, I am not interested.

D. No, I haven't been in college long enough.

E. No, but I plan to do so soon.

138. When thinking about narrowing the number of career areas I wish to explore,

A. I have identified specific personal abilities and limitations which I can use to guide my thinking.

B. I have some general ideas about what I would be successful.

C. I have only a vague sense of where I can best use my skills and minimize my shortcomings.
D. I have never thought about careers in this way.

139. I am purposefully developing intellectual skills and personal habits that will assure that I continue to learn after completing my formal education.

A. I haven't thought about this.

B. I rely completely on course requirements to do this.

C. I think about this some times.

D. I do this systematically.

140. Within the past three months, I have had a serious discussion with a faculty member concerning something of importance to me.

A. No, I don't like talking to faculty members.

B. No, I have tried, but was unsuccessful.

C. No, I haven't found one who seemed willing to interact in that way

D. Yes, I initiated such a discussion.
E. Yes, I responded to a faculty members initiative.

14 1. Within the past three months,

A. I haven't thought seriously about my career.

B. I have read about a career I am considering.

C. I have been involved in activities directly related to my future career.

D. I have thought about my career, but things are still too unsettled for me to take any action.

142. I have weighed the relative importance of establishing a family in relation to other life goals.

A. No, my desire to establish a family is too uncertain.

B. No, my life goals are too uncertain.

C. Yes, but my priorities tend to change.

D. Yes, my priorities about these goals are clear.

143. While in college I have participated in practical experience directly related to my educational goals through an internship, part-time work, summer job, or similar employment.

A. No, I haven't been enrolled long enough.

B. No, I haven't thought about it much.

C. No, I have yet to establish any specific educational goals.

D. Yes, I did it to satisfy program requirement.

E. Yes, I did it on my own initiative.

144. I have established a specific plan for gaining practical experience in the career area I plan to pursue after college.

A. No, I have yet to decide on a career area.

B. No, but that is something I should be doing,

C. No, that isn't something I want to do.

D. Yes, but I haven't actually acted on my plan.

E. Yes, and I have begun implementing my plan.

145. I have considered how my present course of study will impact my goals for the future.

A. No, I haven't thought about this at all.

B. Yes, I have thought about this, but it's unclear how my studies will shape my future.

C. Yes, I have a fairly clear idea about how my studies will shape my future.

D. Yes, I have a very clear picture of how my studies will shape my future.

146 I have developed a financial plan for achieving my educational goals.

A. No, my parent(s) are taking care of it.

B. Yes, I have a plan which depends on the continuation of the present level of funding.

C. No, I haven't thought much beyond the current term.

147. I carefully investigated the intellectual abilities and necessary academic background needed to be successful in my chosen academic major.

A. No, I have yet to make a definite decision about an academic major/concentration.

B. No, I chose my major/concentration solely on the basis of what I enjoyed most.

C. No, I have narrowed the choice down to a few areas, but haven't really investigated majors in that way.

D. No, I never thought about it in that way.

E. Yes.

148. I have decided whether or not to seek admission to a graduate or professional school.

A. Yes, I have made a deliberate decision not to attend.

B. Yes, I plan to attend, but I haven't taken any action.

C.Yes, I plan to attend and have initiated action to be

D. No, but, I have a general notion about I will likely do.

E. No, I haven't thought much about it.

149. Within the past three months I have read a non-required publication related to my major field of study.

A. No, I have yet to decide on an academic major/field of study.

B. No, I don't have time to read such things.

C. No, that would be too boring.

D. Yes.

150. I am acquainted with at least three persons who are actively involved in the kind of work I visualize for myself in the future.

A. Yes

B.No, I haven't met many people doing the work I visualize for myself.

C. No, I have yet to decide on a post-college occupational area.

D. No, I don't think that is very important.

151. I often have trouble visualizing day-to-day work in the career area I have selected.

A. Yes, because I have yet to decide on a career area.

B. Yes, because I don't know what routine work in my career area is really like.

C. Yes, because I don't like to think about that.

D. No, I can visualize work in that area, but I'm not sure that it's realistic.

E. No, I have a clear and realistic picture of work in my career area.

152. Within the past twelve months I have had a serious conversation about my long-term educational objectives with an academic advisor or other college official.

A. No, I don't know to whom to talk.

B. No, I have tried but no one will help me.

C. No, but I want to do that.

D. No, I don't want my options limited.

E. Yes.

153. While in college, I have visited a career center or library to obtain information about a chosen career.

A. No, but I will do that when I find time.

B. No, I don't need career information.

C. No, there is no place or person that deals with careers on my campus.

D. Yes.