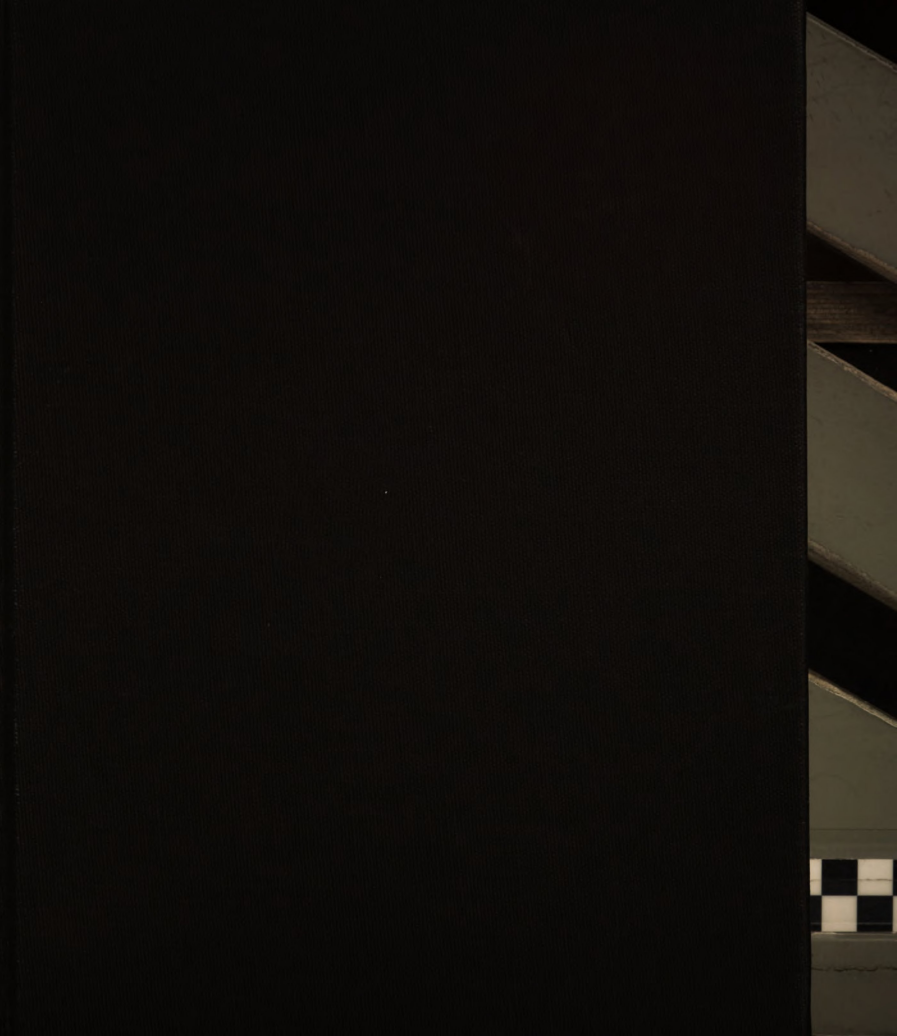

This is to certify that the

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A Comparative Analysis of Job Satisfaction Levels of Traditional and Non-Traditional College Student Graduates

presented by

James M. Rumbolz

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Major professor

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A COMPARATIVE ANALYSIS OF JOB SATISFACTION LEVELS OF TRADITIONAL AND NON-TRADITIONAL COLLEGE STUDENT GRADUATES

by

James M. Rumbolz

A DISSERTATION

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ABSTRACT

Rumbolz, James (Ph.D., Administration and Curriculum, Michigan State University, 1983)

A Comparative Analysis of Job Satisfaction Levels of Traditional and Non-Traditional College Student Graduates

Purpose of the Study

The investigator's purpose in this study was to determine if traditional and non-traditional college students/graduates experienced different levels of job satisfaction some five years following completion of their undergraduate degrees. Also examined were other factors which may have influenced respondent attitudes about their job or college experience. Specifically, these factors included: current educational level; area of study; years spent earning the undergraduate degree; employment status as a student; current occuaption; income; and the reason for entering/re-entering college.

Population

The population of the study consisted of the 1975, 1976 and 1977 undergraduate degree holders from Augustana College, Sioux Falls, South Dakota, Black Hills State College, Spearfish, South Dakota and The University of South Dakota, Vermillion. This number totaled 4810 students/graduates of which 10 percent, or 481, were mailed questionnaires. Of this total, 226 responded and which represent the sample for this study.

Procedures

Two instruments were used to collect the data. A General Information Questionnaire designed by the investigator and the Brayfield and Rothe "Job Satisfaction Index" were mailed to each potential respondent. The respondents were randomly selected by the computer systems at each of the institutions of higher education representing the population.

Standard computer procedures were used for entering and processing the data. The analysis of the data was accomplished through the use of the Statistical Analysis System and the Statistical Package for Social Sciences.

Findings and Conclusions

There were seven research hypotheses tested in the study, a major hypothesis and six sub-hypotheses. Six hypotheses, including the main hypothesis, showed no significant difference in levels of job satisfaction were experienced among and between the two groups tested. The findings also indicated there was little difference between the two groups in other areas. Both pursued similar areas of study, had similar career positions, similar incomes and were influenced to attend college for most of the same reasons.

These findings led the investigator to conclude the two sample groups were more alike than different. Many of the characteristics in the literature describing the non-traditional student/graduate appeared to also describe the traditional student/graduate. These similarities suggest it might be well for higher education to re-evaluate the view it has of the traditional student.

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PREFACE

Dale E. Reich of the University of Wisconsin at Whitewater recently submitted to the Chronicle of Higher Education a list which allowed the adult student to positively determine if he/hse was a "returning student." In many ways Mr. Reich's humorous treatment of the frustrations experienced by the author and others who were "non-traditional" college students seemed to express the basis from which this research emanated. As such, the list seemed an appropriate preface for this comparative study of traditional and non-traditional college students/graduates.

You can tell you're a "returning student" -- someone who has come back to college at age 40 or 50 or even 70 when:

- You're the only person sitting in the front row in class.
- You overhear someone say the "grass" on campus isn't what it used to be, and you wonder why the university doesn't invest in some Turf Builder.
- The music in the student union gives you a headache.
- You think you're the only student in class who doesn't know what the professor is talking about.
- You can remember when John F. Kennedy was President.
- You drink coffee in the afternoon.
- You read the obituaries before the comics.
- You've never eaten a deep-dish pizza.
- You think the legal drinking age should be raised to 30.
- You think ELO is a political group and Ted Nugent is a candy bar.
- You think you're the only student in America who's broke.

- You wonder how some people can spend 15 hours a day in the student union, doing nothing.

- You get nauseated watching a freshman eating a Twinkie and a Coke for breakfast.

- You've never played a video game.

- Someone says your professor is "far out," and you wonder if you'll have to take a cab to get to his office.

- You wonder what the girls see in the boys, and the boys see in the girls.

- Everyone stares in disbelief when you tell them you're "just here to learn."

- Your favorite shoes are older than most of your classmates.

- You talk about your corns to a younger student, and she says she didn't know the college had a major in agriculture.

- Someone tells you he didn't think there was life after 40.

- You suddenly notice one day that you're asking more questions than the rest of the class combined.

- You don't carry your books in a backpack.

- You talk about painting the living room over the spring break, while everyone else is talking about Florida.

- You suspect that the girl next to you paid more for her jeans than you paid for your first car.

- You're the first one to arrive in class, and the last one to leave.

- You go to bed thankful that you'll never have to be 18 again.

CHAPTER I

> One need not argue whether the itch to know exists. It does. Look at any child. The first thing he does is annoy by perpetually asking why. He wants to know the names of things. He seems to share in the primitive magic feeling that knowing the name of a thing gives one power over that thing. He fiddles with the thing too -- with his eyes, with his hands. So the itch to know is there and when it begins to be satisfied it gets triggered anew.
>
> Joseph J. Schwab
> Center Magazine
> Nov./Dec. 1976

Background

The above premise has few detractors. Societies have long capitalized on this "itch" to cultivate values and normalize behavior. In some instances it was done to suppress deviance, but mostly it was and continues to be a means for perpetuating a particular culture (Griese, 1981, pp. 26-27).

In early societies perpetuating community tradition was an informal process. Values, customs and even tribal laws were passed on to succeeding generations through dialogue around campfires and in the home by community and family members. However, as societies became more complex, retention of tribal mores required a more formal procedure in the shape of societal institutions (Morris and Pai, 1976, pp. 408-09).

Along with the church, one of the more effective social institutions for transmitting values has been the system used for education, the school. Invariably one finds societal values closely linked with the expressed goals of educational institutions (Beck, 1974, pp. 263-64). It is little different in modern America, where

education represents and speaks for the core values of American culture. "Puritan morality, work-success ethic, individualism, achievement and future-time orientation" are part and parcel to Anglo-Saxon America (Morris and Pai, 1976, 418-19). The concept of educating Americans has its roots in these ideals and values.

One need only view America's perception of higher education to find evidence of this value-laden philosophy. The benchmark for achieving the "better things in life" has traditionally been associated with completing a college education. A college degree has long been perceived as a virtue which provides its holder with greater job opportunities and in some instances, a "right" to hold certain positions in society (Meyer, 1975, pp. 114-117).

This perception is especially held by lower and middle class Americans. For the past several decades, parents representing these groups have gone to great lengths and made many sacrifices to ensure that their offspring will "have it better than they did." The common denominator for their children to achieve the better things has been the completion of a college education (Sanford, 1962, pp. 12-14).

The student make-up of American higher education has been greatly influenced by this educational value orientation. Colleges and universities have nearly become the domain of youth (Mayhew, 1979, p. 154). Parents see education, and especially higher education, as providing their young with a winning edge in an increasingly competitive and difficult world. This expectation has produced a social mentality that suggests the education process should also take place in a prescribed time frame, so the youngster is given full benefit of the future to realize his/her educational rewards.

Events in the past have also contributed to the perception that education is a youthful endeavor. During the 1960's and early 1970's America's post World War II "baby boom" reached college age, swelling college enrollments to unprecedented levels. As Dr. Charles Freil (a 1980 speech in Rapid City, SD) aptly described the effect the baby boom had on society, "it is like a snake digesting a grapefruit...causing the snake consternation with each rib it passes," so too was its effect on higher education. Dormitories, curricula and teaching methods were all geared to this youthful invasion.

At the same time, attending college provided young people a haven from the unpopular Viet Nam war draft (Carnegie Commission, 1975, pp. 2-10). Young draft age males, who in the past might have opted not to attend college, joined the ranks of the young in already crowded college and university classrooms to avoid military duty.

In the early 1970's, however, educators began making ominous predictions. The generation representing the baby boom was not to be as prolific as that of their parents. In fact, the birth rate had declined considerably in the 60's. It was forecast that by the 1980's the lack of college age (18 to 22 years) young people would result in a dramatic drop in college enrollments (More Than Survival, 1975, pp. 2-3).

These predictions were the beginning of major changes in the make-up of college enrollments. Higher education began to display a sudden interest in the adult population as a new and different constituency (Peterson and Associates, 1979, pp. 2-3). This was a radical departure from the past. The education of youth had become an integral part of the function of higher education. Adult education was

viewed by both administrators and faculty as a peripheral, if not marginal, activity (Jensen, 1964, pp. 21-22). There were serious questions whether higher education was able to serve the adult student, and an even more serious question about the capabilities of adult students to endure the rigors of a college program of study (Mayhew, 1979, pp. 183-195).

Many of these early questions were put to rest in the subsequent research efforts of higher education administrators and scholars. Investigations began to focus on the adaptability of institutions of higher education for accepting this new type of student, and on whether the adult could, indeed, successfully complete a college level program of study.

Institutionally, increased availability of correspondence classes, greater emphasis on extension programs, regular scheduling of evening classes and other innovative changes geared to the needs of the adult student were and continue to be implemented (Jensen, 1964, pp. 20-21, Houle, 1977 pp. 46-47). Many institutions of higher education also looked more closely at what they were doing and what they offered. As a result, curricula and teaching methods were evaluated and found wanting. Changes were initiated in many of these areas in an effort to be more attractive to the adult population (Flaherty, 1978, pp. 375-78, NAPCAE, 1978, pp. 1-18, Mayhew, 1979, p. 29).

The academic abilities of adults also came under the scrutiny of scholars. Studies surfaced which focused on the academic performance of adult students already enrolled in college (Reed and Murphy, 1975, pp. 129-43; Sikula, 1975, pp. 508; Ma and Wooster, 1979, pp. 106-111).

At the same time, attention was placed on the general characteristics of adult students and what motivated them to attend college (Bishop and Van Dyk, 1977, pp. 39-58; Munday, 1976, pp. 681-93).

In these studies and others, the adult fared well when compared with his/her youthful counterpart. Indeed, in many instances the adult was a better performer in the classroom and, at times, provided a stabilizing influence on campus.

Based on what has been said thus far, one could almost infer there are few issues remaining to be debated. Institutions of higher education have, for the most part, made a transition from what was primarily a youth oriented function to one of serving a broad age constituency (Mayhew, 1979, p. 29; Cross, 1971, pp. 1-10). Similarly, adults are participating in some form of continuing education at an unprecedented rate (The Chronicle of Higher Education, May 5, 1982). The adult came to be perceived as a viable higher education student and, to a great extent, has received scholarly acceptance in the academic community.

The Problem

The discussion presented above is not so clear cut as one might conclude at this point. It is evident that most of the research relative to adults has focused on the process of education. That is to say, the concerns have centered upon whether colleges and universities could educate a new kind of student and whether the new student could be educated. Both concerns tend to be short term and preliminary in relation to the real problem.

The greater problem, and the focus of this study, is whether the adult student can predict with any certainty that a college degree will meet his/her needs. It is known, for example, that the traditional age (18 to 22 year old) student approaches his/her college education knowing there will be a long term "pay off" for persisting. For the past decade, college graduates could predict both higher initial annual earnings and a greater lifetime income than their less educated counterparts (the 1970 and 1980 Bureau of Census Reports, U.S. Department of Commerce, Department of Statistics). No such information or studies can provide such reassuring news for the non-traditional adult college graduate.

The literature also suggests that college graduates gain other benefits. Heath (1976, pp. 173-190), Hyman, et al. (1975, pp. 94-108), and Juster (1975, pp. 1-43) propose college graduates experience a more stable maturation, have increased knowledgeability, and greater sociability skills than the general population. Again, the results of these studies were based on data from traditional age college students. No mention is made of adult students/graduates receiving similar benefits from their college experience.

This lack of information regarding outcome benefits for adult students/graduates should be of special concern for the academic community. First, our society has recently placed considerable emphasis on both public and private institutional accountability. Higher education is similarly faced with the accountability issue. This concern has caused at least one higher education administrator to say "...colleges and universities are responsible for conducting their affairs so that outcomes are worth the cost" (Bowen, 1974, pp. 1-5).

While his statement covers the range of higher education activities, it has special meaning for students and especially the adult student. Time, effort and money are all expenditures realized by the student in achieving a college education. For the adult student, the cost-effectiveness of a college education is particularly debatable. There is little evidence in the literature that higher education has made much of an effort to fully research and evaluate its abilities to be cost effective and accountable to students. For a public institution that promotes and teaches research, this lack of information seems to run counter to its very sense of being.

The second issue, and of equal concern to the academic community, is the nature of the adult student. Research suggests that adult students are more "practical" and "goal oriented" than traditional age students (Peterson and Associates, 1979, pp. 113-115). It is only reasonble to assume that adults will be vitally concerned with what benefits will be derived from a college education. If the academic community is to be successful in maintaining the present level of adult participation in higher education and, perhaps more importantly, successfully recruit non-participating adults, outcome research is essential. Lacking such research, higher education is ill equipped to respond to outcome questions.

The investigator's concern in this study is an attempt to partially respond to at least one of these outcome questions: do non-traditional college students/graduates and traditional college students/graduates differ in the level of job satisfaction they experience after completing an undergraduate college degree?

Importance of the Study

The problem statement has, to some extent, outlined the importance of the study. At a time when our social institutions are coming under intense public scrutiny and demands for accountability, higher education, with all its research capabilities, seems unprepared to respond to many pertinent and researchable questions. This is especially true in terms of what society may perceive as higher education's most important product, the student.

Henry (1975, p. 156) provides an accurate assessment of the need for continued accountability research when he says,

> It should be noted, too, that in the struggle to survive stress and crisis, great influence has been exerted by those who ardently, often eloquently, and persistently worked to interpret the social benefits of higher education. The search for public understanding should not be brushed aside on the assumption that the public benefits of 'good works' are self-evident and compelling for support. . . .

He goes on to say,

> Increasingly, proof of accountability is expected and the academic community will serve well in stimulating research on that subject and its interpretation.

The future seems to suggest that the problem will escalate. Consistent with the aging trend in America, students, like all people, will get older, resulting in greater adult participation in the education process. As mentioned earlier, higher education is already experiencing an ever increasing influx of adult students. Adults have been shown to display more relevant concerns regarding their educational experiences than the youthful student of the past several decades (Peterson and Associates, 1979, p. 113). As such, higher education may be entering an era when students, comprised mostly of adults, will demand answers to educational outcome questions. Yet, at

the present there is little information available regarding the benefits the older student might realize from his/her college education. Research which has been conducted relative to educational outcomes has focused on the traditional student aged 18-22 years.

Higher education should not be complacent. The adult, as a client of higher education, is a reality. If the academic community does not respond, the more "practical" adult student may not become the enrollment resource college administrators have anticipated. The assumption that higher education represents "good works" may no longer suffice as an outcome for a more critical society and student clientele.

This study examines one, of perhaps many, potential educational outcomes. It is hoped, if nothing more, the study will contribute to the literature.

Purpose of the Study

The investigator's purpose in this study was an attempt to identify and measure an educational outcome. The outcome to be measured was the level of job satisfaction experienced by two populations of college graduates, those who earned their undergraduate degree in a traditional manner and those who earned their degree in a non-traditional manner.

