To the Graduate Council:

I am submitting herewith a dissertation written by Mary Katherine Warden entitled "A Study of University of Tennessee, Knoxville Evening School Students who Have Experienced Educational Counseling Face-to-Face or by Telephone." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Education, with a major in Vocational-Technical Education.

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We have read this dissertation
and recomment its acceptance:

Accepted for the Council:

Vice Provost
and Dean of the Graduate School

A STUDY OF UNIVERSITY OF TENNESSEE, KNOXVILLE EVENING SCHOOL STUDENTS WHO HAVE EXPERIENCED EDUCATIONAL COUNSELING FACE-TO-FACE OR BY TELEPHONE

A Dissertation

Presented for the

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Degree

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ABSTRACT

Changing economic and societal trends have increased the participation rates of adults in colleges and universities. However, there is a scarcity of empirical research investigating the influence of educational advising on adult students in higher education.

The purpose of this study was to assess the effectiveness of educational counseling for non-traditional students with respect to congruence or "fit" with the University environment, retention, and satisfaction.

Fall Quarter 1986 all of the 291 new University Evening School undergraduate students were randomly assigned to a treatment group for educational counseling or a control group. The treatment group received a special three quarter sequence of educational counseling face-to-face or by telephone. At the end of three quarters, Robert Pace's College and University Environmental Scale (CUES) (1967) was used to measure the adult learners' perception of the psychological environment of the University, "fit" or congruence. In addition, the effects of the demographic variables of gender, marital status, age, and degree status on the measures of congruence were assessed. The non-traditional learners' retention was measured by a Chi-square test, and satisfaction with the services of the University Evening School was measured by an ANOVA procedure.

Based on Pace's scoring rationale the scores of the control group differed significantly from the treatment group. The control group had consistently higher scores on the environmental scales implying they perceived the campus environment as more supportive, friendly, and scholarly than did the adult learners' in the face-to-face or telephone counseling groups.

A 2 x 3 Chi-square analysis determined that no significant difference in retention as measured by frequency of enrollment existed among the face-to-face counseling, telephone counseling or control groups.

A Likert attitude scale was used to measure the adult learners' satisfaction with the services of the University Evening School. Satisfaction scores for all three groups were high. However, the ANOVA procedure indicated there was no significant difference in satisfaction level among the face-to-face, telephone or control groups.

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CHAPTER I

INTRODUCTION

The 70 million people born between 1946-1964 (the "Baby Boom") moving through the educational system put immense stress on American higher education. Between 1970 and 1980 enrollment in higher education increased by 40% (Center for Educational Statistics, 1987). As these students moved out of colleges and universities, analysts and administrative officials predicted severe declines in post-secondary enrollment. In contrast to these predictions, enrollment between 1980-1985 increased 10% (Center for Educational Statistics; OALS, 1987). This increase was due to a larger percentage of 18-to 24-year-old students going to colleges and universities, and increased participation rates of older and part-time students. Between 1980-1985 enrollments for students over 25 increased by 12% (Center for Educational Statistics, 1987). Most of the increase in the numbers of older students was due to increased participation rate of women 25 and older; male participation rate has decreased and female participation rate has increased. It is predicted that by 1992 the proportion of college students over 25 will increase to 50%, and the percentage of part-time enrollments will increase to 50% (Admission Strategist, 1985).

In order to attract and retain non-traditional learners colleges and universities must reexamine mission goals, philosophy, and services based on the 18-to 24-year-old student. The responsiveness of the institution to the needs of the non-traditional student can be evaluated through investigating the programs and delivery of student support services. In the 70's, it was recognized that counseling for traditional students was an essential element in the student service facet of the college or university. Today, college and university student services professionals maintain it is counseling services that transmit the institutional goals, encourage retention and satisfaction, and promote integration of the student with the environment (Huebner, 1978; Willaims, 1986).

The information detailed above indicates there is a need to investigate the effect of educational counseling on the non-traditional student. Specifically, information is needed on the effect of educational counseling on improving congruence or "fit" with the college or university environment, retention, and satisfaction.

Statement of the Problem

Limited information is available at the University of Tennessee, Knoxville on non-traditional students' congruence or "fit" with the University environment, retention, and satisfaction. There is a critical need for

the University Evening School at the University of Tennessee, Knoxville to investigate and assess the effects of its educational counseling on the non-traditional student.

Purpose of the Study

The purpose of this study was to assess the effectiveness of educational counseling for non-traditional students with respect to congruence or "fit" with the University environment, retention, and satisfaction.

Objectives of the Study

The objectives of this study included the following:

1. Assess the effects of educational counseling, face-to-face or by telephone, with respect to three measures of congruence with the University environment. The CUES II (1967) used to measure congruence included three environmental scales; Awareness, Community and Scholarship.
2. Assess the effects of the demographic variables of gender, marital status, age, and degree status with respect to three measures of congruence with the University environment.
3. Assess the effects of educational counseling on student retention.

4. Determine the level of satisfaction with the University Evening School services for the face-to-face counseling, telephone counseling, and control groups.
5. Report information from the advising sessions about non-traditional students' motivation, knowledge of student services, career goals, and trigger events for learning.

Research Questions

The following questions were proposed to attain Objective one:

Question 1: Do University Evening School students who experience educational counseling face-to-face or by telephone have higher scores on the CUES II Awareness scale than the students in the control group?

Question 2: Do University Evening School students who experience educational counseling face-to-face or by telephone have higher scores on the CUES II Community scale than the students in the control group?

Question 3: Do University Evening School students who experience educational counseling face-to-face or by telephone have higher scores on the CUES

II Scholarship scale than the students in the control group?

The following questions were generated to attain Objective two:

Question 4: Is there a significant difference in the scores on the CUES II Awareness scale between male and female University Evening School students who experience educational counseling face-to-face or by telephone and male and female students in the control group?

Question 5: Is there a significant difference in the scores on the CUES II Community scale between male and female University Evening School students who experience educational counseling face-to-face or by telephone and male and female students in the control group?

Question 6: Is there a significant difference in the scores on the CUES II Scholarship scale between male and female University Evening School students who experience educational counseling face-to-face or by telephone and male and female students in the control group?

Question 7: Is there a significant difference in the scores on the CUES II Awareness scale between married and single University Evening School students who experience educational counseling face-to-

face or by telephone and married and single students in the control group?

Question 8: Is there a significant difference in the scores on the CUES II Community scale between married and single University Evening School students who experience educational counseling face-to-face or by telephone and married and single students in the control group?

Question 9: Is there a significant difference in the scores on the CUES II Scholarship scale between married and single University Evening School students who experience educational counseling face-to-face or by telephone and married and single students in the control group?

Question 10: Is there a significant difference in the scores on the CUES II Awareness scale among the different age cohorts (18-23), (24-29), (30-35), (36-40), and (40-60) of University Evening School students who experience educational counseling face-to-face or by telephone and the different age cohorts in the control group?

Question 11: Is there a significant difference in the scores on the CUES II Community scale among the different age cohorts (18-23), (24-29), (30-35), (36-40), and (40-60) of University Evening School students who experience educational

counseling face-to-face or by telephone and the different age cohorts in the control group?

Question 12: Is there a significant difference in the scores on the CUES II Scholarhip scale among the different age cohorts (18-23), (24-29), (30-35), (36-40), and (40-60) of University Evening School students who experience educational counseling face-to-face or by telephone and the different age cohorts in the control group?

Question 13: Is there a significant difference in the scores on the CUES II Awareness scale between degree seeking and non-degree University Evening School students who experience educational counseling face-to-face or by telephone and degree seeking and non-degree students in the control group?

Question 14: Is there a significant difference in the scores on the CUES II Community scale between degree seeking and non-degree University Evening School students who experience educational counseling face-to-face or by telephone and degree seeking and non-degree students in the control group?

Question 15: Is there a significant difference in the scores on the CUES II Scholarship scale between degree seeking and non-degree University Evening

School students who experience educational counseling face-to-face or by telephone and degree seeking and non-degree students in the control group?

Hypotheses

To attain Objectives three and four, the following null hypotheses were tested:

Hypothesis 1: There is no difference in retention as measured by frequency of enrollment between University Evening School students who experience educational counseling face-to-face or by telephone and those in the control group.

Hypothesis 2: There is no difference in scores on the satisfaction scale between University Evening School students who experience educational counseling face-to-face or by telephone and those in the control group.

Rationale

There is very little experimental research on counseling non-traditional students. The findings of this experimental study will provide information about the consequences of a three quarter sequence of educational counseling experienced by University Evening School

students. This study will provide data about non-traditional University Evening School students' "fit" or congruence with the University environment. In addition, retention and satisfaction data will be presented.

Limitations of the Study

1. The population was limited to non-traditional undergraduate students entering the University Evening School at the University of Tennessee, Knoxville, Fall Quarter 1986.
2. Student participation was voluntary.
3. The mortality rate of 18% for the student population was high.
4. Advisor participation was voluntary.

Definitions of Terms

University Evening School Student - Undergraduate students who register and pay fees through the Evening School. The age range is from 18-60. Their participation in evening programs classifies them as non-traditional students.

Educational Counseling - Counseling that attempts to facilitate growth through a combination of information, explanation, exploration of student alternatives, and supportive advising themes.

Face-to-Face Educational Counseling - The face-to-face counseling was defined as a series of advising sessions where the advisor used a prepared script to address the issues of registration, curriculum or career concerns.

Telephone Educational Counseling - Telephone educational counseling was defined as a series of advising sessions on the phone where the advisor used a prepared script to address the issues of registration, curriculum or career concerns.

Environment - Environment denotes the psychological climate of the institution.

Organization of the Study

Chapter II presents a review of the literature on adult characteristics, motivation, retention, and advising. It also includes a review of the developmental background of environmental measures and related research on college environments.

Chapter III provides a description of the methodology of the experimental study.

Chapter IV discusses the results of the data analysis.

Chapter V presents the summary, findings, conclusions, and recommendations.

CHAPTER II

REVIEW OF THE LITERATURE

Organization of the Literature

The literature is organized in seven sections. The first section describes the adult learner on the college and university campus. Section two explores adult motivation. Section three details the scope of adult retention. Section four examines advising and counseling the adult learner. Section five describes the developmental background of environmental measures. Section six reviews the related research on college environments. Section seven is a summary.

Introduction

Due to a maturing population, changing societal attitudes, major economic shifts, and developing technology, non-traditional students are entering American higher education. The Center for Educational Statistics reported that from 1970-1985 there was an increase of 15% in enrollments for students under 25, but the rate for students over 25 was 114%. In 1985 40% of college students were over 25 years-of-age, and it is predicted this will increase (Hodgkinson, 1985). In fact, "by the year 2000 there will be more students 25 years-of-age on college campuses than

under 25 years-of-age, and half of these will be part-time" (Aslanian, 1985, p. 40). The goal of higher education should be to make this rapidly growing segment an integral part of the campus.

Research on traditional age students indicated that the degree of congruence or "fit" with the university environment determined student satisfaction, growth, and institutional integration (Williams, 1986). Unfortunately, because few research projects assess adult congruence or "fit" in higher education, the current understanding of adult "fit" is limited. Yet, this could be invaluable information for program developers and counselors as they respond to the demands of the rapidly growing adult clientele. This chapter identifies and examines the relevant literature on variables that influence the adult learners' congruence or "fit" with the educational environment; adult characteristics, motivation, retention and advising. In addition this chapter explores the pertinent literature on the background of environmental measures and reviews related research on college environments.

Adult Characteristics

The national profile of the mature student in organized educational activities has not changed very much in the last 22 years. In 1965 Johnston and Rivera described

the adult learner as well-educated, middle class, and a white collar worker who is career oriented (Brookfield, 1980). Research by Anderson and Darkenwald (1979), Apps (1981), Aslanian (1980), Cross (1981), and Shannon (1986) verified that this profile of the adult learner in education has remained constant, with one exception. Increasingly, the mature student is female (Center for Educational Statistics, 1986; Shannon). The women's movement, lower fertility rates, and changing work patterns account for the increased female participation rate in adult education (Brookfield, 1987; Jurand, 1981; Knott, 1987; Loring & Pappas, 1985; Van Tour, 1987). Examination of the demographic profile of the adults on college and university campuses helps administrators, advisors, and faculty understand the changing composition of higher education.

Adult Motivation

Knowledge of the non-traditional learners' motivation is essential in defining student-institution "fit." According to Brookfield (1987), the topic of adult motivation "is probably one of the most enduring research concerns since the investigation of the field began" (Brookfield, p. 3).

In 1961 Cyril Houle, utilizing extensive interviews with 22 individuals, proposed a three-way typology of adult education participants: the goal oriented adult who has

specific educational objectives, the activity oriented adult who seeks the stimulus of educational activity, and the learning oriented adult who has a desire to know (Houle, 1961). Houle's main contribution was establishing a set of categories for studying the elusive concept of motivation. He indicated it can be recognized and used as a method for classifying adult learners' motivation. The Education Participation Scale (EPS) used by Roger Boshier (1971) to measure Houle's typology has been described as the "most enduring, often used, and psychometrically defensable instrument" (Boshier & Collins, 1985, p. 113) to measure motivation for participation in adult education. Boshier (1971) administered the 48 item EPS to 233 participants in adult education classes in New Zealand, and failed to accept or reject Houle's typology. However, the EPS has been used throughout the world, and about 60,000 participants have taken some form of this instrument (Boshier & Collins, 1985). In 1985, Boshier and Collins used the EPS to retest Houle's typology. They tabulated 13,422 responses to the EPS from many different educational settings. The results indicated that Houle's goal and learning orientations could be used to classify motivation in adult learners, "but the activity orientation was much more complex than he had envisaged" (Boshier & Collins, p. 128).

Additional research by Boshier examined persistence based on environmental "fit" in educational settings. He

discounted the single variable explanation of persistence and participation found in many adult education studies, and stated this issue is very complex. Boshier's congruence model, based on Murray's need press concept, suggested students who have high incongruence scores will usually dropout (Anderson, 1984; Boshier, 1973; Garrison, 1987). Usually, there is a psychological difference between those adult students who participate and non-participants, and learner motivation can be clarified by understanding these psychological factors interacting with the environment (Boshier). In his research, Boshier identified students as either "growth-motivated" or "deficiency-motivated." He predicted that an individual with the "deficiency-motivated" characteristics will not "fit," and will be dissatisfied, incongruous with the educational environment. However, adults' "reasons for non-participation do not reside exclusively with the participant" (Boshier, p. 279). This research seemed to stimulate questions about the environmental aspects of institutions, and it validated that "goodness of fit" between the learner and educational environment is important in analyzing motivation. In contrast, Garrison (1987) concluded from his research that this conceptual model is too simplistic, and needs to be replicated many times through empirical research before it is accepted.

Peters and Boshier (1978) in their article, Adult Needs, Interests, and Motivation, recognized the importance of the concept of "fit" or congruence with the educational institution in program development. They stated that the administrative staff in continuing education settings must examine the needs, interests, and motives of adult learners in order to enhance learner congruence with the institution. "Needs and interests lie at the root of forces which motivate the adult to approach or avoid further educational experiences" (Peters & Boshier, p. 199).

Morstain and Smart (1977) utilized Boshier's EPS with 648 evening students enrolled for part-time degree credit work. Through the use of factor analysis they determined six factors for participating in educational activities: Social Relationships, External Expectations, Social Welfare, Professional Advancement, Escape/Stimulus, and Cognitive Interest. This study focused on clusters of reasons, but Houle's motivation typology seemed to be validated by this study. Morstain and Smart cautioned that these results cannot be generalized beyond these participants in this institution, and a sample from a more diverse group of adults in different educational settings might change the topological profile.

Aslanian and Brickell (1980) attempted to explain the motivation of adult learners by investigating life transitions. They interviewed 2000 Americans 25 and older,

1519 by telephone, and the rest in face-to-face interviews. The study included formal and informal learning experiences that were initiated by a "trigger event." Of all respondents, 83% cited a specific event: 56% of the events triggered learning in career areas, 36% were in family areas, 4% were in health areas, 2% were in religious areas, and 1% was in citizenship areas. The study showed that the type of trigger event affected the choice of learning activity. In addition, the research indicated 50% of those in career transition chose a formal educational setting: college, university or place of employment. According to Aslanian and Brickell, the value of the study is that now it is known "what kinds of transition causes adult learning" (Aslanian & Brickell, p. 115). This should help institutional program planners design courses, and counselors should have a better understanding of their adult clients. The main criticism of this research work is that the researchers were certain life transitions were significant reasons for changes in the adult life; thus, they elicited the information they wanted (Cross, 1981).

The literature on non-traditional learner characteristics and motivation describes the adult student on campus, but the knowledge of why some adults discontinue learning is essential for an examination of "fit" or congruence with the college or university.

Retention of the Adult Learner

Of the estimated 2.8 million students enrolled in higher education in 1986,

> over 1.6 million will leave the first institution without receiving a degree. Of those approximately 1.2 million will leave higher education altogether without completing a degree program (Tinto, 1987, p. 1).

Because this attrition is costly and administrative officials want to increase the stability of the economic base, studies of the retention of college students have been going on for four decades (Kuh, 1986). In the past, many of these studies were characterized by the following deficiencies: contradictory, inconclusive, lacked theoretical base, and too institution specific (Swift, 1987; Tinto).

Tinto (1987) warned that before individuals recommend retention methods for institutions, they need to understand the complex and diverse patterns students follow to earn a degree that are frequently not assessed in the statistics on entry and departure. Due to cost, complexity of task, and the diversity of first time college entry, institutions ignore delayed entrants and concentrate on the college careers of first time students enrolled in degree-credit programs; consequently, the statistics do not accurately reflect entry and withdrawal. Tinto estimated that data for college entrance are underestimated by 10%,

and the dropout rate is overestimated. His research indicated the practice of only tracking those students who are continually enrolled and complete their program in the "standard" four years, presents another problem in analyzing dropout data. Institutional statistics revealed that delayed completions are common, and point up the need for long term follow-up by institutions. Tinto cited two examples that clarified this deficiency: A University of Illinois study found an increase in degree attainment from 41% after four years, to 69% after ten years; a study at the University of Washington showed a similar increase from 45% after four years, to 71% after ten years. In addition, retention data and research failed to distinguish between the many different forms of departure. For example, Astin's (1975) longitudinal work on dropout focused on certain students who entered in 1968 and followed them up four years later, in 1972. Astin's study defined dropout as "only those students who had originally planned to earn a bachelor's degree but who subsequently failed to do so" (Astin, 1975, p. 6). Thus, there was no distinction between institutional dropout and system dropout.

Tinto's conceptual model for traditional students' attrition is based on the person-environment "fit" or congruence with the institution, and has been verified by many researchers including: Terenzini and Pascarella (1980); Chapman and Pascarella (1983); and Getlzaf,

Sedlacek, Kearney, and Blackwell (1984). Tinto viewed dropout as a multifaceted process; his model suggested the following concepts:

> The individual characteristics related to withdrawal include; characteristics of the family, ability and sex of the individual, educational background, and individual expectations.
>
> Academic integration, measured by G.P.A., and intellectual development, impacts on retention.
>
> The student's capacity to be committed to completion is the most influential factor in determining persistence.
>
> Integration into the social system, a degree of "fit" or congruence, occurs through peer group association and interaction with faculty and administrative personnel of the college.
>
> Commitment to the institution is an insufficient explanation of withdrawal.
>
> Public institutions have higher dropout rates than small private colleges.
>
> Two-year colleges have high withdrawal rates.
>
> Quality of the faculty is important in determining persistence.
>
> Size of institution is related to dropout rate (Tinto, 1975, pp.99-106).

Cope and Hannah (1975) agreed with Tinto that academic or occupational goal commitment was the single most influential variable in determining persistence. In contrast, Bean (1980), using a work turn-over model, concluded that institutional commitment was a significant determinant in predicting withdrawal.

Most of the retention research on adult attrition examines adult needs and characteristics (Anderson and Darkenwald, 1979; Rheeling, 1980; Darkenwald & Gavin, 1987), and there is a scarcity of research applying Tinto's accepted conceptual model to adult retention. Swift presented data from the Adult Liberal Studies Program Survey that confirmed family stress or support, the attitude of one's employer, and the selection of a major as influences in adult retention. Swift concluded that adult persistors do not have the same social integration with their peers, are not as intimate with faculty, and their many time constraints promote withdrawal. Levitz and Noel (1980) indicated that adults had reasons for withdrawal that were similar to traditional students; poor academic programs, lack of commitment, and change in goals. The dissimilar reasons were financial problems, frequent moving, poor transportation, and inadequate course offerings. Kuh and Ardaiolo (1986) emphasized that adult commitments to family, work, and community impact on the social integration of the adult learner. Kuh (1986) agreed that the empirical evidence predicting adult success or retention is scarce. However, he contended that motivation to succeed is probably the best predictor of success. He stated that G.P.A. and age are not related to persistence, and his list of variables that prevent adult attrition included; clarity of educational goals, good academic skills, flexiblity in

transferring previous educational work, and sense of vocational purpose. Kuh maintained that the best predictor is the student; therefore, admission officials should ask "how likely is it that you will complete your educational goal at this university" (Kuh, 1986, p. 4).

Because adults are usually part-time voluntary students who view their student role as a secondary role, Pappas and Loring (1985) maintained the concept of persistence or retention for adults is different. In their analysis, Pappas and Loring listed six variables that seem to affect adult persistence. The variables included the social variables of age and past education, the psychological variables of academic ability and aptitude, impact of the program and classroom situations, faculty behavior, and the educational environment of the institution. Pappas and Loring categorized adult college or university students into the degree seekers, problem solvers, and the cultural enrichment seeker. Pappas and Loring pointed out that administrative officers and faculty, should acknowledge that one-third of all adults are there on the campus for short-term periods. In addition, Pappas and Loring maintain that retention strategies are inherently counter productive for some adult students. In fact, Pappas and Loring stated that institutional representatives need to be focusing on barriers that prevent adult participation,

not retention programs. Cross defined these institutional barriers as

> all those practices and procedures that exclude or discourage working adults from participating in educational activities- inconvenient schedules or locations, full-time fees for part-time study, inappropriate courses of study and so forth (Cross, 1981, p. 98).

Apps included the psychological barriers of lack of confidence, recollection of disappointing educational experiences, and guilt feelings that school interferes with work and family (Apps, 1981). Loring concluded that when support services of day care, flexible scheduling, adult support groups, faculty mentoring, and financial aid are available persistence rates increase.

Tinto (1987) in his current work, Leaving College: Rethinking the Causes and Cures of Student Attrition, recognized that adults on campus have promoted a shift in perspective about retention. In the future, it will be imperative that administrative officials understand that some students come for a specific skill, an occupational goal or a certain number of classes or hours in a course area. To categorize withdrawal of these students as institutional or individual failure is a mistake. In committing institutional resources, the staff must decide which forms of leaving need institutional intervention and which are inevitable (Tinto).

In contrast, Astin (1985) in his latest book, Achieving Excellence, simply ignored the impact of adults and commuter students on higher education. He devoted the book to his latest thesis, student involvement, which he contended is the solution to the retention problem on college and university campuses. Astin was content to address the issue of excellence and advance a concept of retention and involvement that does not include adult students. His justification for this omission was that there was not enough empirical data to understand adult learner involvement. In addition, Astin explained "it is dangerous to try to achieve educational objectives on part-time attendance because there is minimal involvement and withdrawal is easy" (Richmond, 1986, p. 93). Obviously, his theory is outdated, and of little value in studying adult retention.

The literature review indicated that retention research has proceeded through three stages: the first stage focused research on the social and academic integration aspects of attrition; in the second stage research related what types of retention programs and strategies colleges and universities were utilizing; and in the third stage research concentrated on assessment of different types of university-wide retention policies (Bratcher & Shehan, 1987). Levitz and Noel (1986) predicted the fourth stage will focus on staffing as the critical

ingredient in institutional retention efforts. Thus, colleges and universities will look for employees who are able to "woo" students, and who get turned on instead of turned off when a student comes in for assistance (Bratcher & Shehan).

Adult Advising

Research on traditional students' counseling and the advising issues of approaches, models, retention, delivery systems, and lack of support are plentiful. In contrast, the research on non-traditional students' advising programs and strategies is usually more descriptive than experimental, and focuses on examining adult needs through interviews and questionnaires.

Mangano and Corrado (1979) reported on the Re-entry Adult Student Project (RASP) that attempted to assess the needs and satisfaction of adult students in New York State two-year colleges. From the adult responses to the Survey of Student Needs in the pilot project, the researchers developed a Taxonomy of Adult Student Needs. The adult students surveyed indicated a perceived need for being able to get academic and occupational counseling, revealed a need for support, and indicated a need for speedy registration services. Another facet of the RASP included expanding existing traditional advising services at six colleges to recognize the needs of the mature student, and inform the

rest of the two-year colleges in New York about the special needs of adult students. Some of the strategies at the pilot colleges included: initiating a telephone counseling and advisement service, organizing peer counseling services, establishing a coordinator for adult student counseling, and providing tutorial services.

Kasworm (1980) examined traditional and adult usage, need, and satisfaction with student personnel and support services. Using the Support Service Survey Kasworm gathered information about the major areas of support services. The results of the survey indicated that the mature student reported less usage and lower perception of need and satisfaction with physical health services, student union activities, and mandatory academic advisement. Personal counseling, vocational/career counseling, financial aids, study skills, tutoring, and job placement had similar usage, perceived need, and satisfaction for both groups of respondents. Kasworm concluded that adult students will utilize and be satisfied with the institutional support services "that combine the elements of personalization, voluntary engagement, and academic community organization" (Kasworm, 1980, p. 168). In the follow-up study (1982), Kasworm attempted to assess difference in need for institutional support services in the different age cohorts within the adult group of respondents; the age cohorts were 18-22, 23-26, 27-37, and 38-62. Utilizing the same

instrument, the study suggested research should recognize the heterogeneous nature of the adult population, and use a life-span perspective in determining the needs of adult students. The research reported a significant difference between how the older adult (30-39) perceived the need for all support services, including personal counseling, when compared to the younger adults (26-29).