It is believed that this study and others like it will contribute to a sparse literature source. Educational outcome research has maintained a relatively narrow focus. Most outcome studies have tended to examine what is quantifiable, such as: income levels; accumulation of advanced degrees; and publications (Heath, 1976, p. 174).

Increased research efforts in the area of outcome research should aid college faculty and administrators in advising all potential students of what to expect from their education. Perhaps more important, this added information will allow students to make more informed decisions about their education and career choices.

Methodology

This study represents an attempt to compare levels of job satisfaction experienced by traditional and non-traditional college students/graduates. Using a random sample comprised of the above two types of students/graduates, comparisons were made of scores registered by the subjects in the Broyfield and Rothe Index of Job Satisfaction Scale (a full description of the sample, instruments and other pertinent information will be found later in the text).

The sample population was drawn from three institutions of higher education in South Dakota. All subjects had completed at least one undergraduate degree at either the associates or bachelors level.

Statement of Major Hypothesis and Sub-hypotheses

While the focus of the study was a comparison of levels of job satisfaction between traditional college students/graduates, there were a number of secondary questions which the researcher deemed important to the study. These questions have been developed as sub-hypotheses and appear as Hypotheses II through VII. A brief discussion appears below to explain their inclusions in the study.

Major Hypothesis

Hypothesis I: There will be a difference in the level of job satisfaction between college graduates who completed their undergraduate education in a non-traditional manner as opposed to those who completed their undergraduate education in a traditional manner. (A definition of traditional and non-traditional students/graduates appears later in the chapter.)

Sub-Hypotheses

Hypothesis II: College graduates who continue their education beyond the bachelor's degree will experience a different level of job satisfaction than college graduates who terminate their education at the bachelor's degree level.

Discussion: This hypothesis was an attempt to control for those subjects in the sample who may have perceived themselves to be upwardly mobile. As such, the job situation for a person involved in furthering his/her education while employed may differ significantly when compared with someone in a lifelong career.

Hypothesis III: Job satisfaction levels will differ dependent upon the various occupational pursuits of college students/graduates.

Discussion: The literature strongly suggests that some occupations provide for more opportunity, challenge and rewards, thus resulting in higher employee job satisfaction. To avoid the possibility of such occupations being over- or under-represented in the data and being peculiar to a particular category of student/graduate, this variable was also developed as a hypothesis.

Hypothesis IV: College graduates who were employed full-time while pursuing their undergraduate degree will experience a different level of job satisfaction than those graduates who were unemployed while pursuing their undergraduate degree.

Discussion: Realizing that non-traditional students are more apt to be employed while attending college than traditional students, this variable was seen as a crucial variable. For example, do adults return to college to improve their job marketability so they can move on to a better job? If this is so, are these adults ultimately more satisfied? These are but two of several questions to which the researcher hoped to respond in developing this hypothesis.

Hypothesis V: College graduates who have longer continuous records of employment will experience a different level of job satisfaction than college graduates who have shorter periods of employment.

Discussion: Inclusion of Hypothesis V in any research relating to job satisfaction is almost required. Tenure in employment has always been an indicator used in making judgments about job satisfaction. Also, including the length of employment as a variable allowed the researcher to control for the expected longer work records of non-traditional students.

Hypothesis VI: College graduates who currently have higher incomes will experience a different level of job satisfaction than college graduates who have lower incomes.

Discussion: This hypothesis is similarly required in job satisfaction research. Inclusion of Hypothesis VI also provides the opportunity to verify differences in levels of job satisfaction as

they relate to occupational pursuits of the research subjects. For example, if certain occupations are disproportionately high in levels of job satisfaction, are they influenced by income?

Hypothesis VII: The forces motivating a person to attend college will affect the job satisfaction of college graduates.

Discussion: The researcher was concerned that some non-traditional students may have been unduly motivated to return to college in an attempt to improve their job situation. If this was the case, many of these respondents may have reflected unusually low levels of job satisfaction if no change in the job situation had occurred. As such, it was deemed to be an important aspect of the study.

Basic Assumptions

While the study compared levels of job satisfaction between traditional and non-traditional students/graduates, the researcher holds no assumption that college graduates are more satisfied in their work than the non-college educated population. Rather, the decision to make comparisons between the two types of students/graduates was based on the assumption that if college graduates representing one group responded in a certain way, a second group should respond in a similar fashion. Obviously one cannot dismiss the influence of intervening and moderator variables, but when all factors are properly considered, research should prove this assumption true. Thus, if job satisfaction is at a certain level for traditional students/graduates, non-traditional students/graduates should achieve a similar level of job satisfaction. Whether the general population has a higher or lower

level of job satisfaction is not the concern of this research.

Job satisfaction as an outcome variable also requires certain assumptions. One is able to conclude, for example, that few cultures are so oriented to the future, and adhere so closely to the work-success ethic, as is the case in America. Some argue that most high school graduates elect to go on to college on the promise of better job opportunities after college graduation (Mayhew, pp. 154-155). If this is indeed true, one can assume college graduates must often reflect on whether the job they achieve meets the expectations they had prior to and during college.

From a societal standpoint, achieving some degree of happiness at work is indicative of productivity and ultimate success for the worker. The linkage between American values and job satisfaction is obvious. Thus, one can also assume that job satisfaction presents a viable and worthwhile criteria when considering educational outcomes.

Operational Definitions

The focus of this study is upon two independent variables, the traditional and non-traditional college student/graduate. The dependent variable is job satisfaction based on a standardized test which measures levels of job satisfaction. However, a number of other moderator and intervening variables may alter and/or influence one's work attitude. Thus, the following definitions will be used to identify and apply to these variables in this research. They include:

Traditional student/graduate. A person 18 to 24 years of age who enrolled in college after graduation from high school or shortly thereafter. This person would have completed undergraduate

requirements in five academic years or less. Upon graduation from an undergraduate program, he/she would have gone into the job market to seek and ultimately gain employment (Bishop and Van Dyk, pp. 39-59).

Non-traditional student/graduate. A person 25 years of age or older who enrolled in college for the purpose of completing an undergraduate program of study. The non-traditional may or may not have been employed at the time he/she was completing the degree. Similarly, he/she might have enrolled in college out of high school, but for some reason this initial enrollment was interrupted. The important characteristic of this type of student/graduate is that he/she was 25 years old or older when entering or re-entering college to complete the undergraduate degree (Bishop and Van Dyk, pp. 39-59).

Undergraduate degree. For the purpose of this research, an undergraduate degree will be either a two-year associate degree or a four-year bachelor's degree earned at one of the three schools being surveyed. The schools are principally oriented toward liberal arts and pre-professional type degrees. Nursing and dental hygiene degrees are also available but might represent what one would consider a "technical" or "vocational" education. All are represented in this study.

Full-time employment. Full-time employment refers to a person who is self-employed or employed by someone else, and is required to be present on the job for a period of 40 hours a week or more.

Occupation/Career

The categories below were based on position listings used by The University of South Dakota Placement Services and South Dakota Job

Services. The categories and examples appear as follows:

1. Business: comprised of those graduates who are in private business including CPA's, commission sales, economists, morticians and publishing.
2. Clerical: comprised of those graduates who are primarily wage earners including bookkeepers (non-accounting), clerks, receptionists, and typists.
3. Health services: comprised of those graduates who provide services in limited physical and mental treatments. They include: dental hygiene, nursing, and psychological counseling.
4. Professional careers: comprised of professions requiring practitioners to receive advanced training beyond the bachelor's degree level. They include: architecture, dentists, lawyers, physicians and college and university faculty.
5. Public service professions: comprised of graduates who are classified employees in federal, state and local government agencies. Examples include: job placement counselors, police officers and social workers.
6. Teaching: comprised of graduates who teach in educational facilities other than colleges and universities. They include: elementary and secondary education, community colleges and vocational/technical education other than nursing and dental hygiene.
7. Labor: comprised of those graduates employed in what are considered blue collar or hourly wage positions. They

include: carpenter, construction and production line work.

8. Homemaker: comprised of graduates who maintain a home, earning no predetermined or established wage.

Limitations of the Study

This study was limited to a sample population of college graduates from three institutions of higher education in South Dakota. They include: Augustana College in Sioux Falls, Black Hills State College in Spearfish, and The University of South Dakota in Vermillion. Each of the schools offer four-year undergraduate programs along with a variety of graduate programs. (A complete description of the schools is found in a later chapter.) These schools were selected because of their accessibility to the researcher. Including a greater number of colleges, both within and outside the state, was beyond the resources available to the researcher.

Selecting only three schools in South Dakota placed certain limitations on some of the conclusions one might make from the study. Most of the students attending the three schools are from the immediate five state region. The area is principally agricultural, which would reflect rural attitudes and values among the sample population. This limitation precludes making any general statements about populations beyond the Great Plains region.

At the same time, the investigation did not attempt to complete a repetitive examination of job satisfaction over a period of time. Rather, the study was based on a one-time test of the sample population. Thus, the changing job situations which may influence job satisfaction over a period of time provided an added limitation to the

study.

Accenting the limitation stated above is the limited number of non-traditional students/graduates in the sample. This occurred because of the decision by the investigator to sample 10 percent of the 4810 graduates for the years 1975, 1976, and 1977 from the three schools. Of the 480 questionnaires sent out, only 268 responded, of which 42 were identified as non-traditional students. The small number in this category has a limiting effect on the inferences one can make about the non-traditional sub-category.

Additional discussion regarding methods and design limitations are found in Chapter III.

Organization of the Remainder of the Study

This study has been organized into five chapters. The first chapter presented the background and problem surrounding the study. It continued with discussions regarding the importance and purpose of the study and concluded with some basic assumptions, the operational definitions and study limitations.

The second chapter is a review of the literature. This chapter includes the following: the development of education, and specifically higher education; the evolvement of adults as a higher education constituency; the trend toward achieving accountability in higher education; and job satisfaction as a viable outcome criteria for higher education. Each topic area in this chapter will provide basic background information and support for the hypotheses generated in the study.

Chapter III is a description of the design and methods used for conducting the study. It begins with a discussion of the type of research or design adopted by the researcher for the study. This is followed by a description of the sample and the institutions of higher education from which the sample was drawn. Data collection and instrumentation provide the next two sections in the chapter. Data entry and the statistical techniques used to analyze the data concludes the third chapter.

Chapter IV provides the actual analysis of the data. Graphs illustrating the variables, subjects, subject responses, variances, statements accepting or rejecting the stated hypotheses and an elaboration of the findings will comprise this chapter.

Chapter V is the summary, major findings, conclusions, and recommendations of the investigator. This chapter attempted to link the results of the study to theory and the application of the findings to the "real" world.

CHAPTER II

Review of Related Literature

Organization of the Chapter

This chapter contains a review of the literature from several related perspectives. The discussion begins by examining the development of education, and specifically higher education, from a historical standpoint. This initial focus is on the cultural background which spawned American education and provided the direction of education relative to contemporary issues.

The investigator also identifies and discusses some of the societal values which shaped and continue to influence the goals one sees expressed in American education. At the same time, the chapter contains evidence that societal values and goals can be in conflict. These parallels and conflicts will be shown to be of vital concern to this study.

The above discussions provide the basis for the third point to be covered, the transition of higher education from a youth orientation to one which claims to serve a broad based student constituency. Why this occurred, the ramifications, and reflections on the future are also discussed.

Entwined in this discussion are the gradual changes which have evolved as both American society and its educational system have matured. Also identified is the emergence of adults as student participants in higher education, the nagging and persistent societal questions regarding accountability of public institutions, and a discussion of the forces motivating these changes.

The last part of the chapter contains a discussion of job satisfaction as an outcome measure of higher education. By using the findings relative to societal values and their relationship to educational goals, an argument is made that job satisfaction is indeed one of many benefits a college graduate might expect from his/her education.

Historical Background

A major difficulty in making sense of the literature which addresses education from a historical perspective is finding a place to begin. There are historical accounts of specific eras in the development of education. One also finds descriptions of the various movements affecting the direction of education and chronologies regarding various educational institutions. Each represents enough information for a comprehensive essay in and of itself.

Many of the historical perspectives mentioned above are of interest to this study, but in a much narrower vein. Thus, capsulizing such a vast literature into a succinct yet comprehensive review proved to be a formidable task. In The Plague, Camus (1972, p. 5-6) provides a description of the city of Oran which exemplifies this author's efforts in compressing all the available information into something of reasonable size. Camus said:

> ...it (Oran) turns its back on the bay, with the result that it is impossible to see the sea, you always have to go look for it.

It is hoped that everything necessary for use in this study was extracted from the "sea" of information.

In looking back on the development of education in America, one is struck by its conservative nature. It almost seems that a nation as new as America was in the 18th century would have rejected the transplanted educational philosophy that found its way to American shores. The term "transplanted" is used because American education has its intellectual roots with Aristotle, Plato, Ancient Greece, Rome, and the Protestant Reformation (Pulliam, 1982, pp. 2-14). Scholars with this conservative educational background and philosophy migrated from England and western Europe to the New World. It is apparent that as early leaders saw the need for formal education, it was these transient scholars who influenced the direction of education in America (Johanningmeier, 1980, pp. 7-23; Pulliam, 1982, pp. 17-37; and Rudolph, 1962, pp. 4-5).

However, coupled with the English and Western European influence, Americans also contributed to their own educational destiny. America was no different than other emerging nations. It, too, had a need to establish an identity. The new Americans had overcome oppression, they had ideals and, more importantly, they perceived themselves as a people destined to develop a new order in the world. Thus, America's own set of moral values and judgments about what education should be in this new adventure in government was merged with the traditions of western education (Johanningmeier, 1980, pp. 3-133; Pulliam, 1982, pp. 1-64).

The conservative bent in educational philosophy which emerged in Colonial America certainly received support from the early churches. Religious freedom was viewed by many of the colonists as a cornerstone from which to build a new national order. What this actually meant to

these new settlements was the preservation of their particular brand of religion. This was accented by the fact that America was not settled in a "melting pot" fashion as often described in elementary textbooks. Rather, ethnic groups, and especially religious sects, formed their own individual communities. Thus, the Quakers, the Puritans and other Protestant groups developed as separate and distinct communal entities. Each established its own local government and schools. Any effort by the remote civil government to influence these communities was viewed as encroachment, and the autonomy exercised in local matters was zealously defended by community leaders (Pulliam, 1982, pp. 28-30).

In this environment the church had an almost pervasive influence on the education of the young. Even prior to the building of schools, the teachings emanating from the churches were predominant. Education in the form of scripture readings and the teaching of church doctrine was conducted in the homes and at community gatherings by parents and community leaders (Griese, 1981, pp. 26-27). As the need for formal education in the form of schools increased, so too did the influence of the church. Most colonists were relatively poor and either could not or would not invest tax money in schools. These needs and events allowed the various churches to inherit, almost by default, the responsibility to provide education for the young. What occurred then was perceived as religious "freedom," but was, in fact, the teaching of a particular religious doctrine (Pulliam, 1982, pp. 17-40). Pulliam also goes on to characterize what was the general colonial concept of man and education. He summarizes by saying:

> Not only is man bad, but he also has an active nature which must be controlled to prevent the Devil from becoming his master. It is in this notion of man's being bad and active which gave rise to the establishment of schools which should prevent idleness and show mankind the way to overcome evil in his nature. Assuming that man is depraved, there must be an effort to bring him to salvation. This, together with the Protestant notion of the priesthood of all believers, made it mandatory that the New England Puritans establish schools.

Thus, the values derived from the Protestant ethic and grounded in the churches of the Calvinists, Puritans and Quakers provided the major emphasis for education in America.

The discussion to this point has focused on early American perspectives of education in a general sense. The literature suggests higher education in America had similar roots. The denominational churches, and England's Cambridge and Oxford, as well as American values and ideals, contributed to the foundation of the colonial colleges. For many of the same reasons elementary and secondary education became the province of the church, so too, did higher education. This is exemplified by the fact that some of the oldest and most prestigious of modern day colleges and universities were founded as religious denominational colleges (Pulliam, 1982, pp. 30-31).

Along with a strict religious orientation, the colonial colleges also adopted a traditional old world curriculum. Classics, languages and mathematics represented the extent of what students of the times could expect to study during college (Johanningmeier, 1980, pp. 66-76).

It is interesting to note that the "ivory tower" mentality of those who contributed to the establishment of these early colleges was in sharp contrast to the pragmatic views shared by most colonists.

That the two views did not come into open conflict seemed to result from a consensual realization that a college education was not something to be achieved by everyone. Costs, distance from home to college and the "impractical" curriculum probably all contributed to the lack of antagonism of colonists toward these lofty goals established and maintained by early academicians. In fact, attending college was considered a "rich man's" endeavor by colonists and academicians alike (Rudolph, 1962, pp. 15-21).

It was the American Revolution and the intervention of national leaders which sparked the change that did occur early in American higher education. Americans saw education, and particularly higher education, taking on a more useful role. Colleges were seen as tools in shaping the character of a democratic nation (Rudolph, 1962, pp. 39-41). Johanningmeier (1980), describes what may have been the prevailing attitudes of the times when he said:

> Many who contemplated the meaning of the Revolution wanted to ensure that what had been fought for would endure. One way to make sure that the new citizens of the new nation would choose the correct way was to build a system of education that would teach them the correct way.

At the same time, national leaders were questioning the traditional fare offered in the curricula of existing colleges. As a new nation, these leaders saw a need for its citizens to not only be learned, but productive. As such, education and what was learned in college should be utilitarian (Rudolph, 1962, pp. 39-41). Benjamin Rush, a signer of the Declaration of Independence, was especially critical of the traditional language requirement found in most colleges. He said:

> To spend four or five years in learning two dead languages (Greek and Latin) is to turn our backs upon a gold mine, in order to amuse ourselves catching butterflies (Rudolph, 1962, p. 43).