Identification of a life-span approach in identifying adult student counseling needs was the focus of the Warchal and Southern (1986) study. The research failed to correlate differences in counseling needs with developmental periods, and verified the findings of a number of studies (Anderson 1984; Mangano 1979; Mardoyan, Alleman, & Cochran 1983) that academic counseling needs were most important to adult students.

Sewall (1984) reported that adult degree seeking students between 25-34 needed the following services: career and educational counseling, job placement, personal counseling, and evening hours for courses. In addition, the study concluded the numbers of adults returning because of job transition demanded that institutions offer counseling services for prospective students, for example, career options or occupational outlook.

Aslanian and Brickel (1980) found that "trigger events" initiated a learning event, and 56% of adults in career transition looked to colleges, universities or place

of employment for more education. Thus, a majority of the adults needed specific occupational information from counselors and advisors. Aslanian and Brickell stated that the adults interviewed indicated they were deficient in knowledge of: where to learn, the benefits found in formal education, their own potential, coping with transition in life events, how to make a career transition, and how to translate their life experiences into educational credit.

Anderson (1984) attempted to identify the educational needs of undergraduate learners at each life cycle phase. The population included all learners at an urban campus where older learners comprised 30% of all undergraduates. A questionnaire was administered to a stratified sample, and the study analyzed the services on campus with a Survey of Programs and Services to determine and evaluate college resources available. Anderson examined the data through the use of the need clusters of Academic/Developmental Skill, Personal and Social Development, Class/Instructional Patterns, Support Services, and Physical Environment. The study produced three sets of data: educational needs by specific age cohorts, educational needs considered important by all age cohorts, and educational needs unimportant to all age cohorts. Results of the study revealed the following: students in all age cohorts (18-22), (23-34), (35-44), (45-56), (57-64) except 65+, reported a high need for academic counseling and

assistance with registration; students 18-34 specified job placement and financial aid as highly important needs; students 35-44 indicated a high need for evening and weekend registration. There was no significant need for tutoring services, counseling for personal problems or a campus tour during the first semester. Four findings emerged from the study. The first finding was that there were educational differences in needs according to age and life experiences. A second finding was that part-time students were more dissatisfied with the needs in the Academic Policy Cluster, but there was a minimum difference in the number of dissatisfied needs between full and part-time students. The third finding was that female respondents reported a high level of dissatisfaction in Class/Instructional Cluster. The fourth finding was that students attending evening and weekend classes were more dissatisfied than day students.

Demont (1986) reported on one of the few experimental studies on advising non-traditional students. The study attempted to evaluate a special counseling process for non-traditional students. The subjects were randomly selected from non-traditional students at a two-year private college; the mean age was 36, there were 30 females and six males in the experimental group and 31 females and five males in the control group. The experimental group received a special counseling program designed to help the non-

traditional student. It consisted of career counseling based on the results of the Strong-Campbell Interest Inventory, curriculum planning based on the choice of major and scores on the School College Ability Test, and specific information on financial aid. At the end of the treatment period, subject satisfaction was measured on the Student Opinion Survey and the College and University Environmental Scales, and G.P.A. and retention rates were documented. The study concluded that the special counseling services did not increase the G.P.A. of non-traditional students, retention rates did not increase, and the level of student satisfaction between the two groups was not significant.

Developmental Background of Environmental Measures

Historically, college and university admission officers, faculty, and student advisors have attempted to promote student development and retention by changing student characteristics. Student personnel activities are usually reactive and aimed at maintaining the institutional status quo; thus, most administrators and advisors are content to treat the individual student who makes up the student body (Banning & Kaiser, 1974; Banning, 1980; Williams, 1986). According to Banning, the student personnel worker guided by the "individual focused" theory is influenced by one of three concepts: the unenlightened perspective, the adjustment perspective, or the

developmental perspective. The unenlightened perspective has evolved from the idea that many students do not belong in higher education, and the advisor's job is to help the student withdraw. The adjustment perspective relies on the concept that the staff must help the student find a coping mechanism for dealing with conflicts in the institutional environment. The developmental perspective, the most popular hypothesis about college and university students, is built on the theory that students need to grow up before they fit into the environment. Banning suggested that these perspectives are based on a frame of reference that views the student, not the institution, as deficient. Today in student personnel work, there is a growing trend toward the adoption of the ecological perspective that incorporates the interactionist theory and away from the person change approach. This concern with college students and their interaction with the campus is described as the concept of "campus ecology" (Banning, 1980; Clarke, 1987). Campus ecology is developed from the interactionist position that states behavior is a "function of both the individual and the environment" (Huebner, 1980 p. 119). This point of view does not minimize the internal direction of behavior; it simply suggests that environmental influences provide an important clue for understanding behavior (Banning, 1980; Blocher, 1978; Huebner, 1980).

Before student personnel workers can fathom the university or college student-environment interaction and facilitate student academic and personal growth, the environment must be described and analyzed (Baird, 1976). Williams (1986) suggested that analyzing the institutional characteristics of the educational environments is the first step in clarifying student-institution interaction that determines congruence or "fit." Moos and Insel (1974) maintained that social environments are similar to individuals: unique, supportive, controlling, or orderly. Therefore, they can be identified and measured.

Two psychological theorists Lewin (1936) and Murray (1938) helped establish the conceptual framework for the belief that environments can be assessed. When Lewin set forth his phenomenological system for understanding personality through experimental investigation, he emphasized that the entire person must be viewed (Leeper, 1943). Thus, investigators must consider "the characteristics of the person, his momentary state, and his psychological environment" (Lewin, p. 5). In addition, Lewin stressed that his "new system" for developing psychological concepts required relinquishing the old classification system for determining reality and recognizing the characteristics of the psychological environment. In Lewin's phenomenological approach, the field theory of life space, behavior cannot be understood

without analyzing the totality of person and environment (Lewin; Sturgis, 1979; Walsh, 1975).

Harvard psychologist Murray (1938) constructed a theoretical model for Lewin's approach (Insel & Moos, 1974; Murray, 1938; Walsh, 1975). Murray's model relied on a personality "needs" and environmental "press" structure for studying behavior; however, it was 20 years before anyone operationally defined the need/press theory (Baird, 1973; Insel & Moos; Walsh). Stern (1957) attempted to expand Murray's theory by developing relevant techniques that measured college students' personality needs and the related press (Insel & Moos; Stern, 1970). The framework for Stern's "need- press=culture theory" included the following assumptions:

1. Behavior is a function of the relationship between the individual (needs) and the environment (press).
2. The psychological significance of persons may be taken from their behavior.
3. Psychological significance of the environment may be inferred from behavioral perceptions (Walsh, p. 109).

Stern's early work was directed at improving the prediction of college academic success by studying student congruence with the institution (Baird). In his research, environmental press was determined by the definition or the description of the climate or atmosphere from the individuals who lived in the institution, and he measured

needs through the use of a personality test, the Activities Index (1955). In the Syracuse study, Pace and Stern developed the College Characteristics Index (CCI) (1957). By quantifying student psychological needs and environmental press, this instrument was supposed to provide information that would predict student achievement and growth. In addition, Stern hoped the prediction of student-college fit would provide a new basis for classifying colleges and universities (Baird). Stern and other colleagues in the Syracuse study developed three perceptual measures to be utilized in other environments: High School Characteristics Index, Evening College Index, and the Organizational Characteristics Index (Insel & Moos; Stern, 1970; Walsh, 1975, 1978). Each of these scales attempted to measure how institutions impact on the individual; yet, they failed to answer the research question about the interrelationship of achievement, satisfaction and congruence (Baird; Walsh). Critics maintained these studies failed because of the limitations of Stern's model; for example, the scales did not record observed behaviors, the theory espoused only minimum attention to need development, and the studies had complete reliance on self reporting (Huebner, 1978; Walsh, 1975). However, the Syracuse Study and numerous other perceptual studies verified that college environments were recognizable and measurable (Blocher), that personality characteristics had little influence on environmental

scores, and that "the ways people's personalities differed was independent of the way college environments differed" (Baird, p. 3). Consequently, six years after the development of the CCI, Pace concluded that the best measurement of the psychological climate of the campus environment was not the individual student's response utilized in the CCI; therefore, he initiated a new approach for developing perceptual measures. Pace's College and University Environmental Scales (CUES) focused on analyzing the college through a collective perception as the source of knowledge about the college or university (Pace, 1963, 1969). This procedure for determining the psychological characteristics in the environment that facilitated student learning and personal development seemed to move away from Murray's and Stern's need-press system and to concentrate more on the college and university environment (Blocher, 1978; Pace; Walsh, 1975). A portion of Pace's CUES II was chosen for this study, and the detailed analysis and use of this instrument is presented in Chapter III.

Related Research on College Environments

One of the purposes of this study was to substantiate the theory that educational counseling is the institutional support system for adult learners that promotes "fit" or congruence with the university or college environment, resulting in student growth, satisfaction,

persistence, and more effective education. Thirty years of environmental research has provided universities and colleges with the ability to evaluate and predict student and institutional characteristics that encourage achievement and development. However, the student-institution interaction cannot be comprehended until the environment has been assessed (Huebner, 1978; Williams, 1986). Huebner views person-environment assessment as "not a very sophisticated science nor a very advanced art" (Huebner, p. 132); nevertheless, quite a few instruments have been designed to measure educational environments. This section reviews research studies of college and university environments that were designed to assess environmental impact. Unfortunately, only one project (Sturgis, 1970) focused on the adult students' perceptions of the college and university environment.

Astin's and Holland's (1961) first attempt at college and university environmental assessment was based on a demographic approach that viewed students' perceptions as dependent on the characteristics of other members of the community including faculty, staff, and students (Astin, 1968; Baird, 1973; Walsh, 1978). Holland's theory that for each personality there is a corresponding environment and that people choose environments that reflect their distinctive personality types, forms the conceptual framework for their instrument, the Environmental Assessment

Technique (EAT) (Astin; Huebner, 1978; Walsh). The EAT described the eight characteristics of the institutional environment: average intelligence, size, and institutional scores based on the proportions of students in the six broad areas of study. The six personality types, or broad areas of study included the following: Realistic, Scientific, Social, Conventional, Enterprising, and Artistic (Astin, Walsh). The advantage of this instrument was that the information was accessible and studies could be replicated; however, it provided little information about student perception of the environment (Huebner, Walsh).

Astin's second attempt to develop an instrument that would measure the college and university environment more effectively was based on the behavioral approach and resulted in the design of the Inventory of College Activities (ICA) (Astin 1968; Huebner, 1978). Astin hoped to determine environmental stimuli observed by undergraduate students in 264 universities and colleges (Astin; Anderson, 1984; Huebner; Moos, 1979). The 400-item questionnaire covered four clusters: peer environment, classroom environment, administrative environment, and the physical environment (Astin; Anderson; Baird, 1973). It was sent to 60,500 subjects and 264 registrars. According to Astin, this study failed to answer how the environment impacts on growth or persistence, but it did reveal the diversity found in American higher education institutions. In addition, it

verified that there is a need for more information about how these differences in educational environments affect students' development (Astin; Baird).

One of the most important researchers in the study of environments is Moos. His social organization approach measured the environment by focusing on subenvironments or environmental characteristics of living groups. He maintained that the assessment of social environments provided information about satisfaction, growth, and morale (Insel & Moos, 1974). Moos' method was to describe environments as perceived by the people in the environment, and he assumed that the way an individual perceived the environment influenced behavior (Moos, 1979). Because studies indicated differences in the development of college students who lived in residence halls and those who lived in private off-campus housing, Moos created the University Environmental Scale (UES) (Moos, 1979; Walsh, 1978). In this study, (1979) Moos not only attempted to differentiate between maturation levels in different college and university living groups but also listed specific suggestions for promoting social change in these educational environments. Moos' research work with psychological scales was not limited to the educational climate but extended to a variety of institutions: prisons, hospitals, and secondary classrooms (Moos, 1973).

Moos' focus on the microsetting of students' living quarters negates the use of his scales as an appropriate measure for determining non-traditional students' perceptions of the educational environment. Likewise, Astin's EAT and ICA were designed for the traditional 18-23 age group, and the questions are unsuitable for the adult student. In contrast, Pace's College and University Environmental Scales II (1969) was one perceptual instrument that has been used to measure non-traditional students' perceptions of the environment (Sturgis, 1979). According to Sturgis, it should be obvious that adults in colleges and universities have a learning experience that is distinct from the traditional student. Using the CUES II (1969), Sturgis (1979) compared adult learners' and traditional age college students' perceptions of the learning environment in two university settings, contrasted adult learners' perceptions of their respective environment, and showed how different demographic variables were associated with differences in perception (Sturgis, Kuh & Sturgis, 1980).

The instrument consisted of 100 items that formed five scales and two subscales:

Practicality	Organization and structure
Community	Friendly and supportive environment
Awareness	Emphasis and concern for the individual student
Propriety	Conventional behavior expected

Scholarship	Intellectual climate
Campus Morale	Environment spirited
Quality of Teaching	Professors are scholarly

Sturgis mailed the CUES II (1969) to 150 adult students enrolled at a large university and 100 adult students enrolled at a small university. These adults were randomly sampled from all adult learners who met the age criteria of 25 or older. The instrument, CUES II, was distributed to 150 traditional-age students enrolled in physical science classes at a large university and 86 traditional-age students enrolled in psychology classes at a small university.

The non-traditional learners at both universities had significantly lower scores on the Community and Awareness scales, but had similar scores on the other three scales and two subscales. The similar scores reflected that non-traditional and traditional students agreed that their institutions have a degree of organization, that group standards were important, and that the instructional process was valued. In contrast, the adult learners' low scores on Community represented that adult students felt a lack of support from the institution, and that togetherness or sharing did not characterize the educational environment. The adult students' low scores on Awareness indicated that the students felt the institution has little concern for the

individual student (Anderson, 1984; Kuh & Sturgis, 1980; Sturgis, 1979). In addition, the evaluation of the data showed that the adult learners in the small university perceived more support from the environment, but the adult learners in the large university indicated there was more emphasis on self-understanding.

Sturgis' study found that the adult students' perceptions of the environment were related to the demographic variables of sex, place of residence, academic field, and participation in extracurricular activities. The demographic variables influenced the perceptions of the educational climate between adults and traditional age students and within each single group.

The conclusion of Sturgis' research was that the social-emotional climates at the large and small university did not meet the needs of the non-traditional students.

Currently, the popular methods of assessing effective education in colleges and universities focus on the students' characteristics, by measuring the value added to academic achievement. Pace's (1983) latest instrument attempted to measure the quality of the educational experience through measurements of the amount, scope, and quality of student effort. Pace's scale for measuring these areas was an updated version of Moos' College Student Experience Scale (1979), and the content of this questionnaire did not contain questions appropriate for a

diverse undergraduate student body that includes adult learners.

Astin's (1985) recent conceptual approach for building better learning environments concentrated on student involvement. His theory stated "the more students are committed to their educational experience both psychologically and physically, the more likely they will succeed in and be satisfied with their college experience" (Astin, 1985; Richmond, 1986, p. 92). Although he has not operationally defined this concept, Astin suggested using Pace's College Student Experience Scale (1983), using a time diary, evaluating specific student characteristics that are related to different forms of involvement, and measuring the involvement of faculty and staff (Astin). This theory completely neglected the commuter and the adult learner; thus, it is too incomplete to be useful as a measure of non-traditional environmental perception.

In the past 30 years, research in environmental theory and assessment has expanded in response to the belief that "fit" between student and educational environment promotes satisfaction and achievemnt. Admission officers, faculty, and advisors agree that in order to attract and retain traditional or non-traditional students, the degree of "fit" or congruence with the institution needs to be examined. Yet, there is a scarcity of research and appropriate measurements that examine the impact of

educational environments on adult learners. Because Robert Pace's CUES II has been used with adult learners, it seems to be an appropriate measurement of non-traditional student perception of the environment.

Summary

The literature and research review validated that changing economic and societal trends have made the adult student a presence in American higher education. However, the mature student profile has not changed dramatically in the past two decades. The majority of adult learners are white middle class students attending classes for career change or advancement. The only notable change is the increase in the participation rates of females 25 and over (Center for Educational Statistics, 1987).

As college campuses change and adult students are not simply "warm bodies" filling empty seats institutional officers, admission officials, and advisors are demanding knowledge of the non-traditional students' motivation and participation. Although there is a great amount of research and literature on the traditional college student, the literature review substantiated that information about the non-traditional student on college and university campuses is limited. Cyril Houle's (1961) investigation of a three-way typology of adult education participants established a theoretical framework for empirical studies on adult

motivation that was utilized by Boshier (1971), Boshier and Collins (1985), and Morstain and Smart (1985). Articles by Boshier (1973) and Peters and Boshier (1976) stimulated questions about the importance of congruence or "fit" with the educational environment in analyzing adult learner motivation. Aslanian and Brickell's (1980) landmark research investigated life transitions as the key to understanding adult motivation and participation. The literature review indicated there is a need for replication of the theoretical and experimental research, and a deficiency in longitudinal studies.

The literature review confirmed that there have been a number of studies on adult motivation. Unfortunately, similar retention studies are rare. Most retention studies disregard the part-time student, and fail to note the complex and diverse patterns students follow to earn a degree. Tinto's (1975) conceptual model for studying traditional students' attrition has rarely been applied to the non-traditional student. Thus, most of the retention research on adult attrition examined adult needs and characteristics, and focused more on the barriers to entering educational institutions (Apps, 1981; Cross, 1981; Pappas & Loring, 1985). In addition, the review of the literature suggested that current work on retention recognized that the appearance of the adult learner on campus suggests a new perspective for studying withdrawal.

There is the recommendation that the old definitions are no longer accurate, and new concepts of retention must be envisioned and measured. Researchers and administrators are beginning to understand that certain types of leaving are inevitable, not institutional or individual failure (Tinto, 1987).

The literature supported the view that there is a dearth of empirical studies on advising/counseling the non-traditional learner in colleges and universities. Research on the adult learner has been more descriptive than experimental, and frequently utilized interviews and questionnaires about the use of and satisfaction with support services (Anderson, 1984; Kasworm, 1980; Sewall, 1984). In addition, the literature review revealed many articles that stressed adult counselors must be cognizant of the uniqueness of the adult students' needs that suggest different counseling strategies and techniques.

Before counselors can promote adult retention through adequate advising, they must understand the student-environment interaction that facilitates student academic and personal growth. The literature review explored the conceptual background for Stern's need/press theory that attempted to analyze college success through studying student congruence or "fit" with the institution. Today, this concern with the students' interaction with the campus is described as the concept of campus ecology. The

literature emphasized that college environmental influences are important, and they need to be assessed.

The literature review documented 30 years of research in environmental theory and assessment in response to the belief that congruence with the institution promotes satisfaction and achievement. Yet, there is a scarcity of research and appropriate instruments for measuring adult "fit" with the institution. Therefore, there seems to be a need for an experimental study on counseling adult students that might explain the adult students' congruence or "fit" with the campus environment.

CHAPTER III

RESEARCH METHOD

The population of this study was non-traditional undergraduate students (ages 18-60) entering the University Evening School at the University of Tennessee, Knoxville, Fall 1986. The University of Tennessee, Knoxville, is the largest state university in Tennessee, with a total graduate and undergraduate enrollment for Fall Quarter 1986 in excess of 25,000. Undergraduate admissions is somewhat selective in this urban, mostly commuter school. Only 7,282 students live in residential housing.

The University Evening School's total undergraduate and graduate enrollment for Fall Quarter 1986 was in excess of 3,000. Reflecting a nationwide trend of movement away from arts and science toward business, most of these non-traditional learners were in the Business College or had declared a business interest.

The major purpose of this experimental study of University Evening School students was to provide information about three groups of non-traditional learners' perception of The University environment, and their congruence or "fit" with the institution. Utilizing a three quarter sequence of educational counseling, face-to-face or telephone, this study investigated the influence educational counseling had on this congruence. In addition, information

was compiled about the effectiveness of an alternative method of counseling, telephone advising.

The purpose of this chapter is to explain the selection of the population, research design, procedure, written script and training sessions for the advisors, description of the instruments utilized, data collection, and data analysis.

Population

During August 1986, the Evening School clerical staff began to identify undergraduate students for the face-to-face, telephone or control groups. All mail-in registration forms were sorted, the population for the study was entered on the personal computer, and a file was created containing all the pertinent information needed to contact the new student. Because the Evening School staff uses the personal computer to enter each of the registrations on the system, this was easily accomplished. An identical procedure was used during the secondary registration for Fall Quarter. By the end of the second week of registration, a total of 291 new undergraduate evening students were identified. Because this number was small, the total population was included in the study.

The study began with 291 students coded as new undergraduate students Fall Quarter, 1986, and ended with 214 students Spring Quarter, 1987: 53 students never

completed Fall Quarter, 14 students were former students, 4 students were graduate students, 3 were full-time day students, 2 students informed the advisors they did not want to participate in the study, and 1 student was a deaf student who was advised by Handicapped Student Services.

Research Design

The research design for this study was a Post-Test Only Group Design (Campbell & Stanley, 1969; Gray, 1981). Utilizing this design the subjects were randomly assigned to a face-to-face, telephone or control group. The face-to-face and telephone groups received a three quarter sequence of educational counseling. At the end of the three quarters, the subjects were given the CUES II (1969) instrument that measured congruence or "fit" with the University environment. In addition, retention rates of the three groups were measured by a frequence count, and their satisfaction with the University Evening School was measured by an six point Likert scale.

Procedure

Each subject was randomly assigned to either a treatment or control group. There were 97 students in the face-to-face educational counseling group, 97 in the telephone counseling group, and 97 in the control group. Subjects from the two treatment groups were randomly

assigned to four Evening School advisors. Three advisors in the Evening School had 48 new students to contact, 24 for face-to-face educational counseling and 24 for telephone educational counseling. One advisor had 25 new students for face-to-face educational counseling and 25 students to contact by telephone.

A letter from the Director of the Evening School (Appendix A) was sent to each of the students in the treatment group informing them that The University will be requiring mandatory advising Fall Semester 1988. The letter explained the Evening School was involving Evening School students in a counseling project that would last for three quarters, and would help make the transition to semesters less complicated. A different letter, (Appendix B) containing the same information, was sent to the telephone counseling group. A prestamped postcard was included with the letter in order that the student could make an appointment for a counseling conference in person or by telephone. Unfortunately, only 36 students chose to use this reminder. Thus, each of the advisors had to initiate contact with the rest of the treatment group. The advisors decided they would attempt to reach the student a maximum of five times.

Research Controls

In order to avoid or minimize error in this study the following techniques were used:

1. Subjects were randomly assigned to treatment groups.
2. Subjects were randomly assigned to advisors.
3. All of the advisors used the same script.
4. Every student received the same type of instrument and an identical cover letter.
5. A random sample of nonrespondents was contacted.

Written Script and Training Sessions

The advising project required that the advisor contact the students in the treatment groups every quarter: Fall Quarter 1986, Winter Quarter 1987, and Spring Quarter 1987. A different prepared written script, based on O'Banion's five step model, was used each quarter. The written scripts, approved by Dr. Siegfried Dietz, a professor in the Department of Educational and Counseling Psychology, provided a list of topics for the advising session and established consistent educational counseling for both groups. A pilot project that involved telephoning ten former undergraduate Evening School students helped to determine the clarity and appropriateness of the written script.

During the first quarter the counselors attempted to establish rapport with the students. The content of the written script (Appendix C) included questions on the motives for re-entering school, provided specific curriculum information, discussed course and career goals, and supplied registration information for the next quarter. The second quarter the script (Appendix D) included questions on specific trigger events that encouraged school re-entry (Aslanian & Brickell, 1980), satisfaction with the course or courses taken Fall Quarter, as well as reiteration of services available for the adult student on the campus. The written script for the third quarter (Appendix E) included a discussion of the change from a quarter system to the semester system and the tentative course plan for the next four quarters.

All advisors involved with the advising project were experienced in programming for and advising the adult student; one advisor had a Master of Science in Educational and Counseling Psychology and two of the advisors had Master of Science degrees in Adult Education. The initial planning meeting involved discussion of the proposed content of the script with the advisors, and the advisors were instructed to practice telephoning each other for an evaluation of their telephone presentation. The advisors established a pattern of meeting to discuss problems before the beginning of the succeeding quarters. The advisors were encouraged to

maintain contact with all of their students Winter and Spring Quarter, even if the student failed to return to school.

Description of the Instruments

Pace designed the College and University Environmental Scales (CUES II) (1967), based on Stern's College Characteristics Index, to measure the college and university students' perception of the psychological environment of the institution. The first edition of the instrument contained 150 statements about

> "college life-features and facilities of the campus, rules and regulations, faculty, curricula, instruction and examination, student life, and institutional environment that help to define the atmosphere" (Pace, 1967, p. 9).

It was based on a factor analysis of 50 college and university environments. Thus, the original items in the scales that comprised the first edition of the CUES II were determined by "differences in educational environments not by some personal parallelism between students' needs and environmental demands" (Pace, 1969, p. 9). A factor analysis of the answers from a reference group from 100 institutions provided a national baseline that reflected "a broad cross section of American higher education-from all parts of the country, large and small, and public and private" (Pace, p. 14). The reference group consisted of

over 15,000 students in eight general types of colleges or universities.

The CUES II, Second Edition includes the following five scales:

> Practicality-Describes an environment that is orderly and structured.
>
> Community-Describes an environment that is supportive and cohesive.
>
> Awareness-Describes an environment that stresses self-understanding.
>
> Propriety-Describes an environment that is polite and considerate.
>
> Scholarship-Describes an environment that is characterized by intellectuality.