Thomas Jefferson also joined the ranks of critics of current higher education curricula. He charged it was in the best interest of the nation and its citizens to develop a course of study more in line with modern issues and to be educationally more future oriented (Pulliam, 1982, pp. 71-75). While seemingly adamant in his views, Jefferson was able to alter only a small part of what he actually proposed. It was not until much later that most of his ideas took fruit in the curricula of American colleges and universities (Rudolph, 1962, pp. 40-43).

Overall, it appears education in America heard its critics and was bent somewhat by the demands of the new nation, but maintained its conservative heritage. Those who sought change found an equal number who argued for the status quo (Pulliam, 1982, pp. 58-61). Discipline and learning for the sake of discipline remained an integral part of the American system of education. The sciences, mathematics and grammar received some additional emphasis, but other suggested changes were kept in the wings for another 50 years (Pulliam, 1982, p. 59).

While elementary and secondary education became more and more a "public" institution in the post-Revolutionary period, colleges and universities continued to remain under the influence of the churches. Two factors probably contributed most to this dominance. First, the civil government was in no position to argue for imposing taxes to support another system of education on a people who had just fought a war to rid themselves of overburdening taxes. Thus, there was little

widespread support to develop public institutions of higher education (Rudolph, 1962, pp. 13-20).

Second, the fact that the church spawned many of the pre-Revolutionary colleges of note also ensured that their graduates, who later rose to positions of power, even in public institutions of higher education, retained the general educational philosophy of their prior training. Rudolph (1962, p. 6) described the prevailing attitude toward what higher education ought to be in America when he said:

> A society that intends to live rigorously, moreover, cannot afford to train its rulers haphazardly. A world that finds the deepest expression of its purposes and its goals in the Scriptures cannot afford to ignore the training of its Biblical expositors. A people that expects to have its pretensions taken seriously must recognize its responsibility to the inherited wisdom of the ages, to literature, to science, to learning.

It is from this environment, then, that one sees higher education emerging in America. Steeped in the traditions of Old World education, buoyed by the conservative nature of the Christian church and maintained by a New World society that could not muster enough support, collectively or financially, to alter its direction.

It took the Civil War and the recognition by the American people that they would survive as a nation to truly effect change. The Post-Civil War period saw an accelerated expansion of public institutions of higher education. The Morrill Act of 1862 provided for land grant colleges whose purpose was of a more practical orientation. Agriculture, engineering and a renewed emphasis on mathematics all found their way into the curriculum of these new colleges (Johanningmeier, 1980, pp. 170-172).

At the same time, government leaders and citizens alike began to stress the right of all people to be educated. The Colonial concept that a college education was just for young, wealthy males was less acceptable to people of the Post-Civil War period. Colleges for women began to emerge, as well as colleges with curricula which had appeal for the large and growing American middle class (Rudolph, 1962, pp. 241-247).

Unfortunately, many of these new efforts by higher education to provide practical training lacked practical application. Early teachers of agriculture were merely scientifically trained transplants from other academic areas with no practical experience. This created a large amount of skepticism on the part of farmers who were not sure that their sons would gain enough practical knowledge to make their farms any more productive than they already were. This skepticism caused one farmer/legislator to say:

> I've never seen a man who could write a nice essay or make a good agricultural speech who could make corn enough to feed himself and a bob-tailed mule until the first day of March (Rudolph, 1962, pp. 255-263).

The period between the Civil War and World War I saw a continued expansion of higher education and a stabilization of college subject matter. While the days of the common curriculum was past, higher education as an institution had established itself as an entity. It was no longer a question of whether government would provide Americans with a means for earning a college degree, but how? (Rudolph, 1962, pp. 440-449).

A continued growth of colleges and universities in the 20th century was spurred, to a great extent, by industrialization and the

resulting technological advances needed to sustain the nation's productivity. At the same time, American society saw higher education as a means for upward mobility and social advancement. All of this created bigger colleges and universities and higher enrollments. The poor and the middle class were especially concerned that their young should "have it better than we did." Thus, packing up the young and "sending them off to college" was part and parcel to ensuring a better job and higher income than would otherwise be expected (Johanningmeier, 1980, pp. 263-264; Rudolph, 1962, pp. 462-465).

To avoid trespassing into another era and area which will be dealt with in the discussion of "adult education," it might be well to summarize the discussion to this point. It does not appear to this writer that a clear philosophy of education has developed with the same consistency as has the growth of education as an institution. This lack of direction seems to have created a situation where ever changing social values seem to be in recurring conflict with educational goals. For example, there were and are a community of conservative scholars who espouse what is considered a "liberal" education. These scholars suggest a college curriculum should comprise, at most, six or seven areas of knowledge (National Society for the Study of Education, 1981, pp. 38-51). This educational philosophy was the same view that both Thomas Jefferson and Benjamin Rush saw fit to criticize for its inability to meet the realities of an emerging nation. Today, this conservative philosophy of a liberal education is still upheld as a model even though it predates the technological and social advances of the past century.

On the other hand, the progressives who have been successful in bringing about changes in education are often rejected by the very society that demanded change. Not because the change is not desired, but because the change was too extreme for the society which had become conservative in the interim. Pulliam (1982, pp. 177-78) provides an accurate and succinct description of the "state of the art" when he says:

> One of the great tragedies of American education is that we keep inventing the wheel. Often, ideas that hold great promise for improving teaching and learning are discarded with the movement that brought them about.

It is for these reasons, perhaps, that one finds academicians' views of higher education revolving in almost a cyclic fashion. The traditional and conservative view of what education ought to be is comfortable, and a view that is easy to fall back on when innovative and creative views fail or falter. Morris and Pai (1976, p. 11) provide an excellent rationale for the conservative view:

> By the time a generation of scholars and thinkers arrive at a working ethos of the American way, write their books and articles explaining this ethos, render their findings to the encyclopedists and applicators who themselves write books and manuals, who then transmit their ideas of teachers, and they to boys and girls -- by the time all this has transpired, the fast-changing American ethos has found a thousand new interpretations.

In looking back on education and higher education in America, it can be concluded that its development has not been spurred in any particular direction by progressive and innovative thinking and ideals. In most instances, decisions regarding teaching, curriculum, students and related functions have found academicians looking to the past for answers. Futuristic decisions have been and continue to be forced on higher education by external forces. No better examples are

provided than the changes brought about by the Morrill Act of 1862, Sputnik in the 1950's and, more recently, the Law Enforcement Assistance Administration of the 1970's. Unfortunately, the changes resulting from these motivating forces were not based on an educational philosophy depicting a new direction, but on the availability of dollars.

It is difficult, if not impossible, to find what one might consider a singular philosophy of education in America. Such a philosophy is perhaps less evident in higher education. There do, however, appear to be several common views shared by educators and American society alike. Two of the more common views emerging from the literature are the perceptions that education is "good" and education is something maintained for youth.

The reason that education is seen as an endeavor that is "good" is based, to a large part, on its role as a transmitter of the dominant culture. Certainly, societies have relied on the schools to fulfill their role and the schools have also been relatively successful in its accomplishment. Griese (1981, p. 26) suggests little doubt as to the role of education when he said:

> The traditional definition of education was a simple one: transmission of the cultural heritage to the young. When there were no schools, the family and the tribe took on the job of education. Today schools are so important in education that most of us use these two words to mean the same thing.

Obviously, any society would view an institution fulfilling such a role as worthwhile and good.

The fact that education is viewed as the domain of youth is less clear. Ensuring that the young perpetuate a society's culture is

certainly one reason that the young and schools are almost synonomous. It also appears that it has developed as a tradition in America. The "Founding Fathers" and their successors have all seemed to identify education and schools as a vehicle for "preparing" the young for the future and specifically as "leaders" for the country. American society, in its role as parents, also sees education as preparatory, but in a more pragmatic sense. Parents see education as a way for their children to "have it better than they did." Thus, education in America has developed in this sense from almost a vicarious perspective.

Other conclusions could certainly be drawn from the historical accounts of education in America: however, these appear to be the most dominant. It is interesting to note that only in the last fifty years has any significant change occurred (Pulliam, 1982, pp. 123-180). One can only speculate that two world wars, technological advances and a shrinking world have all contributed to these changes.

Adult Education in America

There are many interpretations of American adult education in the literature. Those who place all forms of learning under the umbrella of education can rightfully claim that adult education was occurring in America as far back as the settlement of the New England Colonies. The early town meetings where free discussions were held regarding public welfare and mutual protection could certainly be considered community education (Peterson and Associates, 1979, pp. 4-6).

For the purpose of this study, however, adult education is to be considered from a much narrower perspective. The concern here is adult

education as a function of higher education. The literature which will be examined includes the following: the emergence of adults as a viable clientele for higher education; the implications this has had for colleges and universities; and a discussion of what the literature has to say about adult education in the future.

Adult education has parallels in its development relative to the development of other forms of American education as discussed earlier in this chapter. In the seventeenth and eighteenth centuries, American society placed considerable emphasis on religion and salvation. Inasmuch as familiarity with the Holy Scriptures was part and parcel of salvation, adult education consisted mostly of teaching adults to read (Schroeder, 1970, pp. 26-27). These efforts appeared to be quite informal in their application. People gathered regularly in central meeting places and what teaching took place seemed to follow a discussion format. Exchanges among peers and focused on the ravages of sin and ways in which discussants and community members alike could gain salvation.

Following the Revolutionary War, American society saw the need to ensure that its citizens be knowledgeable in democratic values and government. While the format for educating the adult appeared to be relatively informal, its emphasis in terms of content remained consistent with what was occuring in the formal, youth oriented classrooms. At the same time, it appeared that the young American republic had not discarded all the social institutions of the mother country. In the early part of the nineteenth century, agricultural and mechanical institutes developed along with the Industrial Revolution. The institutes were popular in both the Northern and Southern states.

A further development in adult education in this period came in the lyceum movement in the 1830's. While more of a social event or theatrical presentation than education as we know it, the lyceum did create a favorable educational atmosphere for adults and often provided training for teachers. Unfortunately, the movement died with the outbreak of hostilities between the states (Johanningmeier, 1980, pp. 123-130; Schroeder, 1970, p. 26).

It was not until after the Civil War that certain major public institutions began to assume responsibility for adult education. The free public library, university extension, correspondence courses, and rural education efforts were but a few movements designed to cope with the educational needs of a growing nation. Equally important, in terms of adult educational needs, was the vast number of non-English speaking people who immigrated to America in the latter part of the nineteenth and early part of the twentieth century. The Americanization of this new population required some sort of federal effort which resulted in the formation of the Department of Immigrant Education of the National Education Association in 1920. In 1924, this department was changed to the Department of Adult Education which appears to be the first official recognition, at the federal level at least, of adults as a viable student group (Schroeder, 1970, p. 26).

The post Civil War period was also the era that produced the land-grant colleges alluded to earlier in the chapter. It was in cooperation with these land-grant colleges that the federal government expended funds on a cooperative basis with the states to provide a system of agricultural extension education (Rudolph, 1962, pp. 255-263; Schroeder, 1970, pp. 26-27). Again, in 1917, through the

passage of the Smith-Hughes Act, state and local funds became available for vocational education. This brought about a large expansion of adult education in both agriculture and the mechanical arts (Pulliam, 1982, pp. 104-105).

Perhaps the greatest growth period in the development of adult education, however, occurred following the end of World War II. During the peak of hostilities, President Roosevelt had lowered the draft age to 18 and promised to provide educational and retraining opportunities for all who served in the Armed Forces. This decision was carried out by the "G.I. Bill" which provided educational assistance and paid training programs for any veteran who served more than 90 days. To illustrate the impact this had on higher education, 2,232,000 veterans were provided funding for attending college in the ten years following World War II (Henry, 1975, pp. 55-63).

The aftermath of the G.I. Bill had several important implications in the development of adult higher education in America. Certainly, it provided proof that higher education was an accessible social institution available to a broader student constituency than the traditional 18-22 year old group. In a more specific sense, Henry (1975, pp. 66-68) identified nine changes in higher education which he attributes directly to the return of World War II veterans. In a summarized form they are as follows:

1. Higher education came to be viewed by policy makers and public alike as a "benefit" in the fulfillment of objectives both in terms of individual "readjustment" and as a means for improving economic conditions.

2. Higher education began to be viewed by both veterans and non-veterans as one way for improving career options and career mobility.
3. The G.I. Bill established a precedent for providing federal economic assistance for educating those who might be economically deprived.
4. The federal government became involved in promoting higher education through financial assistance to students generally with only a minimum amount of federal control.
5. The public image of college students generally was improved by the influx and conduct of mature and educationally motivated veterans on American college campuses.
6. The new status of higher education broadened the appeal of academic careers for increasing numbers of highly qualified young people.
7. The method of providing education under the G.I. Bill gave some legitimacy to off-campus education, which to this point was not accepted by the academic community.
8. Student services took on new meaning on many campuses, with the increased numbers of married students who needed housing and services heretofore unavailable on American college campuses.
9. Other non-traditional practices, like correspondence instruction, short courses, remedial courses, etc., were encouraged and found more acceptable than in the past.

In the long term, Roosevelt's efforts had positive effects for both the World War II veteran and higher education. Certainly, the

veterans benefited in terms of occupational mobility and greater self-esteem.

For higher education, benefits came in the form of recognition and greater esteem granted by the American public. Higher education had now found itself directly linked to the economic and social welfare of the nation (Henry, 1975, p. 68).

While this link was established, acceptance of the adult as a bona fide higher education constituent had to wait. The atomic bomb and the rush to learn about nuclear power created a new crisis for higher education. The adult was lost in the fight. It was determined that America needed to educate its youth to meet this new and imminent threat. Mass education for everyone seemed to be the cry of the times. Federal aid in the form of grants, loans and fellowships were made available to most who desired an opportunity to pursue advanced education. However, the funding and the emphasis was for the youth of America and not for the adult (Henry, 1975, pp. 69-73).

The 1960's had an even more debilitating effect on adult education. The "baby boom" following World War II had reached college age. Enrollments at colleges and universities reached all time highs, spurred also by the college deferrment of draft age youngsters from the unpopular Viet Nam war. In the eyes of adults, the protests and campus unrest did much to lessen the esteem which had been gained by higher education. Adults were not certain how they were perceived by militant faculty and students which prevailed on college campuses. In turn, adult society became suspicious of higher education as a productive and beneficial social institution. Adults not only questioned their need to participate in higher education, but whether

an education coming from such unrest would be of value. The gains higher education had made in terms of prestige following World War II had been severely damaged (Henry, 1975, pp. 136-141).

The renewed focus on adults as a viable higher education clientele resurfaced in the early 1970's. This came about, not so much from the standpoint of what college could do for adults, but what adults could do for higher education. Following the unprecedented enrollment increases, the campus turmoil, and general social unrest of the 60's, it was discovered that the "baby boom" generation was far less prolific in producing babies. From 1960 to 1973 the number of 18-21 year olds in our population grew from 9 million to 14.7 million; it was forecast that by 1990 this age group would dwindle to 13 million (Trow, 1976, p. 380).

Fewer young people growing up in the population provided higher education with some grim realities. Declining enrollment brings reduced funding for higher education. Added to this was the fact that higher education was suffering from the same fiscal crisis as the rest of society (Harvey, 1976, pp. 90-91).

A succinct commentary on the state of higher education is provided in More than Survival: Prospects for Higher Education in a Period of Uncertainty, when it is said:

> *After more than doubling in the 1960's, enrollment growth is slowing down and is likely to reach a zero growth rate within a decade. The demand for additional faculty members follows the trend. It rose to about 27,500 per year in the late 1980's and early 1970's. It will approach zero in the 1980's.*
>
> *Promotional opportunities for younger faculty members are decreasing....*

> ...faculty salaries now fail to keep up with the cost of living. The percentage of the GNP spent on higher education...fell to 2.1 percent in 1975. Federal research funds....are now static in amount in constant dollars. Federal dollars for construction have been cut 90 percent...

These predictions provided a gloomy picture for higher education. As a result, the 1970's represented a period of introspection for academe. A number of scholars suggested that developing a new and appreciative clientele was a means for surviving during the predicted "hard times." Hugstad (1975, pp. 504-510) proposed that the business world technique of "marketing" higher education be used to attract a larger student constituency.

Innovative and heretofore unacceptable methods of providing higher education were also proposed. In particuar, the external degree, a college degree which can be earned without meeting the usual residency requirements, was viewed as a means for tapping a non-participating student resource. Cyril Houle (1974, pp. 46-48) saw the external degree as especially attractive to the adult population when he said:

> It is the adult, now caught up in the pressures and concerns of mature life, who makes up the largest potential clientele for the external degree....

Other scholars have made similar recommendations geared to the idea of attracting adults to higher education. The age old question of curriculum was again raised in the 70's, and it continues to be an issue today. It was proposed that course offerings ought to be more practical, the theory being, of course, that adults desire courses which help them gain mobility in their career endeavors (Flaherty, 1978, pp. 375-378).

The literature is also replete with studies of forces which motivate adults to enroll in higher education programs (Munday, 1976, pp. 681-693; McMillan, 1977, pp. 201-203). The point of what has been said is that higher education, in the 1970's, saw that its resources were dwindling. Academicians became aware that in order to survive, a rethinking of educational philosophy, altering the societal perception of higher education as the domain of youth had to occur.

To some extent, the shift from youth oriented to a more universal student orientation in higher education was beginning to occur. In 1974, the Federal Community Schools Act was passed, strengthening the role of Community and Junior Colleges (Peterson and Associates, 1976, pp. 25-27). For the adult student, this meant access to higher education programs closer to home. The two year schools also provided programs of study more consistent with the utilitarian view many adults have of education (Bishop and Van Dyk, 1977, pp. 39-61).

Other factors also contributed to the growth of adult enrollments in the 1970's. For one, leisure time had steadily increased following World War II. With shorter work days and weeks, free time became available for participation in higher education. At the same time, advance technology caused many workers to recognize that increased skills also increased one's mobility in the work force (More than Survival, 1975, pp. 39-40).