The validation data for the CUES II reflected correlation with other instruments which measured environmental press (Pace, Sturgis). According to Pace, the reliability should be a function of the size of the sample and the number of items falling in the borderline of being counted or not counted. In the most recent use of the instrument Demont (1986) used the Spearman-Brown Split-Half formula and set the consistency of the CUES II at .73.

In 1979 Sturgis used the entire instrument to compare traditional and non-traditional students, and in 1986 Demont used the CUES II as it was designed in 1967. In contrast, the advisors in this study found many of the true/false statements outdated and inappropriate for adult students; for example, "Bermuda shorts, pin-up pictures,

etc., are common on this campus" (Pace, 1967, p. 6). Because there is no specific formula for measuring content validity (Gray, 1981), the advisors had to make a value judgment concerning the relevance of the questions in the instrument. Therefore, it was determined that the Awareness, Community, and Scholarship scales were appropriate for the non-traditional learner in this study (Appendix F).

Pace's basis for the scoring concept for the CUES II is explained in the CUES Technical Manual (1967). It is a true/false test scored on a collective perception rationale, similar to an opinion poll. Respondents must agree, have a concensus, two-to-one before the item is viewed as characteristic of the environment. A score for a scale is obtained by:

1) Adding the number of items answered by 66% or more of the students in the keyed direction.

2) Subtract the number of items answered by 33% or fewer in the keyed direction.

3) Add 20 points to the difference,so as to eliminate any possibility of a negative score.

Pace cautioned that CUES II should not be scored by the use of means or standard deviation, and he emphasized that the unit for scoring the CUES II is the item, not the individual.

A Likert attitude scale, based on the services provided by the University Evening School, was used to

measure the adult learners' satisfaction with the University Evening School. The scale ranged from strongly disagree (1 point) to strongly agree (6 points) (Appendix F). The items for the satisfaction scale were determined from the literature on advising non-traditional learners (Schlossberg, Troll & Leibowitz, 1978; Schlossberg, 1984; Sewall, 1984; Warchall & Southern, 1986). Application of the Kuder-Richardson 21 formula to the researcher prepared satisfaction scale resulted in a .95 estimate of reliability.

Data Collection

The study began with 291 students coded as new undergraduate students Fall Quarter 1986, and ended with 214 students: 53 students never completed Fall Quarter, 14 students were former students, four students were graduate students, three were full-time day students, and two students informed the counselors that they did not want to participate in the study, one was a deaf student who was advised by Handicapped Student Services. At the end of the study, 16 students indicated to their counselor they were moving or did not want to be contacted.

On August 14, 1987, modified CUES II instruments were mailed to the remaining 198 students. Enclosed with the instrument was a personal letter from each advisor to the treatment groups (Appendix G) or a letter from the

Director of the Evening School (Appendix H) to the control group encouraging students to answer and return the instrument. In addition, an addressed postage paid envelope was included. Because this study was interested in group data, not individual responses, anonymity and tracking of responses was assured by having an identifying number on the envelope and instrument. The students were instructed to circle the number if they were interested in the results of the study. Two weeks later a reminder postcard was sent to the students. Ninety-five instruments had been returned by October 15. After another reminder postcard was sent in November, 14 more instruments were returned.

One hundred ninety-eight instruments were sent to students: 14 were undeliverable, six students felt they could not answer, four students refused to participate. Out of the 174 instruments sent to students 109 were returned, but only 105 instruments could be analyzed. At the end of the study there were 36 respondents from the face-to-face educational counseling group, 36 respondents from the telephone educational counseling group, and 33 respondents from the control group. Sixty-five students were classified as nonrespondents.

To determine if the data from the respondents constituted a representative sample of the group to which the instruments were mailed, a random sample of 22 nonrespondents was selected. Each of the nonrespondents was

contacted by telephone and asked to answer the items on the instrument. Six of the students had moved, and could not be contacted. Sixteen students were reached: six refused to participate, two chose to answer only the satisfaction scale, and eight answered the complete instrument.

The instrument, CUES II, answered by the nonrespondents contained three environmental scales Awareness, Community, and Scholarship. A brief description of the scoring of the scales clarifies the scores comparing respondents and nonrespondents. The scores for the Awareness, Community, and Scholarship scales contained in the CUES II ranged from 0-40. Pace determined that two points difference was negligible, four points difference was somewhat significant, and five points was significant (Pace, 1967, 1969). Pace's interpretation of the scores on the scales was not based on a statistical significance, but a perceived difference from reviewing the scores of the norm reference group made up of students in 100 different colleges and universities (Pace, 1966, 1969; Sturgis, 1979). This interpretation was used to compare the respondents' (R) and nonrespondents' (NR) raw scores on the CUES II Awareness, Community, and Scholarship scales. A five point difference in the raw scores was the only measure applied to analyze the raw data. The four point and two point difference was not examined in this study. Table 1 reports

TABLE 1

Raw CUES Scores on the Awareness, Community, and Scholarship Scales for Respondents and Nonrespondents

Scale	Face to Face		Telephone		Control	
	R	NR	R	NR	R	NR
Awareness	19	26	16	16	24	22
Community	16	31	19	11	24	12
Scholarship	23	32	30	16	34	30
n=number of respondents	36	1	36	3	33	4

the comparison of raw data for the respondents and nonrespondents.

The scores on the Awareness scale for the nonrespondents (26) and the respondents (19) in the face-to-face educational counseling group was significantly different (5 points). The higher scores on the Awareness scale by the nonrespondents indicated they perceived the campus as more concerned about the individual than did the respondents.

The scores on the Community scale for the nonrespondents (31) and respondents (16) in the face-to-face educational counseling group was significantly different (5 points). The higher score on the Community scale by the nonrespondents suggested they perceived the campus environment as more supportive than did the respondents. The scores on the Community scale for the respondents (19) in the telephone educational counseling group were significantly different from the scores for the nonrespondents (11) in the telephone counseling group. Likewise, the scores for the respondents (24) in the control group were significantly different from the scores for the nonrespondents (12) in the control group. In contrast to the respondents in the face-to-face educational counseling group, the respondents in the telephone and control groups had the higher scores. Higher scores implied the

respondents viewed the campus as more friendly than did the nonrespondents.

The scores on the Scholarship scale for the respondents (23) in the face-to-face counseling group were significantly different from the scores for the nonrespondents (32) in the face-to-face group. The higher scores for the nonrespondents indicated they perceived the campus environment as more scholarly than did the respondents. The scores on the Scholarship scale for the respondents (30) in the telephone counseling group were significantly different from the scores for the nonrespondents (16) in the telephone counseling group. The scores on the Scholarship scale for the respondents (34) in the control group were significantly different from the nonrespondents (30). The higher scores by the respondents indicated they perceived the campus as more intellectually oriented than the nonrespondents.

The scores for respondents and nonrespondents were significantly different (5 points) on seven of the nine comparisons of raw scores. This analysis of the raw scores indicated the respondents were not a representative sample of the group to which the instruments were mailed.

Data Analysis

Through the use of the Conversational Monitor System (CMS) raw scores on the CUES II scales were tabulated for

the Questions 1-15. The Chi-Square test was used to analyze enrollment for Hypothesis 1. An ANOVA procedure analyzed the satisfaction scale to determine significance for Hypothesis 2.

CHAPTER IV

RESULTS

This study presents information about three groups of non-traditional learners' perception of the University environment, and their congruence or "fit" with the institution. Utilizing a three quarter sequence of educational counseling, face-to-face or by telephone, the study investigated the effect educational counseling had on this "fit." This chapter presents the raw data for analyzing the research questions, and reports the results of the statistical analysis for hypotheses one and two. Throughout the chapter, comparisons are made between non-traditional learners who experienced educational counseling face-to-face or by telephone and the control group.

Raw scores were used for the data analysis of Pace's environmental scales. Pace's scoring rationale considered a five point difference in the scales significant, a four point difference was moderately significant, and a two point difference was negligible (Pace, 1966, 1969; Sturgis, 1979). For clarity and conciseness, this study compared only raw scores that had a significant difference (5 points). Pace established the significant difference for the scales by reviewing the scores of the norm reference group made up of students in 100 different colleges and universities (Pace; Sturgis). Thus, his interpretation of the scores for the

scales was an arbitrary decision based on a perceived difference, not a statistically significant difference. A significant level of .05 was set for the Chi-square and the ANOVA statistical tests.

Findings

The research questions were answered by comparing the raw scores on the three environmental scales Awareness, Community, and Scholarship for the two treatment groups and the control group. The raw scores were interpreted according to Pace's arbitrary scoring rationale. However, a five point difference was the only measure applied to the raw data; the moderate difference (4 points) and the negligible difference (2 points) were not examined in this analysis.

Question 1: Do University Evening School students who experience educational counseling face-to-face or by telephone have higher scores on the CUES II Awareness scale than the students in the control group?

Table 2 presents the raw data for analyzing Question 1. The score (24) on the Awareness scale for the control group of respondents was significantly different (5 points) from the score (19) for the respondents who had experienced educational counseling face-to-face. Likewise, the score (24) was significantly different (5 points) from the score

TABLE 2

Raw CUES Scores on the Awareness Scale for Face-to-Face, Telephone and Control Respondents

Scale	Face-to-Face	Telephone	Control
Awareness	19	15	24
n=number of respondents	36	36	33

(15) for the respondents who had experienced educational counseling by telephone. A higher score on the Awareness scale by the control group indicated they perceived the campus environment as one that reflected more of a concern and awareness about the individual and society than did respondents in either of the treatment groups.

Question 2: Do University Evening School students who experience educational counseling face-to-face or by telephone have higher scores on the CUES II Community scale than the students in the control group?

Table 3 reports the information needed to answer Question 2. The score (24) on the Community scale for the control group of respondents was different (5 points) from the score (19) for respondents who had experienced educational counseling by telephone. In addition, the score (24) is different (5 points) from the score (19) for the respondents who experienced educational counseling face-to-face. A higher score on the Community scale indicated the control group viewed the campus environment as more friendly and group oriented than did the treatment groups.

Question 3: Do University Evening School students who experience educational counseling face-to-face or by telephone have higher scores on the CUES II Scholarship scale than the students in the control group?

TABLE 3

Raw CUES Scores on the Community Scale for Face-to-Face, Telephone, and Control Respondents

Scale	Face to Face	Telephone	Control
Community	16	19	24
n=number of respondents	36	36	33

Table 4 describes the raw data for analyzing Question 3. The score (34) on the Scholarship scale for the control group of respondents was different from the score (23) for respondents who experienced educational counseling face-to-face. A higher score on the Scholarship scale indicated the control group viewed the campus as characterized more by intellectuality and scholastic discipline than did the face-to-face counseling group.

Question 4: Is there a significant difference in the scores on the CUES II Awareness scale between male and female University Evening school students who experience educational counseling face-to-face or by telephone and male and female students in the control group?

The raw scores for Question 4 are provided in Table 5. The score (27) on the Awareness scale for males who experienced face-to-face educational counseling was different from the score (19) for females who experienced face-to-face educational counseling. The higher score on the Awareness scale for males who experienced face-to-face educational counseling suggested they perceived the campus environment as more concerned about emphasizing self-understanding and reflectiveness than did the females who experienced face-to-face advising.

TABLE 4

Raw CUES Scores on the Scholarship Scale for Face-to-Face, Telephone and Control Respondents

Scale	Face-to-Face	Telephone	Control
Scholarship	23	30	34
n=number of respondents	36	36	33

TABLE 5

Raw CUES Scores on the Awareness Scale by Sex

Scale	Face-to-Face		Telephone		Control	
	Male	Female	Male	Female	Male	Female
Awareness	27	19	18	14	20	21
n=number of respondents	13	23	14	22	15	19

There was no difference in the scores on the Awareness scale for males and females in the telephone and control groups.

Question 5: Is there a significant difference in the scores on the CUES II Community scale between male and female University Evening School students who experience educational counseling face-to-face or by telephone and male and female students in the control group?

Table 6 displays the raw data for analyzing Question 5. The score (21) on the Community scale for males in the control group was different from the score (13) for females in the control group. The higher score on the Community scale for the males in the control group indicated they viewed the campus environment as more friendly and congenial than did the females in the control group.

There was no difference in the scores on the Community scale for males and females in the face-to-face and telephone counseling groups.

Question 6: Is there a significant difference in the scores on the CUES II Scholarship scale between male and female University Evening School students who experience educational counseling face-to-face or by telephone and male and female students in the control group?

TABLE 6

Raw CUES Scores on the Community Scale by Sex

Scale	Face-to-Face		Telephone		Control	
	Male	Female	Male	Female	Male	Female
Community	14	14	17	21	21	13
n=number of respondents	13	23	14	22	15	19

Table 7 relates the information for answering Question 6. The score (27) on the Scholarship scale for males in the face-to-face group was different from the score (22) for females who experienced educational counseling face-to-face. The higher score on the Scholarship scale for males in the face-to-face group indicated they perceived the campus environment as more intellectually stimulating than did the females in the face-to-face counseling group.