As early as 1977, it was postulated that increased adult participation in higher education might off-set the predicted decline in enrollments of traditional 18-21 year old students (Bishop and Van Dyk, 1977, pp. 40-42). From all indications, the optimistic predictions regarding adult enrollments were correct. The May 4, 1981,

issue of the Chronicle of Higher Education (page 3) reported that one in three college students were over 25 years old. The time period reflected in this report was from 1974 to 1979. The study showed students age 25 through 34 had increased 17.7% in five years and students aged 35 and over had increased 6.6%.

A later issue of the Chronicle of Higher Education (June 23, 1982, p. 10) had even more detailed and equally optimistic news. It reported the 15% decrease of 18-24 year old students in 1990 would be more than offset by the 56% increase of 25 to 44 year old enrollments.

In summary, one can conclude that adult education made its major breakthrough following World War II. Most efforts prior to this time were considered to be a marginal activity. Extension and evening classes were often offered, but as non-credit courses. Few institutions had formally adopted adult education as an institutional responsibility (Jensen et al., 1964, p. 21).

The G.I. Bill and a national concern for the rehabilitation of World War II veterans almost forced higher education to expand its horizons to include the adult. As a result, it was determined that such an effort had mutual benefits. Higher education benefitted from the standpoint of increased enrollments and a new type of student who was both stable and highly motivated. For the returning veteran, a college education meant greater job mobility and, in most instances, the potential for increased lifetime earnings.

The literature also reveals that with hills there must be valleys. The 1960's provided the valley for adult education. One can surmise that colleges and universities lost interest in the adult population. The demands of the college age "war babies" completely

taxed the resources of higher education institutions. If adults were considered as student clientele, it was from the perspective of "fitting them in" to an already bulging system barely able to serve an existing student body.

The events of the 1970's are perhaps the most revealing about the character of higher education. The revelation that the world does not consist of 18-21 years olds provided higher education with a grim reality. America was getting older and gave cause for academicians to wonder if they could survive such a catastrophe. In looking about for someone to fill the classrooms, higher education rediscovered the adult. At the same time, it appears the adult was not disinterested in higher education, as illustrated by recent enrollment statistics (The Chronicle of Higher Education, May 5, 1982). Whether the merger will succeed will be determined by time.

Job Satisfaction as an Outcome Variable

The investigator had a particular interest in comparing traditional and non-traditional college students with some kind of outcome variable. Determining what that outcome variable would be proved to be a problem. It is assumed that the forces which motivate students to attend college relate directly to the students' perceived benefits following his/her education. However, it is not clear if traditional and non-traditional students are influenced by the same motivating forces.

In reviewing the literature, and while attempting to determine an appropriate outcome variable to use in comparing these two groups, several questions seemed to constantly resurface. The first question

was, is there an underlying social value which appears most often in the literature and which serves as a catalyst in binding America's society and its educational institutions together? The second, and equally perplexing, question was, is there a compelling force steering higher education in a particular direction?

With regard to the first question, the literature seemed to support a "yes" response. The link between social values and the institutions of higher education can almost be assumed. Most scholars strongly suggest that education, and this certainly includes higher education, has by tradition and design reflected the values of the larger society. As Morris and Pai (1976, p. 205) succinctly put it:

> Educators are not only in the business of transmitting knowledge and developing trained intelligence. They are also in the business of recommending to the young a value system, a look at life, an environment of preferences, which it is their concern as adults to make live anew in the experience of the young.

Thus, American colleges are not only embedded in our culture, they also express the persistent trends and conflicts in the American value system. This means that fundamental or widespread change can only come about when there is a general shift of emphasis in our overall system of values (Pulliam, 1982, pp. 11-14).

If these value shifts occur with any regularity, one could almost assume that American society is in a constant state of flux. This might be true if one only looked at change in the narrowest sense. Historically, value shifts and their resulting impacts on higher education have been associated with some type of national or world crisis. The impact on higher education is generally reflected in the attitudes of students. One striking example was the effects of the

depression era in the 1930's. Henry (1975, pp. 27-28) cites a 1933 commencement speaker who described the problems faced by that period's college graduates. He said:

> We have been forced gradually to unlearn a lesson. We have been forced to forsake reluctantly the teachings of the Golden Age. Our four years of college coincided with the dismal years of the depression. Many of our members have been forced to abandon their studies. Others have been sorely pressed to meet expenses. Some who never contemplated it, have earned their way. And now we all stand at the end of a road and look forward to what?

According to Henry (1975, pp. 27-147) there were a number of these shifts which were instrumental in generating everything from student political activism to major curricular revisions in education. However, there always seemed to be a central theme transcending immediate problems and inconsistencies. That is, people, as a rule, were and continue to be concerned with making their lot a little better. They want to work, provide for families, and lead a relatively safe and secure life. One can attach all sorts of meanings to these shifts, but whatever identifiable label or movement that comes forth, they represent, at best, a short term phenomenon. For the long term, we need to look at America's core values, which seem to be far more prevalent and consistent.

Since before the American Revolution, Anglo-American culture has evolved from this system of core values. Morris and Pai (1976, pp. 418-419) suggest these values fall into five general categories. They include: 1) Puritan morality; 2) work-success ethic; 3) individualism; 4) achievement orientation; and 5) future-time orientation.

As mentioned earlier, a number of forces have challenged these values, but institutionally and socially they seem to have persisted.

Morris and Pai (1976, p. 419) provide a supporting argument when they say:

> In spite of the fact that there are many alternative value orientations, such as those in youth groups and minority groups, the major institutions in this country, including the schools, continue to adhere to the traditional conception of the American way.

If these core values are the glue which keeps American society and its institutions from pulling apart it is also reasonable to assume that these values are transmitted to the young at a very young age. In fact, the work-success ethic, future orientation, and personal achievement, to name three, are probably ingrained in the minds of most young people long before they contemplate going to college.

This finding strongly suggests that most aspiring students are motivated to attend college in hopes of finding some form of life work. The literature is not that precise, but seems somewhat supportive of such a statement.

Mayhew (1979, pp. 154-156) suggests there are five factors which motivate students to attend college. These factors include the following: "economic; psychological; sociological; intellectual; and internal support." He goes on to suggest that the most important reason was the students' belief that attending college improves one's economic chances. This belief might be fostered by family and friends or the student may have individually arrived at that conclusion.

At any rate, the influence of these core values is obvious. There certainly is a "future orientation" reflected in the desire to attend college. Whether one wishes to learn, prepare for a career, or meet a life mate, the student is looking to "better things" in the future.

If indeed the motivating force is based on economics, this too is future oriented and closely related to the work-success ethic. The college experience then is a means to an end. The end is what can be achieved after college.

As these thoughts and findings developed, it became obvious that college students are vitally concerned with what their job and work situation will be upon graduation. This student concern is not a 1980's phenomenon. Rather it appears that historically the majority of students display this kind of job or career orientation. As a recent Chronicle of Higher Education (April 7, 1982, p. 16) article reported, students are "in the University to acquire skills which they will need in order to survive in the world..." The literature suggests this is not a new student view.

The idea of using job satisfaction as an outcome variable for this study seemed to be a logical choice. If one's life work is a major motivating force for attending college, there must also be a prevailing desire to be successful in this lifetime endeavor. Whether one is successful often depends on the level of happiness one achieves at work. Certainly people who are happy with their work are more apt to perform better. If the level of performance is high in the job, this tends to make the worker more productive and ultimately successful (Work in America, 1973, pp. 2-10).

Thus, it was this meshing of America's core values and motivators to attend college that lead, in part, to the selection of job satisfaction as an outcome variable.

The second question regarding the perceived direction which higher education was being compelled to take was less problematic. The

aging of the American population is a well established fact (Trow, 1976, pp. 377-381). Colleges and universities are beginning to accept the premise that the young may not be the dominant student influence in the future. Adults are making up a far larger proportion of the higher education student population than at anytime in history (The Chronicle of Higher Education, May 5, 1982). It is projected that this increased adult participation in higher education will continue into the 21st century (The Chronicle of Higher Education, June 23, 1982).

This aging trend among higher education participants has already had considerable effect on colleges and universities. Studies throughout the 1970's have focused on the issues surrounding the participation of adults in higher education. Most of this research, however, seemed to be interested in what segments of the adult population would enroll in college, the academic capabilities of the adult, and what programs and colleges had the greatest attraction for the adult student. For example, Bishop and Van Dyk (1977, pp. 39-61) completed an extensive study in which they examined institutional and individual determinants of adult participation in higher education. Similarly, Munday (1976, pp. 681-693) contrasted traditional and non-traditional students regarding their preferences regarding institutional proximity and tuition costs. Reed and Murphy (1975, pp. 129-142), along with a host of others, were concerned with the academic performance of mature adults and veterans. Bluhm and Couch (1972, pp. 168-175) also examined the performance of readmitted students and their characteristics. Not surprisingly, both studies concluded that adults fared at least as well as their younger counterparts.

The various colleges and universities also came under the scrutiny of researchers. Flaherty (1978, pp. 375-378) was concerned with whether institutions of higher education could meet the needs of adult part-time students. Other scholars have also offered suggestions and detailed programs which would attract and meet the needs of adult learners (Cross and Valley, 1976, pp. 11-147; Cross, 1979, pp. 12-23; Peterson and Associates, 1979, pp. 119-124).

The conclusion to be drawn from the literature is that higher education is being compelled to broaden its service base. Demographic findings really provide colleges and universities with no other choice. They can continue with 19th century residential concepts of providing educational services, but survival will be marginal at best. It appears that these realities will influence most higher education institutions to provide the adult student market with a viable educational product. This appears to be the direction and the future for higher education.

If adults are going to become more and more involved as participants in higher education, it also appears that accountability to these students will receive greater emphasis. Peterson and Associates (1979, pp. 75-136) compiled a comprehensive list of characteristics, needs and interests of adult learners. While the authors (Peterson and Associates, 1979, pp. 75-136) pointed out regional and sexual variances, three conclusions emerged which require attention. First, adults are "pragmatic" learners, they want to be able to "do" something with their education. Second, adults are highly motivated by "external rewards." That is to say, they are seeking careers, or job or professional mobility. And third, adults have a

need for more "active modes of learning." Essentially, adults prefer not to sit and be listeners; rather, they want to use and participate in the learning process.

If it follows the prevailing direction, the above discussion suggests that higher education must become more accountable to its constituency. The adult will not be satisfied with the old axiom that learning is good because it is learning and teaches discipline (Pulliam, 1982, pp. 37-40). The adult will be motivated to learn because he/she believes that there will be some tangible reward derived as a result of this learning. In an effort to attract the adult student, higher education must not only look at how it is going to provide the needed education, it must also evaluate and achieve accountability for what a college education will do for the adult student.

It was this combination of core values, higher education as a value laden endeavor, and the demographics of the population which caused the writer to arrive at job satisfaction as the outcome variable for this research.

It should also be mentioned that job satisfaction has been the focus of much research in recent years. This can be attributed, in part, to the "Human Relations" theorists following Mayo's "Hawthorne study" in the 1920's (Organization Theory, 1973, pp. 213-299). However, most of this research has been oriented toward productivity concerns and relationships between the worker and management. When education has been used as a variable, researchers generally attempted to provide linkages between educational achievement and worker attitudes. Of several of the more comprehensive studies in this area,

one involves a survey of 2,220 federal employees (Vollmer and Kinney, 1955, pp. 39-41). They found that "the higher the workers educational level, the more likely he is to report dissatisfaction with his job." The opposite was true for those workers who had a low educational level. They also found that younger workers were more likely to be dissatisfied with their job. They suggested that in the occupational fields tested the job expectations of the younger and more educated workers were higher than the older and less educated workers. Thus, the level of job satisfaction is directly related to the expectations one has when entering a particular job.

The Vollmer and Kinney study was a confirmation of Mann's (1953, p. 902) earlier research. Mann found that, "....other things being equal, within a given work and skill class those workers with more education will be less satisfied."

In a later study, Berg (1971, pp. 108-109) surveyed 2,139 male industrial workers in sixteen different occupations. This study revealed that as the educational achievement of an employee became more aligned with his job skill requirements, the employee's job satisfaction increased. However, the employee's job satisfaction decreased when the educational achievement surpassed job skill requirements. In fact, Berg concluded that education is a major contribution to employee dissatisfaction if the job skill requirements do not keep pace with the educational level of the employee.

Berg's study seemed to say less about worker attitude than it did about job expectations about the work. He suggested that the educational achievements of workers may be a determinant of their career expectations and hence of their job satisfaction. He

hypothesized that "attitudes toward work will be favorable among better educated workers as their occupational skill requirements increase."

In another similar study, Ritzer (1972) looked at several occupations and categorized them into four groupings. These included: professionals, proprietors, middle level occupations, and low level occupations. He then segregated the various occupations in terms of their relative training, salary, prestige and so on. Ritzer found that the low level workers/occupations tended to be more alienated toward their work than the other categories of workers/occupations. He also concluded that increasing the education of these lower level occupation workers would not decrease but rather increase their work alienation.

Both the Berg and Ritzer studies stress the importance of maintaining a level of parity between educational achievement and job skill and knowledge requirements. If either of the two is disproportionately higher or lower than the other, the worker will become frustrated and ultimately dissatisfied with his/her work.

Pathak and Burton (1977, pp. 27-32) conducted a comparative work considerations study of management professionals and hospital administration professionals. They found financial incentive to be the weakest incentive once an acceptable income level is achieved by the worker. Motivators which provided greater incentive and job satisfaction included security, self-actualization and special work related privileges. Consistent with Berg and Ritzer's findings, Pathak and Burton supported the contention that relationships between job satisfaction and needs are influenced by such variables as work

environment, the nature of the work, and the amount of education achieved by the workers.

While education is used as a variable in many of the studies of job satisfaction, comparisons are generally limited to prescribed categories. That is to say, blue collar workers are compared with other types of blue collar workers (Wool, 1981, pp. 3-8). At the same time, managers, professionals and people at the upper levels in organizations are compared with others in like situations (Bergman, 1981, pp. 275-288; Pathak and Burton, 1977, pp. 27-32; Putt and Springer, 1980, pp. 225-246).

The literature provided little information relative to job satisfaction based on comparisons of traditional and non-traditional college students/graduates. One study did suggest that employers must become increasingly cognizant of the educational needs of employees (Jacobs and Cowden, 1977, pp. 61-64). They argue that education and personal growth are closely related and opportunities for both will contribute to job satisfaction. It was suggested this was especially so for those workers who were new employees and employees at the point of advancement from one level to another.

Summary

Higher education in America evolved from a combination of influences. Initially transient scholars from Cambridge and Oxford brought the Old World educational philosophy to the colonies. The Christian church had much to do with influencing what was to be taught, who would teach it and the emphasis on education as an institution designed to shape moral values.

This emphasis on moral values combined with the geography of America, almost ensured that primarily the young would participate in higher education. It was the young that would ultimately lead America into its position as a world power. Therefore, education should be a means for inculcating ideals and goals into the hearts and minds of the future leaders of this new social order.

At the same time, America had a vast area and limited resources. Colleges and universities developed slowly and were often far removed from many who wished to pursue advanced study. It was generally only the young who could afford to pack up and leave home for an extended time, who availed themselves the luxury of a college education. Adults could not; they had families, jobs and other concerns which kept them at home. Colleges and universities developed and became residential educational institutions with living facilities designed for and most appropriate for young single people.

The adult student emerged as a truly viable client of higher education following World War II. The draft during the war did much to disrupt the lives of the young. Whether high school graduates planned to attend college or not, the draft generally limited their options and required a period of time in the military service. The G.I. Bill brought many of these young adults back to college after their military experience for education and training. This successful experiment established higher education as an institution which could, in fact, have a significant impact on the social and economic well being of both young and old.

The participation of adults in higher education has had its hills and valleys since the days following World War II. Recent demographic

changes in America, however, have compelled higher education to again look to the adult as a client resource. As America ages, so too will the recipients of America's service institutions. Thus, we find that higher education is concerned with developing curricula, changing instructional methods and adopting other means for making itself attractive to adult students. Compared with past short term adult participation in post-secondary education, current adult involvement appears to be something that will persist for at least the next two decades.

If indeed higher education is embarking on a more adult oriented endeavor, it must also begin to consider ways to become more accountable. Adults as a group are more pragmatic and view education as a means to an end. The literature suggests the means and end are closely related to America's core values. That is to say, education as an institution reflects society's values. In turn, those same values are the motivators which influence people to attend college.

Higher education research is noticably sparse in terms of what a college degree actually provides its holder. Lifetime income has been the major criterion for measuring educational benefits. Most of this research, however, has focused on the traditional 18-22 year old student. There is little research which deals with the benefits received by the non-traditional student graduate. In fact, the income criterion may be a poor measure when considering the adult.

Based on the evidence that both education as an institution and the factors motivating one to attend college are derived from similar values, this study attempted to select an educational benefit reflecting these values. Job satisfaction seemed to be the most

appropriate of the outcome benefits considered. Certainly, job satisfaction is affected by many factors both on and off the job. However, the linkage between job satisfaction and America's core values is difficult to refute. In the job situation, performance, work success, and, often, personal happiness are all related to the level of one's job satisfaction. As such, each of these factors are desirable over which most workers wish to achieve. It can also be assumed that college graduates are similarly desirous to be happy in their ultimate career endeavor. The investigator arrived at the conclusion that few educational outcome variables from which one might choose for this study were more appropriate than job satisfaction.

CHAPTER III

Methodology

Introduction

This chapter contains a description of the procedural aspects of the study. There are eight sections comprising the chapter. The sections include the following: (1) the type of research design employed to conduct the study; (2) a discussion of the study's weaknesses and limitations; (3) a description of the sample; (4) the institutions of higher education from which the sample was drawn; (5) a discussion of the process by which the data was collected; (6) a description of the instruments used to test the sample subjects; (7) a description of the data entry process; and (8) a description of the statistical techniques used to analyze the data. Also, at the end of the chapter is a re-statement of the hypotheses.

Type of Research

The term "comparative analysis," which appears in the title, most closely describes the type of research this study represents. No research model is evident in the language of research design exactly duplicating the comparative analysis approach. The "Ex Post Facto" research model has, perhaps, the most similar characteristics. For example, much of the data were collected after the events of interest had occurred (Tuckman, 1972, pp. 113-116). In fact, the focus of the study required a time lapse between independent and dependent variables. That is to say, the education experience, the independent variable, occurred some time prior to the job situation, the dependent

variable. The time lapse was not only desired, it was required to allow the research subjects sufficient time on the job in order to reflect true attitudes about their work. For this study, the time lapse involved a minimum of five years.

Unlike Ex Post Facto research and the causal comparative model, this investigator did not attempt to investigate cause-and-effect relationship. Rather, the goal of this research is to compare and analyze two populations which have had and are presently undergoing similar experiences. Whether these two groups react differently to certain stimuli is the question which this study attempted to analyze.

Also, the comparative analysis design model adopted for this research is in sharp contrast to the "true-experiment" method which collects current data and testing procedures which are carried out under highly controlled conditions (Tuckman, 1972, pp. 106-107).

The comparative component of this study is an attempt to study any differences which may exist between traditional and non-traditional college students/graduates in terms of their respective levels of job satisfaction some years following graduation from college. The study, by its very nature, must also seek to identify other factors which might influence job satisfaction and attitudes about work. This approach is necessary because many factors other than education may add to or detract from an individual's level of satisfaction on the job. Several of these variables are included in the hypotheses and will be tested along with the major hypotheses of the study. This format provides the basis for the type of research undertaken here.

The analysis is in two forms. First, there are statistical tests to determine the existence of differences between variables (see "Statistical Analysis" in this chapter for a full discussion). Second, based on the data, inferences are made about the reasons which may have brought about these differences and their results.

Weaknesses and Limitations

The weaknesses characteristic to Ex Post Facto research are also found in this study. Foremost is the fact that the investigator had little opportunity to control and manipulate variables. This seems to be true of any research conducted outside the traditional laboratory setting. There was no opportunity, for example, to control for the kind of experiences research subjects may have encountered in either their education or employment. This limitation was especially evident for the job situation. Promotional and/or salary decisions made at some critical point might have produced a totally different subject response, had the experiment been conducted at a different time. All of this information was secured after the fact and could not be controlled or manipulated by the researcher.

Further, job satisfaction is difficult to measure under the best of conditions. After-the-fact research makes it more difficult. Some factors which influence employee attitudes about work may have occurred much earlier in life and be unrelated to existing job conditions. Identifying all these factors outside an actual laboratory or clinical setting was clearly not possible.

The same difficulty is present when variables are discovered to have a relationship when analyzing the data. Using "after the fact" information makes it difficult for the researcher to determine which of the two variables were the cause and which were the effect. This study was especially vulnerable to these kinds of discrepancies. For example, a non-traditional student/graduate may have returned to school in an effort to gain new insights about a job where he/she was already satisfied with work conditions. Thus, the high level of job satisfaction may have motivated the person to attend college, and the educational experience may have contributed nothing to the job satisfaction of an already happy employee.

While the weaknesses and limitations found in this type of research design raise questions regarding the findings, it remains the most appropriate design considering what the research is intended to do. In fact, Tuckman (1972, pp. 113-114) suggests that improved survey methods and statistical techniques have made this type of research more and more acceptable in recent years.

The Sample

The intended sample for this study was comprised of 480 undergraduate degree recipients from Augustana College, Sioux Falls, South Dakota; Black Hills State College, Spearfish, South Dakota; and The University of South Dakota, Vermillion, South Dakota, for the years 1975, 1976, and 1977. The number (480) of research participants represents 10 percent of the total number of Associate and Bachelor degree graduates from the three schools for the above three-year period.

The sample was randomly drawn by computer from alumni records at each of the schools. Of the 480 subjects in the sample, 114 were from Augustana, 96 from Black Hills State College, and 270 were from The University of South Dakota.

A foremost consideration in selecting this particular research population was the period between the time the research participants earned their undergraduate degrees and the time this study was conducted. In order to obtain a sufficient number of non-traditional students/graduates the sample had to be a relatively current group of graduates. This lack of non-traditional students was due to the fact that non-traditional student participation in higher education in South Dakota has been a fairly recent phenomenon. Continuing education programs in the form of evening classes and off-campus offerings were almost non-existent in South Dakota until the latter part of the 1960's. The above concerns were based on information from interviews with continuing education personnel and from historical documents at Augustana College, Black Hills State College, and The University of South Dakota.

Black Hills State College was the first of the South Dakota schools to open an extension campus. In 1967, a resident degree granting program was offered at Ellsworth Air Force Base in Rapid City, some 60 miles from the Spearfish campus.

The University of South Dakota had a continuing education component within its system as early as 1915. However, classes were not offered off-campus on a regular basis until 1968. This later emphasis was spurred, in a large part, by a number of federal funding programs and adult interest in extension education.

Augustana College was the last of the South Dakota schools to become actively involved in adult education. Two other private colleges in Sioux Falls combined with Augustana in 1969 to provide for a program of study available to the Sioux Falls community during the evening.

These dates are important to the study for several reasons. First, considering that many non-traditional students would attend college part-time, most who enrolled in the late 60's would not complete their programs of study until the mid 1970's. Thus, the graduating classes of 1975, 1976 and 1977 appeared to represent the most appropriate population from which to draw the sample.

A second consideration concurrent with the above was the necessity for a time lapse between the time research participants graduated and their current employment. This lapse allowed time for the participants to gain some experience on the job, so as to ensure that the job satisfaction questionnaire yielded a true reflection of participant job attitudes. The five year minimum time period between graduation dates (1975-1977) and the testing date (1982) seemed to be adequate for most to become established in the working world.

The third consideration was more practical. The sample was to consist of only 10 percent of the total population. Obviously, a high questionnaire return was not only desirable but necessary. It was assumed that more recent graduating classes would yield more accurate alumni records. This was of special concern to ensure that the highest percentage of research subjects receive the test instruments. In addition, it was believed that the research subjects were not so far removed from their college experience as to have become indifferent to

questionnaires related to their education and job.

Institutional Data

The three institutions of higher education which provided the sample population are located in South Dakota. All the schools are considered four year colleges with combined general and liberal arts curricula. A few two year associate degree programs are also available in specialized areas on each of the campuses. The University of South Dakota is the only school of the three maintaining a variety of graduate/professional programs including business, education, law and medicine.

Black Hills State College and The University of South Dakota are public institutions, while Augustana is a private, church affiliated college. The two public funded schools draw students predominately from South Dakota with a lesser out-of-state enrollment influx from Iowa, Wyoming and Nebraska. Augustana also draws heavily on students from South Dakota, but as a Lutheran school recruits successfully in predominantly Norwegian Lutheran Minnesota.

The schools were selected because they not only serve a five state region, but have shown considerable interest in adult education. Augustana is located in the largest city in South Dakota, Sioux Falls, population 85,000, and attracts a significant number of non-traditional students who work at the variety of private and public agencies which are normally located in a city that size. Some 376 of the 2,091 students enrolled during the fall, 1981, term were part-time students, of which most can be assumed to be non-traditional (Office of Institutional Research, Augustana College).

Black Hills State College is on the western edge of South Dakota with the main campus at Spearfish and a satellite campus at Rapid City (the second largest city in the state). The fall, 1981, enrollment figures showed a total enrollment at the Spearfish campus of 2,173 of which 281 were considered part-time. The Ellsworth Air Force Base campus in Rapid City had a 1,662 headcount enrollment, all of whom were considered part-time (Black Hills State College, Office of the President).

The University of South Dakota, like Augustana, is in the southeastern portion of the state. The largest of the three schools, its 1981 headcount enrollment was 6,220, of which 4,794 were undergraduates. Undergraduates who were considered part-time totalled 94, with most of this total being non-traditional (Office of the Registrar, The University of South Dakota). Added to these numbers is a headcount enrollment of 626 off-campus students who averaged 3 to 6 credits for the 1981 fall term. Nearly all of the latter students would be considered non-traditional (State-Wide Education Services, The University of South Dakota).

Data Collection

The data were collected through a mailed survey. Each of the 480 randomly selected students/graduates comprising the sample were sent the following: 1) a cover letter briefly describing the study, its purpose and instructions for participating (see Appendix A); 2) a general information questionnaire which provided the investigator the necessary information for analysis (see Appendix B); and 3) a job satisfaction scale designed by Arthur Brayfield and Harold Rothe,

commonly referred to as "The Index of Job Satisfaction" (see Appendix C).

The first questionnaire mailing was made on May 27, 1982. Of the 480 questionnaires sent to the research subjects, 96 completed and returned the instruments. On June 11, 1982, the second mailing was made and generated another 110 responses. The third and final mailing was made on June 29, 1982. The established cut-off date was July 16th, and resulted with a total return of 268 completed questionnaires. This response represented 55.7% of the sampled population.

Each research subject was entered on a master list and initially assigned an identifying number which appeared on each questionnaire mailed to that person. As the questionnaires were returned, the person's name who returned it was checked off the master list to eliminate possible duplication should the same person also return a follow-up mailing.

As the completed questionnaires were returned, they were entered in the computer according to their pre-determined classification. Student categories were as follows: 1) traditional student/graduate, 2) non-traditional student/graduate employed while attending college, and 3) non-traditional student/graduate unemployed while attending college. The non-traditional classification was determined by the age of the student when he/she initially enrolled or when re-entering college after having his/her college education interrupted (see questions 6 and 7 in the "General Information Questionnaire"). "Data entry" is more fully explained later in this chapter.

Instrumentation

Two instruments were used to compile the data for this study. This discussion will describe the questionnaires and present in detail the purpose of each.

The "General Information Questionnaire" (see Appendix B) was designed by the investigator. Its purpose was to gather descriptive data about the sampled population. The questionnaire is comprised of 18 questions and a "remarks" section. These questions enabled the investigator to: 1) classify research subjects in categories of traditional and non-traditional students/graduates; 2) determine congruency between education emphasis and career path; 3) learn research subject employment status both while attending college and subsequent to graduation; 4) determine research subjects' income expectations; and 5) identify motivating forces which influenced research subjects to pursue a college education.

Along with providing necessary information for subject classification, the General Information Questionnaire included items considered relevant to job satisfaction.

While the relationship between job satisfaction and the manner in which subjects completed their undergraduate education remains the focal point of the study, other factors and combinations of factors also affect job satisfaction. For the purpose of this study, the factors considered most important and subsequently controlled for were: 1) whether research subjects continued their education after completing bachelor degree requirements; 2) research subjects' occupation/career; 3) subjects' income level; 4) whether the research subjects thought their earning potential had been affected by their

education; and 5) the forces motivating students to enroll/reenter college.

The list of factors above were not intended to be inclusive. Job satisfaction, as a research topic, has always suffered from contradiction (Rosow, 1974, pp. 73-98). Considerate and thoughtful supervision, timely promotions, challenge, and security are but a few of the factors which may contribute to high or low job satisfaction (Work in America, 1973, pp. 93-103).

This study, however, is exemplified by a relatively young sample in terms of job experience. Most of the subjects, especially the traditional students/graduates at the time of the survey, were just becoming established in their jobs. Of major concern to these young workers in their early career years is whether the job is consistent with their educational training (Hall, 1976, pp. 67-73). At the same time, the young worker has a greater awareness for the future. High income and status are desired material rewards, but they are viewed as an expectation rather than as something immediate (Work in America, 1973, pp. 45-51). Beyond these concerns, it was not believed that some of the more complex concerns like promotion, security, etc., would be an issue to this population for several years.

The second questionnaire, the "Index of Job Satisfaction," is similarly comprised of 18 items. Each is a statement expressing attitudes about one's work. Responses are measured on a "Likert" scale based on five categories of agreement-disagreement for each of the 18 items. Responses range in value from 1 to 5 with an "undecided" or a 3 value response representing a neutral position. Thus, the lowest score one might achieve is 18 ranging to a high of 90 (Miller, 1970, pp. 267-269).

Brayfield and Rothe (Journal of Applied Psychology, October, 1951, pp. 307-311) designed the "Index" so it reflected the variety of attitudes representing both management and low level job positions. Equally important is its briefness and ease of scoring. All were desirable qualities in achieving a high subject response which, at the same time, accurately reflected work attitudes.

Both the reliability and validity of the "Index of Job Satisfaction" have been validated. "A reliability coefficient of .87 was obtained for one large group" (Brayfield and Rothe, 1951, p. 311). For validity, the Index correlated with scores on the Hoppock job satisfaction scale in a sample studied at a .92 level. Brayfield and Rothe (1951, p. 511) argue that "Evidence in the high validity of the blank rests upon the nature of the items, the method of construction, and its differentiating power when applied to two groups which could reasonably be assumed to differ in job satisfaction."

For classification purposes, four categories of job satisfaction were established. Using Brayfield and Rothe's "neutral" point of 54, two categories above and below were identified and appear as Table III-1 below.

Table III-1

Classification Scores

	Low	Low Moderate	Neutral	High Moderate	High
Subject Score	18-35	36-53	54	55-42	73-90

Data Entry

The Statistical Analysis System (SAS) and the Statistical Package for Social Sciences (SPSS) were utilized to analyze the data for this study. The computer system at The University of South Dakota provided all necessary functions for data entry, analysis and storage.

As will be noted, both SAS and SPSS were used, each for a different reason. The overall analysis employed SPSS, however, for certain functions SAS provided the researcher with a clearer and more understandable printed copy. For this reason, both systems contributed to the analysis of the data.

The SPSS, as it was used here, consists of three parts. The first, "data listing," labels the questions from the questionnaires as they would appear if key punched on a standard 80 column IBM card. A total of 85 columns was required for this study.

The second part, "value labeling," gave all possible responses to each of the questions on the questionnaires. Each of the responses was given a numerical value which was subsequently entered in the computer.

Both the data listing and value labeling functions must correspond exactly in order to provide accurate data analysis. This was accomplished by initially recording all incoming data on coding forms according to their value. In turn, these values were entered in the computer. A recheck was made by comparing print-outs with the coding forms.

The third and final parts of both SAS and SPSS programs are concerned with entering the appropriate instructions in the computer which in turn generates the desired computations.

Statistical Analysis

This research was primarily concerned with whether differences exist in the level of job satisfaction experienced by traditional students/graduates as opposed to non-traditional students/graduates. There are, however, a number of variables which may affect job satisfaction other than the manner in which a student completed his/her education. In order to test these differences, identify interactions and examine relationships, a number of statistical models were used to analyze the data. They appear in the following order:

1. Summary statistics: The usual summary statistics for determining measures of central tendency and variability were used to analyze the shape of the distribution and the stability of the findings.
2. A chi square statistic was used to determine the significance of certain population characteristics and as a confidence test for the Kendall's W statistic (see 3.d).
3. Hypotheses Testing: The three institutions represented in the study yielded a total of 4,819 bachelor and associate degree graduates in the years 1975, 1976, and 1977. The sample taken from this population was 482, or 10% of the total. Of this total 268 responded to the research questionnaires. Below are the steps followed in hypotheses testing:
   a. The projected alpha level for this research was at the .05 level. Most behavioral science research will accept a level of significance at .05 or below. Basically, this means that there is one chance in twenty that a larger difference in mean or average score would occur if there

were no difference between populations tested.

b. The test of significance was the two-tailed test.

c. The one-way analysis of variance (ANOVA) with F distribution was used to compare the two population variances. The post hoc test is Duncan's multiple range test for identifying variable differences.

d. The Kendall coefficient of concordance: W was used to measure differences in ranked independent variables as they relate to dependent variables.

Discussion of Statistical Techniques

The data were such that they required the comparison of several variables. For example, this study selected job satisfaction as the dependent variable. The primary comparison was between two groups which were determined by the manner in which each completed their undergraduate college education. However, there are many variables which may also influence job satisfaction. They include such things as income, type of job, congruency between training and education, and job expectations.

The logic of ANOVA is that in comparing groups, types, or categories, there should be much greater variation between groups than within groups. In examining this study, the same logic applies. If the sample of non-traditional students/graduates has a higher level of job satisfaction than the sample of traditional students/graduates, then non-traditional students/graduates should be more satisfied in their jobs than traditional students/graduates. ANOVA goes beyond such a judgmental approach, examining this question statistically, and determining whether apparent differences that do exist may be

significant due to chance. ANOVA and the F ratio test enables the researcher to conclude whether or not there are real differences based on similarities within groups and differences within groups.

The procedure used to identify the variable(s) which may be different is Duncan's New Multiple Range Test. Basically, the Duncan procedure separates the observations into groups based on the values of a classification variable, and means are calculated for all variables listed. The group means for each of the listed variables appear in order from largest to smallest. The variables which are significantly different are identified by a letter code.

Restatement of Research Hypotheses

The hypotheses which were formulated to act as a base for this research appear below in the form of a major hypothesis and six sub-hypotheses.

Major Hypothesis

Hypothesis I. There will be a difference in the level of job satisfaction between college graduates who completed their undergraduate education in a non-traditional manner and those who completed their undergraduate education in a traditional manner.

Sub-Hypotheses

Hypothesis II. College graduates who continue their education beyond the bachelors degree will experience a different level of job satisfaction than college graduates who terminate their education at the bachelor degree level.

Hypothesis III. Respective job satisfaction levels will differ, dependent on the various occupational pursuits of college

students/graduates.

Hypothesis IV. College graduates who were employed full-time while pursuing their undergraduate degree will experience a different level of job satisfaction than those graduates who were unemployed while pursuing their undergraduate degree.

Hypothesis V. College graduates who have longer continuous records of employment will experience a different level of job satisfaction than college graduates who have shorter periods of employment.

Hypothesis VI. College graduates who currently have higher incomes will experience a different level of job satisfaction than college graduates who have lower incomes.

Hypothesis VII. The forces motivating a person to attend college will effect the job satisfaction of college graduates.