The score (29) on the Scholarship scale for females in the telephone group was different from the score (23) for males who experienced educational counseling by telephone. The higher score on the Scholarship scale for females in the telephone group suggested they viewed the campus as more scholarly than the males in the telephone counseling group.

There was no difference in the scores on the Scholarship scale for males and females in the control group.

Question 7: Is there a significant difference in the scores on the CUES II Awareness scale between married and single University Evening School students who experience educational counseling face-to-face or by telephone and married and single students in the control group?

Table 8 presents the information for analyzing Question 7. The score (22) on the Awareness scale for

TABLE 7

Raw CUES Scores on the Scholarship Scale by Sex

Scale	Face-to-Face		Telephone		Control	
	Male	Female	Male	Female	Male	Female
Scholarship	27	22	23	29	30	32
n=number of respondents	13	23	14	22	15	19

TABLE 8

Raw CUES Scores on the Awareness Scale by Marital Status

Scale	Face-to-Face		Telephone		Control	
	M	S	M	S	M	S
Awareness	22	17	9	23	26	23
n=number of respondents	23	13	17	19	19	14

married (M) students in the face-to-face group was different from the score (17) for single (S) students who experienced educational counseling face-to-face. The higher score on the Awareness scale for married students in the face-to-face group suggested they viewed the University environment as more concerned about students' self-understanding than did the single students in the face-to-face counseling group.

The score (23) on the Awareness scale for single (S) students who experienced educational counseling by telephone was different from the score (9) for married (M) students in the telephone group. The higher scores on the Awareness scale for single students in the telephone group indicated they perceived the campus environment as more reflective than did the married students who experienced educational counseling by telephone.

There was no difference in the scores on the Awareness scale for married and single students in the control group.

Question 8: Is there a significant difference in the scores on the CUES II Community scale between married and single University Evening School students who experience educational counseling face-to-face or by telephone and married and single students in the control group?

Table 9 presents the information relating to Question 8. There was no difference in scores on the

TABLE 9

Raw CUES Scores on the Community Scale by Marital Status

Scale	Face-to-Face		Telephone		Control	
	M	S	M	S	M	S
Community	15	18	15	18	24	24
n=number of respondents	23	13	17	19	19	14

Community scale for married (M) and single (S) students in the face-to-face, telephone or control groups.

Question 9: Is there a significant difference in the scores on the CUES II Scholarship scale between married and single University Evening School students who experience educational counseling face-to-face or by telephone and married and single students in the control group?

Table 10 provides information for analyzing Question 9. The score (28) on the Scholarship scale for married (M) students in the face-to-face group was different from the score (23) for single (S) students who experienced educational counseling face-to-face. The higher score on the Scholarship scale for the married students in the face-to-face group indicated they perceived the campus as more interested in scholarship and intellectuality than the single students in the face-to-face group.

The score (30) on the Scholarship scale for single (S) students in the telephone group was different from the score (22) for married (M) students who experienced educational counseling by telephone. The higher score on the Scholarship scale for the single students in the telephone group suggested they viewed the campus as more scholarly than did the single students in the treatment group.

TABLE 10

Raw CUES Scores on the Scholarship Scale by Marital Status

Scale	Face-to-Face		Telephone		Control	
	M	S	M	S	M	S
Scholarship	28	23	22	30	34	30
n=number of respondents	23	13	17	19	19	14

There was no difference in scores on the Scholarship scale for married (M) and single (S) students in the control group.

Question 10: Is there a significant difference in the scores on the CUES II Awareness scale among the different age cohorts (18-23), (24-29), (30-35), (36-39), and (40-60) of University Evening School students who experience educational counseling face-to-face or by telephone and the different age cohorts in the control group?

Table 11 reports information relating to Question 10. The score (37) on the Awareness scale for the age cohort (18-23) who experienced educational counseling by telephone was different from the score (24) for the same age cohort in the control group and the score (21) for the same age cohort in the face-to-face counseling group. Likewise, the score (22) for the (24-29) age cohort who experienced educational counseling by telephone was different from the score (16) for the same age cohort in the control group and the score (13) for the same age cohort in the face-to-face educational counseling group. In addition, the score (26) on the Awareness scale for the age cohort (40-60) who experienced educational counseling by telephone was different from the score (17) for the same age cohort in the face-to-face educational counseling group and the score (14)

TABLE 11

Raw CUES Scores on the Awareness Scale for the Age Cohorts (18-23), (24-29) (30-35), (36-39), and (40-60)

Scale	(18-23)	(24-29)	(30-35)	(36-39)	(40-60)
			Face-to-Face		
Awareness	21	13	21	18	17
n=number of respondents	7	5	10	3	11
			Telephone		
Awareness	37	22	10	10	26
n=number of respondents	7	10	8	8	3
			Control		
Awareness	24	16	30	26	14
n=number of respondents	5	8	5	1	14

for the same age cohort in the control group. The higher scores on the Awareness scale for the age cohorts (18-23), (24-29), and (40-60) who experienced educational counseling by telephone indicated they perceived the campus environment as more concerned about student growth than did the same age cohorts in the face-to-face educational counseling and control groups.

The score (30) on the Awareness scale for the age cohort (30-35) in the control group was different from the score (21) for the same age cohort in the face-to-face educational counseling group and the score (10) for the same age cohort in the telephone counseling group. The score (26) on the Awareness scale for the age cohort (36-39) in the control group was different from the score (18) for the same age cohort in the face-to-face educational counseling group and the score (10) for the same age cohort in the telephone counseling group. The higher score on the Awareness scale for the age cohorts (30-35) and (36-39) in the control group suggested they viewed the campus as more involved in promoting self-understanding than did the same age cohorts in the treatment groups.

Question 11: Is there a significant difference in the scores on the CUES II Community scale among the different age cohorts (18-23), (24-29), (30-35), and (40-60) of University Evening School students who experience educational

counseling face-to-face or by telephone and the different age cohorts in the control group?

Table 12 presents data that analyzes Question 11. The score (26) on the Community scale for the age cohort (18-23) in the control group and in the telephone counseling group was different from the score (20) for the same age cohort in the face-to-face counseling group. The higher scores on the Community scale for the (18-23) age cohorts in the control and telephone counseling groups indicated they perceived the University environment as more friendly and congenial than did the same age cohorts in the face-to-face educational counseling group.

The score (22) on the Community scale for the (24-29) age cohort in the telephone counseling group was different from the score (12) for the same age cohort in the face-to-face counseling group. The score (20) on the Community scale for the (24-29) age cohort in the control group was different from the score (12) for the same age cohort in the face-to-face counseling group. The higher scores for the (24-29) age cohort in the telephone and control groups suggested they perceived the campus as more friendly and congenial than did the same age cohort in the face-to-face group.

The scores (22) and (20) on the Community scale for the age cohorts (30-35) and (36-39) in the control group

TABLE 12

Raw CUES Scores on the Community Scale for the Age Cohorts (18-23), (24-29), (30-35), (36-39), and (40-60)

Scale	(18-23)	(24-29)	(30-35)	(36-39)	(40-60)
			Face-to-Face		
Community	20	12	16	14	20
n=number of respondents	7	5	10	3	11
			Telephone		
Community	26	22	13	18	10
n=number of respondents	7	10	8	8	3
			Control		
Community	26	20	22	20	19
n=number of respondents	5	8	5	1	14

were different from the scores (16) and (14) for the same age cohorts who have experienced educational counseling face-to-face. The higher scores on the Community scale for the age cohorts (30-35) and (36-39) in the control group suggested they viewed the campus environment as more cohesive and group-oriented than did the same age cohorts in the face-to-face group.

The score (20) on the Community scale for the (40-60) age cohort in the face-to-face counseling group was different from the score (10) for the (40-60) age cohort in the telephone counseling group. Likewise, this score (10) was different from the score (19) for the (40-60) age cohort in the control group. The higher score on the Community scale for the age cohort (40-60) who experienced educational counseling face-to-face and for the (40-60) age cohort in the control group indicated they perceived the campus as more supportive than did the same age cohort in the telephone group.

Question 12: Is there a significant difference in the scores on the CUES II Scholarship scale among the different age cohorts (18-23), (24-29), (30-35), (36-39), and (40-60) of University Evening School students who experience educational counseling face-to-face or by telephone and the different age cohorts in the control group?

Table 13 relates the data for Question 12. The score (36) on the Scholarship scale for the (18-23) age cohort in the telephone counseling group was different from the scores (21) for the same age cohort in the face-to-face counseling group and the score (2) for the same age cohort in the control group. A higher score for the (18-23) age cohort who experienced educational counseling by telephone suggested they viewed the campus environment as more scholastic than did the same age cohorts in the face-to-face counseling and control groups.

The score (34) on the Scholarship scale for the (24-29) age cohort in the control group was different from the score (29) for the face-to-face counseling group and the score (26) for the telephone counseling group. The higher score on the Scholarship scale for the students in the (24-29) age cohort in the control group indicated they perceived the campus as more intellectually rigorous than did the same age cohorts in the treatment groups.

The score (23) on the Scholarship scale for the (30-35) age cohort in the face-to-face counseling group was different from the score (16) for the same age cohort in the telephone counseling group. Likewise, the score (23) was different from the score (8) for the same age cohort in the control group. The higher score for the (30-35) age cohort in the face-to-face counseling group implied they viewed the

TABLE 13

Raw CUES Scores on the Scholarship Scale for Age Cohorts (18-23) (24-29) (30-35) (36-39) (40-60)

Scale	(18-23)	(24-29)	(30-35)	(36-39)	(40-60)
			Face-to-Face		
Scholarship	21	29	23	28	27
n=number of respondents	7	5	10	3	11
			Telephone		
Scholarship	36	26	16	25	36
n=number of respondents	7	10	8	8	3
			Control		
Scholarship	2	34	8	26	32
n=number of respondents	5	8	5	1	14

campus environment as more scholarly than did the same age cohorts in the telephone and control groups.

There was no difference in the scores on the Scholarship scale for the (36-39) age cohorts in the face-to-face, telephone or control groups.

The score (36) on the Scholarship scale for the (40-60) age cohort in the telephone counseling group was different from the score (27) for the same age cohort in the face-to-face counseling group. Likewise, the score (32) for the (40-60) age cohort in the control group was different from the score (27) for the same age cohort in the face-to-face counseling group. The higher scores on the Scholarship scale for the students in the (40-60) age cohort suggested they perceived the campus environment as more scholastic than did the same age cohorts in the face-to-face counseling and control groups.

Question 13: Is there a significant difference in the scores on the CUES II Awareness scale between degree seeking and non-degree University Evening School students who experience educational counseling face-to-face or by telephone and degree seeking and non-degree students in the control group?

Table 14 presents the information to analyze Question 13. The score (21) on the Awareness scale for non-degree (ND) students who experienced educational counseling by

TABLE 14

Raw CUES Scores on the Awareness Scale by Degree Status

Scale	Face-to-Face		Telephone		Control	
	D	ND	D	ND	D	ND
Awareness	20	22	16	21	14	24
n=number of respondents	19	17	19	17	14	19

telephone was different from the score (16) for degree (D) seeking students in the telephone group. The higher score on the Awareness scale for non-degree students who experienced educational counseling by telephone indicated they viewed the campus environment as more concerned about self-understanding than did the degree seeking students in the telephone group.

The score (24) on the Awareness scale for non-degree (ND) students in the control group was different from the score (14) for degree (D) seeking students in the control group. The higher score on the Awareness scale for non-degree students in the control group indicated they viewed the campus as one that reflected more of an awareness about the individual than did the degree seeking students.

There was no difference in the scores on the Awareness scale for degree and non-degree students who experienced educational counseling face-to-face.

Question 14: Is there a significant difference in the scores on the CUES II Community scale between degree seeking students and non-degree students who experience educational counseling face-to-face or by telephone and degree seeking and non-degree students in the control group?

Table 15 provides the data for Question 14. The score (23) on the Community scale for non-degree (ND)

TABLE 15

Raw CUES Scores on the Community Scale by Degree Status

Scale	Face-to-Face		Telephone		Control	
	D	ND	D	ND	D	ND
Community	24	21	14	23	15	24
n=number of respondents	19	17	19	17	14	19

students who experienced educational counseling by telephone was different from the score (14) for degree seeking students in the telephone counseling group. Likewise, the score (24) for non-degree students was different from the score (15) for degree seeking students in the control group. The higher score on the Community scale for degree seeking students who experienced educational counseling face-to-face and in the control group indicated they perceived the campus environment as more congenial and cohesive than did the degree seeking students in the telephone and control groups.

There was no difference in the scores on the Community scale for degree (D) and non-degree (ND) students who experienced educational counseling face-to-face.

Question 15: Is there a significant difference in the scores on the CUES II Scholarship scale between degree seeking and non-degree students who experience educational counseling face-to-face or by telephone and degree seeking and non-degree seeking students in the control group?