CHAPTER IV

Analysis and Results

Introduction

Before beginning the statistical analysis and results of the major tests of the hypotheses, the general characteristics of the research subjects will be presented. This information was gleaned from and is a result of the "General Information Questionnaire" (see Appendix A) which was mailed, along with the Job Satisfaction Scale, to each of the research subjects. Total subject response and corresponding percentage figures are represented by Tables IV-1 through IV-23.

The percentage figures appearing in the Charts are presented in terms of columns (COL %) and rows (ROW %). Each is based on two interpretations of the data. The "Col %" figure represents the percentages for a particular respondent category. For example, if the Col % is 84% in the "traditional" category for age 25-29 year old students, this means 84% of the traditional students are age 25-29 exclusive of the non-traditional category. Percentage figures in the Col % under "non-traditional" would similarly represent only the non-traditional category.

The "Row %" column represents the percentage of both categories for a particular response. For example, if the Row % figures were 66.6% for "traditional" and 33.3% for "non-traditional" in the age bracket 30-34 years, it means of all students/graduates sampled, 66.6% were traditional and 33.3% were non-traditional. Wherever the row and column percentages appear in the tables, the above description is applicable.

Table IV-23 is illustrated differently than the others. The response requested was a preference ranking of several statements appearing on the questionnaire. A "rank order scale" was developed which is explained in a footnote below the table.

The analysis of the hypotheses begins after the description of the sample characteristics. Each of the hypotheses is presented with a discussion relative to the manner in which it was tested, their cause for their acceptance or non-acceptance. Finally, a summary of the analysis will conclude the chapter.

Statement of the Null Hypotheses

In research, hypotheses are non-specific in that they do not state the size of the difference hypothesized. To enable an investigator to statistically test hypotheses they must be stated in a null or "no difference" form. Basically, such a statement says that the difference between populations is zero which makes the hypothesis explicit enough to be testable.

Therefore, the null form of each hypothesis is presented below. The null hypotheses are represented by the symbol H_o.

Major Hypothesis

H_o I: There will be no difference in the level of job satisfaction between college graduates who completed their undergraduate education in a non-traditional manner and those who completed their undergraduate education in a traditional manner.

Sub-Hypotheses

H_o II: College graduates who continue their education beyond the bachelors degree will experience no different level of job

satisfaction than college graduates who terminate their education at the bachelor's degree level.

H_0 III: Job satisfaction levels will not differ regardless of the various occupational pursuits of college students/graduates.

H_0 IV: College graduates who were employed full-time while pursuing their undergraduate degree will experience no difference in their level of job satisfaction than those who were employed while pursuing their undergraduate degree.

H_0 V: College graduates who have longer continuous records of employment will experience no different levels of job satisfaction than college graduates who have shorter periods of employment.

H_0 VI: College graduates who currently have higher incomes will experience no difference in levels of job satisfaction than college graduates who have lower incomes.

H_0 VII: The forces motivating a person to attend college will have no effect on the job satisfaction of college graduates.

Subject Characteristics

Table IV-1

Age of Respondents at the Time of the Study

	Traditional			Non-Traditional		
	N	Col %	Row %	N	Col %	Row %
No Response	2	0.9	100	---	---	---
20 - 24	1	0.4	100	---	---	---
25 - 29	190	84.0	98.9	2	4.8	1.0
30 - 34	32	14.2.	66.6	16	38.1	33.3
35 - 39	1	0.4	14.3	6	14.2	85.7
40 - 44	---	---	---	5	11.9	100
45 and Older	---	---	---	13	30.9	100

The age of the subjects appears to be consistent with other related tables. The traditional student who graduated from college in 1975 at age 22 years would have been 29 at the time of this survey. The two later graduating classes (1976-77) would have been correspondingly younger, but still in the 25-29 year age bracket. This is where 84% of the traditional students/graduates appear.

The non-traditional students/graduates are expectedly more diverse. Some 38% of this category appear in the 30-34 year age bracket while another 31% appear in the 45 year and older age bracket. The explanation for the sharp decrease in the two intervening age brackets can only be speculative. Certainly, the limited number of respondents could contribute to the disparity. However, a better

explanation may lie with the fact that the availability of adult education programs began to peak in South Dakota about the time this group entered the non-traditional age category. As will be discussed later, non-traditional students/graduates in this sample tended to enter/re-enter college between age 25 and 29 years. This would explain the higher ratio in the age 30-34 year bracket for this study.

The high percentage of respondents in the age 45 and older bracket can be attributed to the much longer age span this bracket represents.

Table IV-2

Gender of Respondents

	Traditional			Non-Traditional		
	N	Col %	Row %	N	Col %	Row %
No Response	1	0.4	100.0	---	---	---
Male	103	45.6	83.1	21	50.0	16.8
Female	122	53.9	85.3	21	50.0	14.6

The gender breakdown of the respondents is a fair reflection of the student population at the three schools surveyed. Registration at the two larger schools shows that females consistently outnumber males in the various undergraduate programs (Offices of the Registrar, University of South Dakota and Augustana College, June, 1983).

Table IV-3

Respondents Enrolled in College Courses at Time of Study

	Traditional			Non-Traditional		
	N	Col %	Row %	N	Col %	Row %
No Response	1	0.4	100.0	---	---	---
Yes	32	14.6	96.9	1	2.4	3.0
No	193	85.0	82.4	41	97.6	17.5

Table IV-4

Educational Level of Respondents at Time of Study

	Traditional			Non-Traditional		
	N	Col %	Row %	N	Col %	Row %
No Response	1	0.4	---	---	---	---
Doctoral	20	8.8	100.0	---	---	---
Masters	27	12.0	64.3	15	35.7	35.7
Baccalaureate	170	75.2	86.7	26	61.9	13.2
Associate	8	3.5	88.9	1	2.4	11.1

Tables IV-3 and IV-4 show figures representing both the continuing education efforts of the respondents and education level each achieved at the time of the survey. The findings suggest there is no significant difference between traditional and non-traditional students/graduates in terms of continuing education efforts (see Table

IV-3). A X test was conducted on the findings and it was discovered that a null hypothesis of "no significant difference" must be accepted at the .05 level.

Conversely, the two populations were significantly different in terms of their educational achievements at the time of the survey. Traditional students were far more apt to have pursued their education to some form of terminal degree, e.g. doctorate in law, medicine, etc.

The non-traditional student was far more inclined to terminate his/her education at the master's level. In fact, proportionately, the non-traditional student surpassed the traditional student in terms of completing master's degree programs by some 24%.

Table IV-5

Undergraduate Major of Respondents Holding a Baccalaureate Degree

	Traditional			Non-Traditional		
	N	Col %	Row %	N	Col %	Row %
No Response	9	4.0	90.0	1	2.4	10.0
Business	30	13.3	78.9	8	19.0	21.0
Education	70	31.0	80.4	17	40.5	19.5
Fine Arts	5	2.2	100.0	---	---	---
Health	24	10.6	96.0	1	2.4	4.0
Humanities	13	5.7	92.8	1	2.4	7.1
Natural Sciences	30	13.3	93.7	2	4.8	6.2
Social Sciences	45	19.9	78.9	12	28.5	21.1

Table IV-6

Undergraduate Major of Respondents Holding an Associate Degree

	Traditional			Non-Traditional		
	N	Col %	Row %	N	Col %	Row %
No Res./Not App.	200	88.5	85.1	35	83.3	14.8
Business	1	0.4	50.0	1	2.4	50.0
Education	2	0.9	100.0	---	---	---
Fine Arts	---	---	---	1	2.4	100.0
Health	14	6.2	87.5	2	4.8	12.5
Humanities	---	---	---	1	2.4	100.0
Natural Sciences	4	1.8	100.0	---	---	---
Social Sciences	5	2.2	71.4	2	4.8	28.5

Tables IV-5 and IV-6 show subject response regarding the major areas of study pursued by the two categories of students for both the baccalaureate and associate degrees. The table listing Associate Degree holders (Table IV-6) did not yield sufficient numbers to make meaningful comparisons. Table IV-5 was more revealing. It suggests that traditional and non-traditional students tend to share career interests in terms of educational preparation. Both student groups had the highest number of majors coming from education and social science disciplines, respectively. The groups also seemed to share a similar interest in the business area. These results cause one to speculate that both traditional and non-traditional students may have similar long-term career aspirations when enrolling in their college programs of study.

Table IV-7

Age of Respondents when They Initially Enrolled in College

	Traditional			Non-Traditional		
	N	Col %	Row %	N	Col %	Row %
No Response	1	0.4	100.0	---	---	---
19 or Below	219	97.0	88.3	29	69.0	11.7
20 - 24	6	2.6	75.0	2	4.8	25.0
25 - 29	---	---	---	4	9.5	100.0
30 - 34	---	---	---	3	7.1	100.0
35 - 39	---	---	---	2	4.8	100.0
40 - 44	---	---	---	1	2.4	100.0
45 or Older	---	---	---	1	2.4	100.0

Table IV-8

Age of Respondents when They Re-enter College to Complete Degree Requirements

	Traditional			Non-Traditional		
	N	Col %	Row %	N	Col %	Row %
No Response	2	0.9	100.0	---	---	---
25 - 29	2	0.9	7.7	24	57.1	92.3
30 - 34	---	---	---	2	4.8	100.0
35 - 39	---	---	---	5	11.9	100.0
40 - 44	---	---	---	2	4.8	100.0
45 - Older	---	---	---	---	---	---
Not Applicable	222	98.2	96.1	9	21.4	3.9

Age was one of the factors used to determine the traditional and non-traditional student categories. Tables IV-7 and IV-8 provide the breakdown of respondent age when they initially enrolled in college (IV-7) and, if interrupted, the age when they re-entered to complete degree requirements (IV-8). Two points in the findings emerge which make for interesting reflection. First, the results show that most non-traditional students had some college experience prior to re-entering to complete requirements. More than 73% in this category initially enrolled in some higher education program of study immediately following high school or shortly thereafter.

Second, if their college career was interrupted, most students in the non-traditional category re-entered college within only a few years. The results show that 47% were back in college by the time they reached the age bracket 25-29 years.

Table IV-9

Age of Respondents when They Completed Baccalaureate Degree Requirements

	Traditional			Non-Traditional		
	N	Col %	Row %	N	Col %	Row %
No Response	10	4.4	90.9	1	2.4	9.1
20 - 24	206	91.2	100.0	---	---	---
25 - 29	10	4.4	33.3	20	47.7	66.6
30 - 34	---	---	---	4	9.5	100.0
35 - 39	---	---	---	4	9.5	100.0
40 - 44	---	---	---	8	19.0	100.0
45 or Older	---	---	---	5	11.9	100.0

Table IV-10

Age of Respondents when They Completed
Associate Degree Requirements

	Traditional			Non-Traditional		
	N	Col %	Row %	N	Col %	Row %
No Response	200	88.5	85.1	35	83.3	14.9
19 or Below	3	1.3	75.0	1	2.4	25.0
20 - 24	20	8.6	90.9	2	4.8	9.0
25 - 29	3	1.3	60.0	2	4.8	40.0
30 - 34	---	---	---	---	---	---
35 - 39	---	---	---	1	2.4	100.0
40 - 44	---	---	---	1	2.4	100.0
45 or Older	---	---	---	---	---	---

Tables IV-9 and IV-10 show the number and percent of respondents' age when they received both bachelor and associate degrees. Table IV-10 illustrates that an insufficiency of numbers precludes any speculation about the results. Table IV-9, which contained responses from baccalaureate degree holders was, again, more informative. The findings suggest that non-traditional students who enter or re-enter college while between the ages of 25 and 29 years complete degree requirements fairly quickly. Referring back to Table IV-8, the investigator found that 24 respondents re-entered college while in the 25-29 year age bracket. Figures in Table IV-9 show that 20 of those students completed baccalaureate requirements within that four year age span.

Table IV-11

Age of Respondents when They Finished High School

	Traditional			Non-Traditional		
	N	Col %	Row %	N	Col %	Row %
No Response	67	29.6	77.9	19	45.2	22.1
19 or Below	159	70.4	87.8	22	52.4	12.1
20 - 24	---	---	---	1	2.4	100.0
25 - 29	---	---	---	---	---	---
30 - 34	---	---	---	---	---	---
40 - 44	---	---	---	---	---	---
45 and Older	---	---	---	---	---	---

Table IV-11 contains a breakdown relative to the age of respondents when they completed high school. Any conclusions which might be reached here would be heavily biased due to the great number of respondents who chose not to respond. For those who did respond, however, it indicates there was little difference between the two categories of students through graduation from high school. That is to say, both traditional and non-traditional students/graduates completed high school at around 18 years of age. It was not until after high school that their education patterns changed. The traditional student went on to complete his/her college education immediately following graduation from high school. The non-traditional student, on the other hand, either waited to begin college until age 25 years, or after

enrolling in college immediately following high school, dropped out and resumed his/her education at 25 years or older.

Table IV-12

Years Spent in Completing Associate Degree Requirements

	Traditional			Non-Traditional		
	N	Col %	Row %	N	Col %	Row %
Not Applicable/ No Response	198	87.6	84.6	36	85.7	15.3
1 - 3 Years	26	11.5	86.6	4	9.5	13.3
4 and Over	2	0.9	50.0	2	4.8	50.0

Table IV-13

Years Spent in Completing Baccalaureate Degree Requirements

	Traditional			Non-Traditional		
	N	Col %	Row %	N	Col %	Row %
Not Applicable/ No Response	9	4.0	90.0	1	2.4	10.0
3 - 5	212	93.8	90.2	23	54.8	9.7
6 and Over	5	2.2	21.7	18	42.8	78.2

Tables IV-12 and IV-13 represents data illustrating the time spent in years required by traditional and non-traditional students/graduates to complete both their associate and baccalaureate

degrees. Again, responses from those who earned an associate degree (see Table IV-12) was too limited for comment.

At the bachelor's level (see Table IV-13) the findings predictably show that non-traditional students spent more time completing degree requirements than the traditional student. Nearly half of the non-traditional category spent 6 years or more to earn a four-year degree, whereas a little over 2% of the traditional students required that much time to complete the same degree requirements. The vast majority (93.8%) of the traditional students completed their baccalaureate degrees in 3 to 5 years.

Table IV-14

Respondents Who were Employed Full Time While Completing Degree Requirements

	Traditional			Non-Traditional		
	N	Col %	Row %	N	Col %	Row %
No Response	1	0.4	100.0	---	---	---
Yes	16	7.1	39.1	25	59.5	60.9
No	209	92.5	92.4	17	40.5	7.5

Table IV-15

If Employed Full-Time, Average Number of Credits Enrolled Per Term While Earning Baccalaureate Degree

	Traditional			Non-Traditional		
	N	Col %	Row %	N	Col %	Row %
No Response	1	0.4	50.0	1	2.4	50.0
3-6 Credits	3	1.3	33.3	6	14.3	66.7
7-11 Credits	---	---	---	7	16.7	100.0
12 or More	11	4.9	52.4	10	23.8	47.6
Not Applicable	211	93.4	92.4	18	42.8	7.8

Table IV-16

If Employed Full-Time, Average Number of Credits Enrolled Per Term While Earning Associate Degree

	Traditional			Non-Traditional		
	N	Col %	Row %	N	Col %	Row %
No Response	1	0.4	100.0	---	---	---
3-6 Credits	---	---	---	1	2.4	100.0
7-11 Credits	1	0.4	100.0	---	---	---
12 or More	---	---	---	2	4.8	100.0
Not Applicable	224	99.1	85.1	39	92.8	14.8

Table IV-17

Average Percentage of Credits Earned by Respondents Via Extension or Correspondence

	Traditional			Non-Traditional		
	N	Col %	Row %	N	Col %	Row %
No Response	1	0.4	100.0	---	---	---
Less than 10%	58	25.7	77.3	17	40.5	22.6
10% - 24%	1	0.4	16.6	5	11.9	83.4
25% - 49%	2	0.9	28.5	5	11.9	71.4
50% and Over	3	1.3	60.0	2	4.8	40.0
Not Applicable	161	71.2	92.5	13	31.0	7.4

Tables IV-14, IV-15, IV-16 and IV-17 provide, perhaps, the best example as to why non-traditional students may require more time to complete their college education. Over 59% of the non-traditional students were employed full-time (see operational definitions for description of term) while attending college, compared with only 7% for the traditional student category.

Table IV-17 also shows that non-traditional students/graduates tend to make greater use of extension and correspondence courses to complete degree requirements than traditional students. More than 28% completed 10% or more of their degree requirements via extension and correspondence courses. This compares with 2.6% for the traditional students/graduates.

Table IV-18

Respondents Employed by the Same Agency or in Same Career as when Attending College

	Traditional			Non-Traditional		
	N	Col %	Row %	N	Col %	Row %
No Response	41	18.1	91.1	4	9.5	8.9
Yes	7	3.1	38.9	11	26.2	61.1
No	178	78.8	86.8	27	64.3	13.1

Table IV-19

Occupations of Respondents at the Time of the Study

	Traditional			Non-Traditional		
	N	Col %	Row %	N	Col %	Row %
No Response	8	3.5	88.9	1	2.4	11.1
Business	66	29.2	82.5	14	33.3	17.5
Clerical	6	2.7	85.7	1	2.4	14.3
Health Services	31	13.7	88.5	4	9.5	11.4
Professional	22	9.7	100.0	---	---	---
Public Services	19	8.4	70.3	8	19.0	29.6
Teaching	67	29.7	84.8	12	28.5	14.2
Homemaker	2	0.9	66.6	1	2.4	33.3
Labor	5	2.2	83.3	1	2.4	16.7

Table IV-20

Total Years Respondents Employed in Most Recent Occupation

	Traditional			Non-Traditional		
	N	Col %	Row %	N	Col %	Row %
Not Applicable/ No Response	13	5.8	86.6	2	4.8	13.3
Less than 1 Year	17	7.5	80.9	4	9.5	18.0
1 to 3 Years	87	38.5	89.7	10	23.8	4.3
3 to 5 Years	48	21.1	87.2	7	16.7	9.7
5 Years and Over	61	27.0	76.2	19	45.2	23.7

Two major indicators of job satisfaction are longevity on the job and the type of work a person pursues (Work in America, 1973, p. 17-23 and pp. 77). Tables IV-18, IV-19, and IV-20 provide data about both the job tenure and career paths of the respondents. It is interesting to note that 26% of the non-traditional students who returned to college while employed continued in the same career after completing their undergraduate education (see Table IV-18). This compares with 3% of the traditional age college students/graduates who were employed during college.