Table 16 reports the data for Question 15. The score (33) on the Scholarship scale for non-degree (ND) students who experienced educational counseling by telephone was different from the score (21) on the Scholarship scale for degree seeking students who experienced educational counseling by telephone. The higher score on the

TABLE 16

Raw CUES Scores on the Scholarship Scale by Degree Status

Scale	Face-to-Face		Telephone		Control	
	D	ND	D	ND	D	ND
Scholarship	27	25	21	33	27	36
n=number of respondents	19	17	19	17	14	19

Scholarship scale for non-degree students who experienced educational counseling by telephone indicated they viewed the campus environment as more scholastic than did the degree seeking students in the telephone counseling group.

The score (36) on the Scholarship scale for non-degree (ND) students in the control group was different from the score (27) for non-degree students in the control group. The higher score on the Scholarship scale by the non-degree students in the control group indicated they perceived the campus environment as more intellectually stimulating than did the non-degree students in the control group.

There was no difference in the scores on the Scholarship scale for degree (D) and non-degree (ND) students who experienced educational counseling face-to-face.

Summary of Findings for the Awareness, Community, and Scholarship Scales

Analysis of the raw data for Questions 1-3 suggested the control group had consistently higher scores on the Awareness, Community, and Scholarship scales. Likewise, examination of the raw scores on the three environmental scales indicated the demographic variables of gender and degree status did not influence congruence in any distinctive pattern. It was also determined from analyzing the three environmental scales, that the married and single

students in the control group seemed to perceive better congruence or "fit" with the University environment than did the married and single students in the treatment groups. In addition, the scores for the (18-23), (24-29), and the (40-60) age cohorts indicated they perceived better congruence with the campus environment than did the (30-35) and (36-39) age cohorts.

Null Hypotheses

Hypothesis 1: There is no difference in retention as measured by frequency of enrollment between University Evening School students who experience educational counseling face-to-face or by telephone and those in the control group.

Table 17 relates the analysis of the Chi-square procedure. Utilizing the Fall Quarter enrollment data, a 2 x 3 Chi-square analysis indicated there was no difference in retention as measured by frequency of enrollment among the three groups. The value of Chi-square, with 2 degrees of freedom, required for significance at the .05 level is 5.99. The calculated Chi-square value (.10) fell below this; therefore, Hypothesis 1 is accepted.

Hypothesis 2: There is no difference in scores on the satisfaction scale between University Evening School students who experience educational

TABLE 17

Chi-square Analysis of Retention

	Face-to-Face	Telephone	Control	Total
Retained	16 (44%)	16 (44%)	13 (39%)	45
Not Retained	20 (56%)	20 (56%)	20 (61%)	60
Column Total	36 (100%)	36 (100%)	33 (100%)	105

Calculated Chi-square = .10
p (.05) = 5.99 (with 2 degrees of freedom)

counseling face-to-face or by telephone and those in the control group.

Table 18 reports the data for the ANOVA procedure that was used on each of the six questions that measured the students' satisfaction with the University Evening School. This statistical analysis indicated the scores on the satisfaction scale for University Evening School students who experienced educational counseling face-to-face or by telephone were not significantly different from each other or the control group. The calculated F value, with 2,100 degrees of freedom, required for significance at the .05 level is 4.82. The F values fell below this; therefore, Hypothesis 2 is accepted.

Table 19 reports the mean scores for the six satisfaction questions. The ANOVA procedure indicated there was no significant difference in mean scores on the satisfaction scale among the three groups. However, the analysis did indicate satisfaction scores for the students who experienced educational counseling face-to-face or by telephone and the control group were high; thus, the Evening School students seemed to be satisfied with the services provided by the University Evening School.

Report of Information from Advising Sessions

In the beginning of this study, the decision was made not to report on the descriptive information gleaned

TABLE 18

Summary Table for Analysis of Variance for Six Satisfaction Questions

Question	df	F
1. The Evening School helped me define realistic goals.	2,100	.89
2. The Evening School assisted me in exploring career goals.	2,99	.11
3. The Evening School provided me with accurate information.	2,100	.65
4. The Evening School was supportive.	2,100	.87
5. The Evening School was always available.	2,100	.44
6. The Evening School took a personal interest in me.	2,100	1.89

p (.05) = 4.82 (with 2,100 degrees of freedom)

TABLE 19

Mean Scores for the Six Satisfaction Questions

Question	Face-to-Face	Telephone	Control
Question 1	4.9	5.0	5.4
Question 2	4.7	4.5	4.6
Question 3	6.0	6.0	5.6
Question 4	6.0	5.9	5.5
Question 5	5.9	5.8	5.6
Question 6	5.4	5.6	4.8

from the written scripts used in the counseling sessions. However, as the scripts were examined, it was determined they contained invaluable information about University Evening School students. This section does not compare the treatment and control groups; it simply reports some of the important responses needed to attain objective five of the study. Objective five of the study was to report information from the advising session about non-traditional students' motivation, knowledge of student services, career goals, and trigger events for learning. This knowledge should help administrators and advisors know the adult learner better, and the findings may help determine needed support services.

The advisors' scripts provided information about motivation, student services, career goals, and trigger events. The adult learners, in the counseling sessions, gave many different reasons for returning to school: 33% returned for career reasons; 31% returned for personal growth and development; 15% needed certification. In contrast to the popular assumption that adults are not degree oriented, 46% planned to receive a degree. Likewise, the misconception that most adults are not satisfied with their job was not verified in the counseling sessions; 51% said they were very satisfied with their present occupation.

In response to questions about course and curriculum requirements the majority (63%) lacked knowledge of college

association requirements, (52%) did not understand the repeat rules, and (65%) were not aware of drop and add deadlines. These figures are consistent with the fact that the majority (59%) had not talked with an Evening School advisor. This was a revealing statistic. The advisors thought the Evening School was reaching most of the new students with basic information. Likewise, the assumption that the majority of students knew about student services was refuted by the facts listed below:

1. 65% had not received a re-entry handbook.
2. 80% were not aware of the adult organization on campus.
3. 51% did not know tutors were available.
4. 91% were not aware of the Discover system.

Aslanian and Brickel (1980) determined that all formal and informal learning experiences were initiated by a trigger event. Therefore, the script used in the counseling sessions included three questions taken from their work. Aslanian and Brickel found 56% of all respondents, in their study, cited career transitions as their main trigger event. However, only 13% of the adults in the educational counseling groups mentioned career transitions as a trigger event. Thus, the information from the counseling sessions seemed to contradict the Aslanian and Brickel study, Americans in Transition: Life Changes as Reasons for Adult Learning.

CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Due to a maturing population, changing societal attitudes, major economic shifts, and developing technology non-traditional students are entering American higher education. By the year 2000 half of all college students will be adult part-time learners. As institutions recognize this rapidly growing segment in higher education, marketing and recruiting departments will demand information on the issues of adult motivation and retention. Although there is an immense amount of literature and research on the traditional college student, material about the non-traditional adult learner on college and university campuses is limited. The research that is available is more descriptive than experimental; consequently, this study attempted to add to the body of experimental research on the adult learner.

For this study it was assumed that integration and congruence promoted adult satisfaction and retention, and that educational advising was the institutional support system that encouraged the non-traditional students' "fit" with the educational environment.

Summary of the Study

Fall Quarter 1986 all of the 291 new University Evening School undergraduate students were randomly assigned to either treatment groups for educational counseling or a control group. The treatment group received a special three quarter sequence of educational counseling face-to-face or by telephone. During these three quarters, the University Evening School advisors endeavored to improve the adult learners' congruence or "fit" with the educational environment by being supportive and informative. The content for the prepared script, utilized by the advisors each quarter in the counseling sessions, was based on O'Banion's Five-Step Model. The advisors covered the following topics:

Curriculum and registration information

Course and career goals

Motivation and trigger events

Available student services

Initially the information from these counseling sessions was excluded from the results; however, later it was determined these topics provided important data about non-traditional learners. Therefore, descriptive information about the characteristics of University Evening students was included in the results of the study.

At the end of three quarters, the effects of the educational counseling for non-traditional learners was assessed with respect to congruence, retention, and satisfaction. Robert Pace's College and University Environment Scale (CUES) (1967) was used to measure the adult learners' perception of the psychological environment of the University, "fit" or congruence. The CUES II administered to the adult learners consisted of three scales:

1. Awareness-Describes an environment that stresses self-understanding.

2. Community-Describes an environment that is supportive and cohesive.

3. Scholarship-Describes an environment that is characterized by intellectuality.

In addition, the effects of the demographic variables of gender, marital status, age, and degree status on the three measures of congruence was assessed. The non-traditional learners' retention was measured by the Chi-square test, and satisfaction with the services of the University Evening School was measured by an ANOVA procedure.

A random sample of nonrespondents was selected to determine if the respondents raw data on the CUES II was representative of the group to which the instruments were

mailed. Each of the nonrespondents was contacted by telephone, and asked to answer the items on the instrument.

Findings of the Study

Based on Pace's scoring rationale the scores of the control group differed significantly from the treatment group. The control group had consistently higher scores on the environmental scales implying they perceived the campus environment as more supportive, friendly, and scholarly than did the adult learners' in the face-to-face or telephone counseling groups.

Examination of the raw scores on the three environmental scales indicated the demographic variables of gender and degree status did not influence congruence with the University in any distinctive pattern. In contrast, married and single students in the control group seemed to perceive better congruence with the campus environment. Likewise, the scores for the 18-23, 24-29, and 40-60 age cohorts indicated these age groups perceived a better "fit" with the psychological environment than did the 30-35 and 36-39 age cohorts.

The analysis of the nonrespondents' raw data on the Awareness, Community, and Scholarship scales showed the respondents differed (5 points) on seven of the nine comparisons of raw data. This suggested the respondents

were not a representative sample of the group to which the instrument was mailed.

A 2 x 3 Chi-square analysis of the enrollment data for Fall Quarter, 1986 and Fall Quarter, 1987 determined that no significant difference in retention as measured by frequency of enrollment existed among the face-to-face counseling, telephone counseling or control groups.

A Likert attitude scale was used to measure the adult learners' satisfaction with the services of the University Evening School. Satisfaction scores for all three groups were high. However, the ANOVA procedure on the six questions in the satisfaction scale indicated there was no significant difference in satisfaction level among the face-to-face, telephone or control groups.

Conclusions

The findings of this research has provided the basis for the following conclusions:

1. Non-traditional students who received educational counseling had a lower perception of "fit" with the campus environment than those who did not receive counseling.

2. Non-traditional students who received educational counseling and non-traditional students who did not receive educational counseling had similar retention rates.

3. Non-traditional students who received educational counseling had a high satisfaction level with the service of the University Evening School. However, educational counseling did not significantly influence the satisfaction level.

Recommendations

This research has generated several recommendations for future research:

1. There is a need for experimental research on advising the adult learner in other colleges and universities.

2. A study of the effects of time constraints on non-traditional learners would be valuable.

3. It would be useful to look at the educational goals of adult learners, and determine how these goals influence retention data.

4. A longitudinal study of advising and retention that would follow-up University Evening School students in other educational institutions is needed.

5. A study that would examine effective methods of disseminating registration, curriculum, and student service information to the University Evening school student would be helpful.

6. With the change to the semester system, the University of Tennessee will be requiring mandatory advising

every semester. A follow-up study with the control group after they have been exposed to advising would be valuable.

7. There is a need for further research to determine why the Evening School loses 18% of the new undergraduate students before mid-term.

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APPENDIXES

APPENDIX A

THE UNIVERSITY OF TENNESSEE
KNOXVILLE



Division of
Continuing
Education

University Evening
School

October 16, 1986

Name
Address
City, State Zip

Dear :

Are you aware the University of Tennessee will be changing to the semester system in 1988, and will begin a new mandatory advising policy? Mandatory advising will be phased in Spring Quarter 1987. All day and evening students must have academic advising and an advisor's signature on their registration form. The University Evening School has chosen you to participate in an advising program that will make this transition as smooth as possible.

Please return the enclosed post card indicating a convenient day and time for the advising session; one of our counselors will contact you very soon.

If you have any questions about this advising program, please do not hesitate to contact a counselor at 974-5174.

Sincerely,

Sam C. Bills
Director

SCB/ha

451 Communications Building Knoxville, Tennessee 37996-0341 (615) 974-5361

APPENDIX B

THE UNIVERSITY OF TENNESSEE
KNOXVILLE



Division of
Continuing
Education

University Evening
School

October 16, 1986

Name
Address
City, State Zip

Dear :

Are you aware the University of Tennessee will be changing to the semester system in 1988, and will begin a new mandatory advising policy? Mandatory advising will be phased in Spring Quarter 1987. All day and evening students must have academic advising and an advisor's signature on their registration form. The University Evening School would like to help make this transition as smooth as possible for the student; therefore, we are investigating several methods of advising. The University Evening School has chosen you to participate in the telephone advising program.

Please return the enclosed post card indicating a convenient day and time for the advising session; one of our counselors will contact you very soon.

If you have any questions about this telephone advising program, please do not hesitate to contact a counselor at 974-5174.