Regarding occupations (see Table IV-19), traditional and non-traditional graduates were very similar. The teaching professions and business endeavors provided the predominant career pursuits for both graduate groups. The remaining occupational areas also showed similar patterns, except that non-traditional graduates showed proportionately higher participation in public service than their

traditional counterpart.

Employment longevity provided nearly predictable results (see Table IV-20). More than 45% of the non-traditional students/graduates had been employed for 5 years or longer. This compared with 26% of the traditional graduates with a like employment record. The majority of this latter graduate group were in the 1 to 3 year employment period. It should be remembered that all findings regarding the employment longevity of the traditional students/graduates can be related directly to their graduation years from college.

Table IV-21

Income Level of Respondents at the Time of Study

	Traditional			Non-Traditional		
	N	Col %	Row %	N	Col %	Row %
No Response	5	2.2	62.5	3	7.1	37.5
Less than $4,999	15	6.6	100.00	---	---	---
$5,000-$6,999	10	4.4	90.0	1	2.4	9.1
$7,000-$9,999	17	7.5	94.4	1	2.4	5.5
$10,000-$12,999	24	10.6	85.7	4	9.5	14.3
$13,000-$16,999	63	28.6	82.9	13	31.0	17.1
$17,000-$20,999	35	15.5	87.5	5	11.9	12.5
$21,000-$24,999	24	10.6	72.7	9	21.4	21.2
$25,000-$29,999	16	7.1	84.2	3	7.1	15.8
$30,000-$39,999	8	3.5	80.0	2	4.7	20.0
$40,000 and Up	9	4.0	90.0	1	2.4	10.0

Table IV-21 presents figures showing the income levels of the two graduate groups. Both were consistently similar. Using figures from the U.S. Bureau of Economic Analysis (BEA), most of the respondents were slightly below what is considered an "average" income for a college graduate. The range considered average is from $14,000 to $17,999. Both respondent groups from this study were predominately in an income range from $13,000 to $16,999. (This is possibly due to geographic variations in income, e.g., South Dakota's average income relative to national income.)

Table IV-22

Respondents Perspective of the Effect a College Degree had on Earning Potential

	Traditional			Non-Traditional		
	N	Col %	Row %	N	Col %	Row %
No Response	5	2.2	100.0	---	---	---
Increased Greatly	72	31.9	82.7	15	35.7	17.2
Increased Some	104	46.0	84.5	19	45.2	15.4
Had No Effect	39	17.2	82.9	8	19.0	17.0
Decreased Some	4	1.8	100.0	---	---	---
Decreased Greatly	2	0.9	100.0	---	---	---

Table IV-22 provides the breakdown of respondents' perspective of the effect education had on their earnings. It is interesting to note that even when the findings show that their actual income was quite

average, most graduates in both categories thought their education either "increased income some" or "increased it greatly." Only about 20% of the traditional and 19% of the non-traditional thought the degree "had no effect" or their income "decreased."

Table IV-23

The Reason Respondents Enrolled/Returned to College to Complete Degree Requirements

	Traditional			Non-Traditional		
	*	Col %	Rank	*	Col %	Rank
Family/Parents influence	240	16.4	3	12	4.0	8.5(T)
College social activities	18	1.2	10	12	4.0	8.5(T)
Available financial assistance	27	1.8	8	24	8.0	5
Develops deeper understanding of social and ethical issues	72	4.9	7	18	6.0	7
Increase technical and job skills	186	12.8	4	36	12.0	3.5(T)
Preparation for advanced or professional education	282	19.3	2	42	14.0	2
Increase potential in job market	336	23.0	1	90	30.0	1
Increase upward mobility in chosen profession/ career	150	10.3	5	24	8.0	5
Proximity of college/ university	24	1.6	9	6	2.0	10
Increase my income potential	126	8.6	6	36	12.0	3.5(T)

*The totals in this column represent a rank order index.

Respondents were asked to rank in order of preference each of the ten factors which influenced them to enroll in/return to college. The first choice was given a weight of 6, second choice 4, third choice 2, and fourth choice 1. Thus, each of the first, second, third, and fourth choice responses were multiplied by their respective "weight" to determine percentage and rank. As a result, the first four rankings for both traditional and non-traditional respondents represent only "first choice" responses.

The last table from the "General Information Questionnaire" (see Table IV-23) is the respondents' ranking of the various reasons they enrolled in college. As with many of the earlier findings, traditional and non-traditional students tend to share a host of education related interests. Except for "family/parents influence," the two respondent groups are almost parallel in their responses. The first two choices, "increase potential in the job market" and "preparation for advanced or professional education," both indicate the future orientation of students generally. In fact, the rankings tend to show that students view undergraduate college as a stepping stone to a job, professional career, or greater opportunities for material wealth. Of least concern was the "proximity of a college/university," "college social activities" and to "develop a deeper understanding of social and ethical issues."

Data Analysis

The investigator's primary purpose in this study was to attempt to determine if a significant difference in job satisfaction existed between students who completed their undergraduate education in a

traditional manner as opposed to those who were considered non-traditional (see "operational definition"). In addition, other variables which might influence job satisfaction were considered and several of these variables were developed and tested as sub-hypotheses.

The principle statistical tool used to test these hypotheses was the analysis of variance. The analysis of variance determines whether the variability between groups is large enough in comparison with the variability within groups to justify the inference that the means of the populations from which the different groups were sampled are all the same. This test is commonly referred to as the F-ratio:

$$F = \frac{\text{Between Group Variance}}{\text{Within Group Variance}}$$

The analysis of variance is but the first procedure used to test the hypotheses for the study. The F-ratio, if it is significant, only provides the researcher with the information that somewhere in the data something other than chance is probably operating (Hays, 1973, pp. 457-559). To isolate the presence, nature and extent of this non-chance influence, a "post-hoc" test must be employed to make this further determination. The method selected was Duncan's New Multiple Range Test. The Duncan test was recommended by members of the psychological testing facility at The University of South Dakota because if its clarity and its application to studies with unequal N's.

Only one hypothesis required another type of statistical technique to determine differences in the data. Hypotheses VII suggests levels of job satisfaction vary based on the motive students

have for attending college. Thus, it was necessary to rank the resulting reasons for attending college and determine if significant differences in job satisfaction were evident when compared with these rankings. The Kendall Coefficient of Concordance W was the statistical technique used to determine differences, if any, occurring between these variables. (An expanded discussion of this technique is found following Table IV-31.)

As already discussed in Chapters I and III, there are seven hypotheses dealing with seven factors which may influence levels of job satisfaction. These seven independent variables were: 1) the traditional or non-traditional manner in which the research subjects completed their undergraduate education; 2) the continuing education efforts of the research subjects following completion of their undergraduate degree; 3) the occupations of the research subjects; 4) the employment status of research subjects while attending college; 5) the employment tenure of research subjects; 6) the income level of research subjects; and 7) the factors which motivated research subjects to attend college.

The null form of each of the seven hypotheses are as follows:

Each hypothesis is presented in the form of an "analysis," a corresponding table, and a discussion. The hypotheses appear below as I through VII.

Analysis: Hypothesis I

The analysis of variance shows there is no significant difference in the means of job satisfaction scores between traditional and non-traditional students/graduates. PR > F where PR = 0.6075 and F =

0.26 with an alpha level of .05 suggests any difference is more apt to be due to chance than to any actual difference between means. Table IV-24 provides the breakdown and the corresponding statistical data used for analyses.

Table IV-24

Research Subjects' Response to Job Satisfaction Questionnaire

	Subject Category		
Variables	All Subjects N = 268	Traditional Students/Graduates N = 226	Non-Traditional Students/Graduates N = 42
No Response	11 (4.1%)	9 (4.0%)	2 (4.8%)
Low 18 - 35	1 (0.37%)	1 (0.4%)	---
Low Medium 36 - 53	22 (8.2%)	18 (8.0%)	4 (9.5%)
Neutral 54	3 (1.1%)	3 (1.3%)	--- (0%)
High Medium 55 - 72	168 (62.7%)	147 (65.0%)	21 (50.0%)
High 73 - 90	63 (23.5%)	46 (21.1%)	15 (35.7%)

Mean Scores: All Subjects 64.5; Traditional 64.2; Non-Traditional 65.6

Test for Variation of Response: Analysis of Variance
Independent Variable: Traditional -vs- Non-Traditional Students/ Graduates
Dependent Variable: Job Satisfaction.

	Mean Square	F Value	PR > F
Between Groups	69.97603795	0.26	0.6075
Within Groups	264.60500255		

Duncan's Multiple Range Test for Job Satisfaction Score: Means with the same letter are not significantly different.

Alpha level .05 DF = 266 MS = 264.605

Grouping	Mean	N	Value of Variable Trad.
A	65.666667	42	Traditional
A	64.261062	226	Non-Traditional

No significant difference, thus the Null Hypothesis is accepted.

Discussion: Hypothesis I

The null hypothesis was accepted. It was concluded that no significant difference could be determined in levels of job satisfaction between traditional and non-traditional college students/graduates. The mean score of 64.5 did, however, place the average level of job satisfaction of all subjects in the arbitrary category of a "high medium" range (55-72). This is some 10 points

above what Brayfield and Rothe called the "neutral" response of 54 (Journal of Applied Psychology, Aug. 57, pp. 201-205).

The above findings indicate that the respondents, generally, were satisfied with their work. This is consistent with other research in the area. A report by the Special Task Force to the Secretary of HEW (Work in America, 1973, pp. 14-15) cited a Gallup poll which found that 80% to 90% of the workers surveyed in America provided positive responses about their jobs. Using the established "neutral" category as a point of embarkation, more than 85% of the respondents in this survey similarly provided positive responses.

Analysis: Hypothesis II

The F value for the results of Hypothesis II was 0.11 with a probability of 0.8966. At the .05 level, this suggests the groups tested were not significantly different. Table IV-25 provides the number and percentage of subject responses relative to research subjects continuing their education and their relative job satisfaction.

Table IV-25

Continuing Education of Research Subjects
and the Level of Job Satisfaction

	Continuing Education -- N = 268		
Variables	No Response N = 1	Yes N = 3	No N = 234
No Response	--- (0%)	2 (6.0%)	9 (3.9%)
Low (18-35)	--- (0%)	--- (0%)	1 (0.4%)
Low Medium (36-53)	--- (0%)	3 (9.0%)	19 (8.1%)
Neutral (54)	--- (0%)	--- (0%)	3 (1.3%)
High Medium (55-72)	1 (100%)	19 (57.6%)	148 (63.3%)
High (73-90)	--- (0%)	9 (27.3%)	54 (23.1%)

Mean Scores: All - 64.5; Yes - 63.8; No - 64.5; No Response - 71.0.

Test for Variation of Response: Analysis of Variance
Independent Variable: Continuing Education
Dependent Variable: Job Satisfaction

	Mean Square	F Value	PR > F
Between Groups	29.00735976	0.11	0.8966
Within Groups	265.64864904		

Duncan's Multiple Range Test for Job Satisfaction Score: Means with the same letter are not significantly different.

Alpha Level 0.05 DF = 226 MS = 265.649

Grouping	Mean	N	Value of Variable Enrolled
A	71.000000	1	No Response
A	64.547009	234	Yes
A	63.818182	33	No

No significant difference, thus the null hypothesis is accepted.

Discussion: Hypothesis II

Whether or not college students/graduates continued taking classes after completing their undergraduate education made no significant difference in the level of respondents' job satisfaction. It was assumed, based on the literature review, that college graduates who continued to enroll in college course work while on the job would do so for the purpose of increasing job skills and job related knowledge. This would suggest a high job interest and a correspondingly high level of job satisfaction.

To some extent, the opposite was true. The research subjects who did not continue their education after graduation from college showed, in fact, a slightly higher average of job satisfaction than those who continued their education (64.5 to 63.8).

Obviously, these results are somewhat suspect due to the low number of respondents among those who continued their education.

Analysis: Hypothesis III

The analysis of variance shows that a significant difference exists in the means of job satisfaction scores as they relate to the

various occupations of respondents. PR > F where PR = 0.0189 and F = 2.35 with an alpha level of .05 suggests there is less than a 2% chance that the difference is due to chance.

Table IV-26 provides the breakdown of research subject responses and the corresponding statistical data used for analysis.

	Mean Square	F Value	PR > F
Between Groups	595.08266835	2.35	0.0189
Within Groups	253.64573502		

Means: All Subjects - 64.5

Duncan's Multiple Range Test for Job Satisfaction Score. Means with same letter are not significantly different.

Alpha Level - 0.05 DF = 259 MSE - 2253.646

Grouping	Mean	N	Variable
A	67.5	79	Teaching
A	66.1	27	Public Services
A	65.9	22	Professional
A	64.1	7	Clerical
A	64.1	80	Business
A	63.1	35	Health Services
B	59.8	6	Labor
B	47.0	9	Unemployed
B	47.0	3	Homemaker

Table IV-26

Job Satisfaction Scores as They Relate to Research Subject Occupations

Variables	Occupation								
	No Response	Business	Clerical	Health Services	Professional	Public Services	Teaching	Homemaker	Labor
JOB SATISFACTION									
No Response	3(33.3%)	2(2.50%)	--- (0%)	1(2.90%)	1(4.60%)	1(3.70%)	2(2.50%)	1(33.3%)	--- (0%)
Low 18-35	--- (0%)	1(1.30%)	--- (0%)	--- (0%)	--- (0%)	--- (0%)	--- (0%)	--- (0%)	--- (0%)
Low Medium 36-53	--- (0%)	9(11.3%)	1(14.3%)	5(14.3%)	1(4.60%)	1(3.70%)	3(3.80%)	--- (0%)	2(33.3%)
Neutral 54	--- (0%)	1(1.30%)	--- (0%)	1(2.90%)	1(4.60%)	--- (0%)	--- (0%)	--- (0%)	--- (0%)
High Medium 55-72	4(44.4%)	48(60.0%)	5(71.4%)	22(62.9%)	15(68.2%)	14(51.9%)	54(68.3%)	2(66.7%)	4(66.7%)
High 73-90	2(22.2%)	19(23.8%)	1(14.3%)	6(17.4%)	4(18.2%)	11(40.7%)	20(25.3%)	--- (0%)	--- (0%)

Test for Variation of Response: Analysis of Variance
Independent Variable: Occupation
Dependent Variable: Job Satisfaction

The observed difference is significant at the .05 level, however, the null hypothesis is accepted. The reason for this obvious contradiction is found in the "Discussion" of Hypothesis III.

Discussion: Hypothesis III

The null hypothesis was accepted. The Duncan post hoc test identified three occupational categories which were significantly lower than the other six. They include "labor," "no response" and "homemaker." To some extent the findings were predictable, yet should be viewed with extreme caution. The findings are predictable because there appears to be little relationship between these "lower" occupational groups and what a college graduate might expect from a college education. Volmer and Kinney (1955) found that the level of job satisfaction is directly related to the expectations one has when entering a particular job. Both the fields of "common labor" and "homemaking" do not have connotations that are as favorable in American society as that of other occupations.

The findings are to be viewed with caution because in two of the lower occupational groups, individual responses suggested there may be a bias. The "no response" category included two respondents who stated they were "unemployed." It was impossible to determine if the job satisfaction scores recorded were related to the respondents' "unemployed" status, a previous job, or a job the respondents were seeking. These findings created some doubt in the mind of the investigator as to the validity of all nine of the "no response" job satisfaction scores.

The same doubts arose in the "homemaker" category findings. One of the respondents advised she had recently lost her job and was "forced" into a homemaker role. Again, it was not clear whether the respondent was referring to her "satisfaction" with a previous job or that of being a homemaker. This lack of respondent definition coupled with the relatively low N in lower three categories, cast suspicion on this occupational group. For the reasons stated above the null hypothesis was accepted.

Analysis: Hypothesis IV

This hypothesis was tested from two perspectives. First, an analysis was made, based on the wording in the original hypothesis. That is to say, an attempt was made to determine whether a difference in job satisfaction level was experienced by those who were employed full-time while attending college as opposed to college student graduates who were not so employed.

Second, an analysis was made of the non-traditional student graduates. In this instance the non-traditional students/graduates were isolated in terms of their employment status and their respective job satisfaction scores were compared.

The results were as follows: The analysis of variance showed a significant difference in the means of job satisfaction scores from both standpoints. In the first case there was an F value = 5.27 with a PR = .0057. At the .05 level this was significant. The statistical data for this finding may be found in Table IV-27.

When isolating the non-traditional students in terms of their employment status while attending college, the mean satisfaction

scores were also significantly different. PR > F where F = 6.26 and PR = .0022, shows the probability that the difference was due to chance was less than 1%. Table IV-28 provides the statistical data for the second group.

Table IV-27

Employment Status of Research Subjects while Attending College and Response to Job Satisfaction Quesionnaire

	Full-Time Employment Status while Attending College -- N = 268		
Variables	No Response N = 1	Yes N = 41	No N = 226
No Response	-- (0%)	-- (0%)	11 (4.9%)
Low - 18-35	-- (0%)	-- (0%)	1 (.4%)
Low Medium 36-53	-- (0%)	1 (2.4%)	21 (9.3%)
Neutral - 54	-- (0%)	-- (0%)	3 (1.3%)
High Medium 55-72	1 (100%)	22 (53.6)	145 (64.1%)
High - 73-90	-- (0%)	18 (43.9%)	45 (19.9%)

Mean Score: 64.5

Test for Variation of Response: Analysis of Variance
Independent Variable: Full-time Employment
Dependent Variable: Job Satisfaction

	Mean Square	F Value	PR F
Between Groups	1346.38795782	5.27	0.0057
Within Groups	255.70615397		

Duncan's Multiple Range Test for Job Satisfaction Score. Means with same letter are not significantly different.