Sincerely,

Sam C. Bills
Director

SCB/ha

451 Communications Building Knoxville, Tennessee 37996-0341 / (615) 974-5361

APPENDIX C

Nam3
SS#
Address
Phone/Work Phone
Age
Sex

INTRODUCTION

Are you aware that the University is going to semesters in 1988? When the University changes to semesters, students will be required to talk with an advisor before they will be allowed to register for a course. This policy will be phased in Spring Quarter 1987. The Evening School would like to determine the value of different methods of advising.

GENERAL QUESTIONS

I know you are a new student, are you a transfer student? yes___no___

(If the student is a transfer student) How many transfer hours do you have? ____

When you attended school before, was it a high school ___, community college ___, technical institute ___ or other ___?

Why did you decide to return to school? _____
_____

How were you made aware of the evening school? _____
_____

Have you talked to an evening school advisor before? ___yes ___no

CURRICULUM INFORMATION

What is your classification? Non-Degree ___ University ___ Degree ___

What college do you want to associate with? _____

Do you understand the association requirements for that college? ___yes ___no Explain if necessary.

Are you familar with the courses you must take in that college? ___yes ___no How were you made aware of the requirements? (List of requirements attached)

Do you understand the repeat rule for F's and incompletes? ___yes ___no (For a no response explain the policy.)

Are you aware of the Drop and Add deadlines?___yes ___no (For a no response explain the policy.)

Do you understand the repeat rule for F's and incompletes? ___yes ___no (For a no response explain the policy.)

Are you aware of the Drop and Add deadlines?___yes ___no (For a no response explain the policy.)

COURSE/CAREER GOALS

What course (courses) are you taking? _____

How does this course (do these courses) fit into your educational program? _____

Are you interested in pursuing a degree? _____
_____

What is your present occupation? _____

How will this course help you in your present occupation?
_____

How would you rate your satisfaction with your present job? ___very satisfied ___satisfied ___neutral ___dissatisfied ___very dissatisfied. What specifically contributes to this attitude?
_____

What are your long term career goals? _____
_____

How does this course help you achieve your career goals? _____
_____

Are you aware the evening school has a computer based career guidance system, Discover, available for students to use? _____
_____ (If necessary explain Discover)

Would you like me to mail you information about Discover? ___yes ___no

REGISTRATION INFORMATION

Will you attend the University winter quarter? ___yes ___no

(For a no answer) Why are you not attending the University winter quarter? _____

(For a yes answer) What class have you decided to enroll in winter quarter? _____

(Because the change to semesters will come in 1988, remind the student that the University is encouraging every one to be aware that course choices should include required pre-requisites, co-requisites, and sequence courses.)

Did you pre-register fall quarter? ___yes ___no

(If the student did not pre-register fall, explain the advantages of class priority and avoiding registration lines, etc.)

(Pre-registration for Winter quarter will be from Nov 28-Dec 3.)

Are you aware that you can drop and add by telephone? ___yes ___no

Do you have any registration or course concerns or problems that you would like to discuss? _____

SPRING QUARTER YOU WILL NOT BE ALLOWED TO REGISTER WITHOUT SPEAKING WITH AN ADVISOR; THEREFORE, I WOULD LIKE TO SEE YOU AGAIN WINTER QUARTER AND DISCUSS YOUR EDUCATIONAL GOALS AND PLANS.

INTERVIEW NOTES

APPENDIX D

Please check address and phone number

ADVISOR'S WORKSHEET

INTRODUCTION

Thank you for talking with me fall quarter. Some of the following questions may be duplication of last quarter's questions, but the answers are helpful.

TRANSITION/TRIGGERS AS A TIME FOR LEARNING (Aslanian & Brickell study)

You began taking courses fall-Why did you start then?_____
Why not earlier?_____
Why not later?_____
What happened at that time to cause you to start then?_____
_____

GENERAL QUESTIONS

What course are you taking winter quarter?_____
How does it fit into your curriculum/certification requirements?_____
_____
Were the courses you chose fall and winter good course selections for you? ___yes ___no
(If no) How could this have been avoided?_____
_____
Were you satisfied with your course (courses) fall quarter? _____yes _____no
What contributed to this feeling?_____
_____
What has been the most frustrating part of your education experience so far?_____
What aspect has been the most helpful?_____
What is the biggest adjustment you have had to make for school?_____
_____
What is your impression of the University?_____
Would you describe this impression as positive____or negative_____?
Do you think the University has concern for the student? ___yes ___no
(Ask the student to explain why he feels this way)_____
_____

SERVICES

Are you aware there is an organization for the adult student? ___yes ___no
(If no) It is called 25+_____
Do you see a need for this type of group? ____yes ____no

Would you be interested in meeting in the evening once a quarter with an adult student group? ___yes ___no
The University publishes an undergradute re-entry student handbook, Encore, would you like it sent to you? ___yes ___no (If necessary explain contents)
Are you aware there are tutors available through student orientation ___yes ___no?
(Telephone number 974-2435)

CURRICULUM INFORMATION

Spring quarter you need to fill out a tentative course plan for the next 6 quarters; therefore please be thinking of those course selections. If you choose to go to the advising centers spring quarter, I will be glad to help you prepare a program of study to take with you. Hopefully, we will know available course offerings for the quarters preceding the semester change by spring. I will be contacting you Spring quarter.

Do you have any registration or course concerns/problems that you would like to discuss?

INTERVIEW NOTES

APPENDIX E

ADVISOR'S WORKSHEET

STATUS - (i.e. Non-respondent)

COMMENTS - (i.e. attempted to contact 5 times)

INTRODUCTION

Thank the student for participating in educational counseling.

Check accuracy of address and phone number (this is critical!)

MANDATORY ADVISING (April 6 - May 28)

We need to fill out the tentative course plan for Fall Quarter, 1987, Mini-Term December, 1987, Winter Quarter, 1988, Summer Quarter, 1988, Fall Semester, 1988 and Spring Semester, 1989.

STUDENT CONCERNS/COMMENTS

Do you have any registration concerns or problems that you would like to discuss?

During the summer I will be sending you an evaluation questionnaire about the educational counseling you have participated in for three quarters. If you would return these responses to me, I would appreciate it. Thank you for helping me.

INTERVIEW NOTES

APPENDIX F

DIRECTIONS

The Cues is not a test in which there are right or wrong answers; it is more like an opinion poll - a way to find out how much agreement or disagreement there is about the characteristics of a campus environment.

Circle T or F with any type of pencil or ball-point pen.

1.	The professors really push the students' capacities to the limit.	T	F
2.	Most of the professors are dedicated scholars in their fields.	T	F
3.	Most courses require intensive study and preparation out of class.	T	F
4.	Students set high standards of achievement for themselves.	T	F
5.	Class discussions are typically vigorous and intense.	T	F
6.	A lecture by an outstanding scientist would be poorly attended.	T	F
7.	Careful reasoning and clear logic are valued most highly in grading student papers, reports, of discussions.	T	F
8.	It is fairly easy to pass most courses without working very hard.	T	F
9.	The school is outstanding for the emphasis and support it gives to pure scholarship and basic research.	T	F
10.	Standards set by the professors are not particularly hard to achieve.	T	F
11.	It is easy to take clear notes in most courses.	T	F
12.	The school helps everyone get acquainted.	T	F
13.	Students often run errands or do other personal services for the faculty.	T	F
14.	The history and traditions of the college are strongly emphasized.	T	F
15.	The professors go out of their way to help you.	T	F
16.	There is a great deal of borrowing and sharing among the students.	T	F
17.	When students run a project or put on a show everybody knows about it.	T	F
18.	Many upperclassmen play an active role in helping new students adjust to campus life.	T	F
19.	Students exert considerable pressure on one another to live up to the expected codes of conduct.	T	F
20.	Graduation is a pretty matter-of-fact, unemotional event.	T	F
21.	Channels for expressing students' complaints are readily accessible.	T	F
22.	Students are encouraged to take an active part in social reform or political programs.	T	F
23.	Students are actively concerned about national and international affairs.	T	F
24.	There are a good many colorful and controversial figures on the faculty.	T	F
25.	There is considerable interest in the analysis of value systems, and the relativity of societies and ethics.	T	F
26.	Public debates are held frequently.	T	F
27.	A controversial speaker always stirs up a lot of student discussion.	T	F
28.	There are many facilities and opportunities for individual creative activity.	T	F
29.	There is a lot of interest here in poetry, music, painting, sculpture, architecture, etc.	T	F
30.	Concerts and art exhibits always draw big crowds of students.	T	F
31.	Most of the professors are very thorough teachers and really probe into the fundamentals of their subjects.	T	F
32.	Most courses are a real intellectual challenge.	T	F
33.	Students put a lot of energy into everything they do in class and out.	T	F
34.	Course offerings and faculty in the natural sciences are outstanding.	T	F
35.	Courses, examinations, and readings are frequently revised.	T	F
36.	Personality, pull, and bluff get students through many courses.	T	F
37.	There is very little studying here over the weekends.	T	F
38.	There is a lot of interest in the philosophy and methods of science.	T	F
39.	People around here seem to thrive on difficulty - the tougher things get, the harder they work.	T	F
40.	Students are very serious and purposeful about their work.	T	F
41.	This school has a reputation for being very friendly.	T	F

42.	All undergraduates must live in university approved housing.	T	F
43.	Instructors clearly explain the goals and purposes of their courses.	T	F
44.	Students have many opportunities to develop skill in organizing and directing the work of others.	T	F
45.	Most of the faculty are not interested in students' personal problems.	T	F
46.	Students quickly learn what is done and not done on this campus.	T	F
47.	It's easy to get a group together for card games, singing, going to the movies, etc.	T	F
48.	Students commonly share their problems.	T	F
49.	Faculty members rarely or never call students by their first names.	T	F
50.	There is a lot of group spirit.	T	F
51.	Students are encouraged to criticize administrative policies and teaching practices.	T	F
52.	The expression of strong personal belief or conviction is pretty rare around here.	T	F
53.	Many students here develop a strong sense of responsibility about their role in contemporary social and political life.	T	F
54.	There are a number of prominent faculty members who play a significant role in national or local politics.	T	F
55.	There would be a capacity audience for a lecture by an outstanding philosopher or theologian.	T	F
56.	Course offerings and faculty in the social sciences are outstanding.	T	F
57.	Many famous people are brought to the campus for lectures, concerts, student discussions, etc.	T	F
58.	The school offers many opportunities for students to understand and criticize important works of art, music, and drama.	T	F
59.	Special museums or collections are important possessions of the college.	T	F
60.	Modern art and music get little attention here.	T	F

DIRECTIONS

For each item please circle one of the following numbers. Circle 1 if you strongly disagree with the statement; circle 7 if you strongly agree with the statement:

	Strongly Disagree						Strongly Agree
The Evening School helped me define realistic educational goals	1	2	3	4	5	6	7
The Evening School assisted me in exploring career goals	1	2	3	4	5	6	7
The Evening School provided me with accurate information	1	2	3	4	5	6	7
The Evening School was supportive	1	2	3	4	5	6	7
The Evening School was always available	1	2	3	4	5	6	7
The Evening School took a personal interest in me	1	2	3	4	5	6	7

APPENDIX G

THE UNIVERSITY OF TENNESSEE
KNOXVILLE



Division of
Continuing
Education

University Evening
School

August 13, 1987

Name
Address
Address
City, State Zip

Dear Mr/Mrs :

The Evening School is interested in your experience at the University of Tennessee, and your responses on the enclosed questionnaire will help our department evaluate UTK and the Evening School. The Evening School values your opinion and strongly encourages you to complete and return this survey in the enclosed postage paid envelope.

If you would like the results of the survey, please circle the number on your return envelope.

For further information about this study, please contact Kathy Warden at 974-5174.

Sincerely,

Sam C. Bills
Director

SCB/ha

enclosure

451 Communications Building / Knoxville, Tennessee 37996-0341 (615) 974-5361

APPENDIX H

THE UNIVERSITY OF TENNESSEE
KNOXVILLE



Division of Continuing Education

University Evening School

August 14, 1987

Name
Address
Address
City, State Zip

Dear Mr/Ms :

Thank you for your participation in the Evening School advising program conducted during Fall quarter 1986, Winter quarter 1987, and Spring quarter 1987.

The enclosed questionnaire will assist the Evening School in evaluating this advising program. Your opinion is valuable to our department; thus, we encourage you to complete and return your survey in the enclosed postage paid envelope.

If you would like the results of this study, please circle the number on your return envelope.

For further information about this questionnaire, please contact Kathy Warden at 974-5174.

Sincerely,

Kathy Warden
Assistant Director

KW/ha

enclosure

451 Communications Building Knoxville, Tennessee 37996-0341 (615) 974-5361

VITA

Mary Katherine Warden received a degree in Education in March 1960 from the University of Tennessee, Knoxville. After a career as a teacher and homemaker, she re-entered the University of Tennessee and received a Master's degree in Adult Education. This degree was awarded in June 1980.

The author joined the Division of Continuing Education in 1982, and became an Assistant Director of the University Evening School in 1986.

Ms. Warden received the Doctor of Education degree with a major in Vocational-Technical Education in June 1988.