Alpha level - .05 DF = 265 MS = 255.706

Grouping	Mean	N	Full-Time Employed
A	71.8	41	Yes
A	71.0	1	No Response
B	63.1	226	No

The observed difference is significant at the .05 level, therefore the null hypothesis is not accepted.

Table IV-28

Non-Traditional Employment Status and Response to Job Satisfaction Employment Status While Attending College

Variables	Employment Status While Attending College		
	Traditional	Non-Traditional Employed Full-Time	Non-Traditional Not Employed Full-Time
Non Response	9 (4.0%)	-- (0.0%)	2 (11.8%)
Low - 18-35	1 (0.4%)	-- (0/0%)	-- (0.0%)
Low Medium 36-53	18 (8.0%)	1 (4.0%)	3 (17.7%)
Neutral - 54	3 (1.3%)	-- (0.0%)	-- (0.0%)
High Medium 55-72	147 (65.0%)	10 (40.0%)	11 (64.7%)
High - 73-90	48 (21.1%)	14 (56.0%)	1 (5.9%)

Mean Score: 64.5; Traditional: 64.3; Non-Traditional Employed: 72. Non-Traditional Not Employed: 55.2

Test for Variance of Response: Analysis of Variance
Independent Variable: Employment Status
Dependent Variable: Job Satisfaction

	Mean Square	F Value	PR > F
Between Groups	1588.84527388	6.26	0.0022
Within Groups	253.87628743		

Duncan's Multiple Range Test for Job Satisfaction Score.
Means with same letter are not significantly different.

Alpha Level - .05 DF = 265 MS = 253.876

Grouping	Mean	N	Status
A	72.8	25	Non-Traditional Employed
B	64.3	226	Traditional
C	55.2	17	Non-Traditional Unemployed

The observed difference is significant at the .05 level, therefore the null hypothesis is rejected and the hypothesis is retained.

Discussion: Hypothesis IV

The null hypothesis was rejected. Significant differences in job satisfaction scores occurred when the data was controlled for employment status while attending college. The Duncan Post Hoc test identified low levels of job satisfaction among those students/graduates, both traditional and non-traditional, who were not employed or, at most, employed part-time while attending college.

This hypothesis was developed initially in an attempt to make some comparisons of traditional and non-traditional students in terms of their employment status while attending college. There was an assumption that non-traditional students may have been motivated to attend college based on some negative aspect about their job. As a result, job satisfaction scores of non-traditional students might be correspondingly low.

In fact, the reverse was true. Students, traditional and non-traditional, both scored significantly higher in levels of job

satisfaction if they were employed while attending college than those who were not employed. The difference was even greater when the data was controlled to show only the job satisfaction scores of non-traditional college students/graduates.

Analysis: Hypothesis V

The analysis of variance shows that a significant difference exists in the means of job satisfaction scores as they relate to the respondents' years of employment. PR > F where PR = .0002 and F = 2.35 with an alpha level of .05 generally cause one to conclude that the difference is not due to chance. Regardless of the above finding, however, it was the decision of the investigator to accept the null hypothesis. The reason for this decision is explained fully in the "Discussion" section following Table IV-29.

Table IV-29

Years Employed and Response Relative to Level of Job Satisfaction

Variables	Years Employed				
	Unemployed N = 15	Less than 1 year N = 21	1 to 3 N = 97	3 to 5 N = 55	5 and over N = 80
No response to Questionnaire	5(33.3%)	--- (0%)	2(2.10%)	3(5.50%)	1(1.20%)
JOB SATISFACTION Low 18-35	--- (0%)	--- (0%)	--- (0%)	1(1.80%)	--- (0%)
Low Medium 36-53	--- (0%)	--- (0%)	7(7.20%)	5(9.10%)	8(10.0%)
Neutral 54	--- (0%)	--- (0%)	2(2.10%)	--- (0%)	1(1.20%)
High Medium 55-72	8(53.2%)	11(52.4%)	66(68.0%)	28(50.9%)	55(68.6%)
High 73-90	2(13.3%)	8(38.1%)	20(20.6%)	18(32.7%)	15(18.8%)

Mean Score: 64.5

Test for Variation of Response: Analysis of Variance
Independent Variable: Years Employed
Dependent Variable: Job Satisfaction

	Mean Square	F Value	PR > F
Between Groups	1444.51965549	5.87	.0002
Within Groups	245.91949846		

Duncan's Multiple Range Test for Job Satisfaction Score.
Means with same letter are not significantly different.

Alpha Level = 0.05 DF = 263 MS = 245.919

Grouping	Mean	N	Years Employed
A	68.5	21	Less than 1 year
A	65.9	80	5 and over
A	65.5	97	1 to 3
A	64.1	55	3 to 5
B	45.9	15	No Response

The observed difference is significant at the 0.05 level, however, the null hypothesis was accepted. (See text below for elaboration.)

Discussion: Hypothesis V

The null hypothesis was accepted. The application of the statistical technique to the data suggests a significant difference in the means of job satisfaction scores. Duncan's Post Hoc test identified the "no response" category as being significantly lower

than the corresponding groups. However, in reviewing Table IV-29, one is able to discern an immediate discrepancy. Of the 15 who classified themselves as "unemployed," five did not complete the job satisfaction questionnaire and were given job satisfaction scores of 0. The remaining 10 respondents in this category who completed the questionnaire scored well into the positive range. For example, excluding the five 0 scores, 80% of the respondents scored in the "high medium" range while the remaining 20% were in the "high" range. Thus, the null hypothesis was accepted and it was concluded that no significant difference existed between the means tested.

Analysis: Hypothesis VI

The analysis of variance shows the presence of a significant difference in the means of job satisfaction scores as they relate to the income level of the respondents. Where PR > F and where PR = 0.0001 and F = 6.53 with an alpha level of .05, generally causes one to conclude that the resulting difference in means is not due to chance. Again, with the above finding in mind, the researcher did not reject the null hypothesis. The reason for this decision will be found in the "Discussion" section following Table IV-30.

Table IV-30

Income Level of Respondents and Response to Job Satisfaction

JOB SATISFACTION Variables	Income										
	No Response N = 8	Less than $4,999 N = 15	$5,000 $6,999 N = 11	$7,000 $9,999 N = 18	$10,000 $12,999 N = 28	$13,000 $16,999 N = 76	$17,000 $20,000 N = 40	$21,000 $24,000 N = 33	$25,000 $29,999 N = 19	$30,000 $39,999 N = 10	$40,000 and up N = 10
No Response	5 (62.5%)	1 (6.7%)	1 (9.0%)	--- (0%)	1 (3.6%)	2 (2.6%)	--- (0%)	1 (3.0%)	--- (0%)	--- (0%)	--- (0%)
Low 18-35	--- (0%)	--- (0%)	--- (0%)	--- (0%)	--- (0%)	--- (0%)	1 (2.5%)	--- (0%)	--- (0%)	--- (0%)	--- (0%)
Low Medium 36-53	--- (0%)	1 (6.7%)	2 (18.2%)	1 (5.6%)	2 (7.1%)	7 (9.2%)	5 (12.5%)	3 (9.1%)	1 (5.3%)	--- (0%)	--- (0%)
Neutral 54	--- (0%)	--- (0%)	--- (0%)	--- (0%)	1 (3.6%)	1 (1.3%)	--- (0%)	--- (0%)	--- (0%)	--- (0%)	1 (10.1%)
High Medium 55-72	3 (37.5%)	10 (66.7%)	4 (36.4%)	13 (72.2%)	18 (64.3%)	50 (65.8%)	27 (67.5%)	21 (63.6%)	13 (68.4%)	6 (60.0%)	3 (30.0%)
High 73-90	--- (0%)	3 (20.0%)	4 (36.4%)	4 (22.2%)	6 (21.4%)	16 (11.5%)	7 (24.2%)	8 (26.3%)	5 (26.3%)	4 (40.0%)	6 (60.0%)

Mean Score: 64.5

Test for Variation of Response: Analysis of Variance

Independent Variable: Income Level

Dependent Variable: Job Satisfaction

Test for Variation of Response: Analysis of Variance
Independent Variable: Income Level
Dependent Variable: Job Satisfaction

	Mean Square	F VAlue	PR > F
Between Groups	1427.95663959	6.53	0.0001
Within Groups	218.58109074		

Duncan's Multiple Range Test for Job Satisfaction Score.
Means with the same letter are not significantly different.

Alpha Level = .05 DF = 257 MS = 218.581

Grouping	Mean	N	Income Level
A	73.3	10	$40,000 and Up
A	71.9	10	$30,000 - $39,999
A	68.2	19	$25,000 - $29,999
A	67.9	18	$ 7,000 - $ 9,999
A	65.6	11	$21,000 - $24,999
A	65.0	15	Less than $4,999
A	64.9	76	$13,000 - $16,999
A	64.6	28	$10,000 - $12,999
A	64.0	40	$17,000 - $20,999
A	59.7	11	$ 5,000 - $ 6,999
B	25.5	8	0

The observed difference is significant at the 0.05 level; however, the null hypothesis was accepted. (See text below for elaboration.)

Discussion: Hypothesis VI

The null hypothesis was accepted. The reason for not rejecting the null hypothesis is the same as it was for Hypothesis V. There were five respondents in the "unemployed/no response" category who chose not to complete the job satisfaction questionnaire. All received "0" scores. This brought the mean scores for this category down to a significantly lower response level than the other categories. In looking at Table IV-30, one can readily see that the three respondents in the unemployed/no response category who completed the job satisfaction questionnaire all scored in the range of scores representing the mean for all other categories. As such, the null hypothesis was accepted and it was concluded that there was no significant difference between the mean job satisfaction scores and respondent income levels.

Analysis: Hypothesis VII

The Kendall Coefficient of Concordance: W was used to determine the difference in respondent levels of job satisfaction as they relate to the ranked reasons for attending college. The ranked reasons were in order of preference with 10 statements from which respondents could choose. A "1" ranking represented the most important reason for attending college while a "10" was the least important. The various levels of job satisfaction appear as they did in previous tables.

Table IV-31 provides both the weighted coverage response according to rank and the actual ranking. The upper figure in each of the squares representing data is the "weighted average value" while the lower figure is the actual rank for each job satisfaction category.

Table IV-31

Levels of Job Satisfaction and Reason for Attending College

JOB SATISFACTION Variables	Reasons for Attending College									
	Parent/ Family Influence	College Social Activities	Financial Assistance Available	Understand Social Ethical Issues	Increase Technical Skills	Preparation for Advanced Education	Increase Potential in Job Market	Upward Mobility in Chosen Profession	Proximity of College/ University	Increase Income Potential
No Response	(5.55)	(6.36)	(7.27)	(6.09)	(3.54)	(2.46)	(3.18)	(4.00)	(7.27)	(3.82)
N=11	6	8	9.5	7	3	1	2	5	9.5	4
Low	(1.00)	(7.00)	(5.00)	(8.00)	(2.00)	(9.00)	(4.00)	(3.00)	(10.00)	(6.00)
18-35 - N=1	1	7	5	8	2	9	4	3	10	6
Low Medium	(5.55)	(7.37)	(6.18)	(5.86)	94.27)	(5.55)	(2.86)	(4.22)	(7.27)	(3.81)
36-53 - N=22	5.5	10	8	7	4	5.5	1	3	9	2
Neutral	(3.67)	(9.33)	(5.67)	(8.00)	(3.66)	(7.00)	(2.67)	(4.33)	(7.67)	(3.00)
54 - N=3	3.5	10	6	9	3.5	7	1	5	8	2
High Medium	(4.39)	(6.47)	(6.33)	(5.29)	(3.90)	(4.30)	(3.04)	(4.07)	(6.30)	(3.70)
55-72 - N=168	6	10	9	7	3	5	1	4	8	2
High	(4.89)	(6.49)	(6.40)	(5.57)	(3.54)	(3.87)	(2.71)	(3.55)	(6.02)	(4.19)
73-90 - N=63	6	10	9	7	2	4	1	3	8	5

N = 268

Test for Variation of Responses: Kendall Coefficient of Concordance W

Independent Variable: Reasons for Attending College by Rank Order

Dependent Variable: Job Satisfaction

Test for Variation of Response: Kendall Coefficient of Concorance W
Independent Variable: Reasons for attending college by rank order
Dependent Variables: Job Satisfaction

Kendall's $W = \frac{S}{\frac{1}{12} K^2(N^3-N)}$ where W = .8263 or that the agreement among groups is 83%. The Chi Square test for significance of Kendall's W resulted in a computed X^2 = 44.62 with 9 degrees of freedom and a critical value of X^2 - 16.92. Thus, Kendall's W of .8263 is not due to chance. Therefore, the null hypothesis was accepted.

Discussion: Hypothesis VII

The null hypothesis was accepted. Kendall's W is a procedure to determine the degree of agreement among groups regarding their individual ranking of a particular issue. The higher the W figure, the closer the groups are to perfect agreement with W = 1.000 representing perfect agreement and W = -1.000 perfect disagreement.

In this instance, the respondents ranked in order of preference the reason they attended college. The groups against which these ranked reasons were measured were the various levels of job satisfaction. The result of this measure indicated that individuals, when grouped according to job satisfaction, were in agreement 83% of the time relative to their reason for attending college. The high or significant value of W may be interpreted as meaning that the respondent had essentially the same reason for attending college regardless of job satisfaction levels. Thus, it was concluded that there was no significant difference and the null hypothesis was accepted.

It should be mentioned that earlier in this chapter a number of tables were developed and provide a character description of the respondents. A ranking of the respondents' reasons for attending

college appears in Table IV-23. This should not be confused with the discussion or table pertaining to testing Hypothesis VII. Table IV-23 provides the rankings of reasons for attending college based on a weighted figure for "first," "second," "third," and "fourth" choice response. No effort was made to coordinate those findings with the findings resulting from significance tests in Table IV-31. While both tables tend to be similar in the rankings of reasons for attending college, no attempt is made to test their similarity or difference.

Additional Tests Conducted on the Data

Each sub-hypothesis was analyzed furtner. The data were controlled for traditional and non-traditional studentgraduate categories and subjected to the f-test and Duncan post hoc test. To avoid redundancy, it can be summarized by saying that this further testing provided nothing new. Where the analysis of a sub-hypothesis indicated a difference in the results, the same difference occurred when the "traditional" and "non-traditional" categories appeared as separate variables. Similar results were produced when the findings of the sub-hypotheses resulted in a "no difference" finding, suggesting the two groups were basically alike in their differences as well as their similarities.

Summary

The results of the various analyses which were used for this study revealed that traditional and non-traditional students/graduates were in many ways more similar than different.

In an effort to be succinct, a brief review in summary format is presented below. First, the characteristics of the two groups is discussed based on data from the "General Information Questionnaire." This will be followed by a summary discussion of the Hypotheses tests.

Differences in Characteristics of the Two Groups:

1. By definition non-traditional students/graduates were older than their traditional counter-parts, both at the time of their respective college experiences and at the time of the survey.
2. Traditional students/graduates far outnumbered non-traditional students/graduates in completing terminal and/or professional degrees.
3. It generally required more time for the non-traditional student/graduate to earn his/her undergraduate degree than it did for the traditional student/graduate.
4. A proportionately larger number of non-traditional students/graduates were employed full-time while attending college than were traditional college students/graduates.
5. Non-traditional students/graduates showed a greater participation in completing coursework through extension and correspondence programs than did traditional students/graduates.
6. Again, almost by definition, non-traditional students/graduates were proportionately employed for a longer period of time than traditional students/graduates.

7. As a first choice option, family/parent influence was more apt to have motivated the traditional student/graduate to attend college than it did the non-traditional student/graduate.

Similarities in Characteristics of the Two Groups:

1. Traditional and non-traditional students/graduates were equally represented in terms of gender make-up while attending college.
2. Non-traditional and traditional students/graduates have similar interests in terms of continuing their education to the master level.
3. Traditional and non-traditional students/graduates generally pursued the same major areas of study at the bachelor's level. There was only one major difference among the seven areas listed, an indication that traditional students/graduates majored in the natural sciences proportionately more than non-traditional respondents.
4. The vast majority of both traditional and non-traditional students/graduates enrolled in college immediately upon graduation from high school.
5. While the data is suspect due to the low response rate for both groups, it appeared that traditional and non-traditional students/graduates completed high school at about the same age.
6. Occupationally, traditional and non-traditional students/graduates had strikingly similar interests. It was

only in the public services area that non-traditional students/graduates had a proportionately higher employment rate.

7. The income levels of both groups were also more similar than different. While some income brackets showed a proportionately higher representation by one group, it was offset by another bracket where the opposite occurred.
8. Traditional and non-traditional students/graduates had an almost identical perspective of the effect their college education had on their respective income potential.
9. With the exception of family/parent influence, traditional and non-traditional students/graduates were similarly motivated to attend college.

Results of Hypotheses Tests

Major Hypothesis

Hypothesis I: Traditional and non-traditional college student/graduates experienced no significant difference in levels of job satisfaction some five years following completion of their undergraduate education.

Sub-Hypotheses

Hypothesis II: There was no significant difference in the levels of job satisfaction on the part of college students/graduates regardless of continuing education efforts following completion of the undergraduate degree.

Hypothesis III: Job satisfaction levels did differ among the various occupational pursuits of college students/graduates. The findings, however, suggested that the three occupational categories which were "different" may have been biased.

Hypothesis IV: College graduates who were employed full-time while pursuing their undergraduate degree experienced a significantly different level of job satisfaction than those graduates who were unemployed while pursuing their undergraduate degree.

Hypothesis V: College graduates who had longer continuous records of employment experienced no significant difference in levels of job satisfaction than college graduates with shorter periods of employment.

Hypothesis VI: College graduates who had higher incomes experienced no significant difference in levels of job satisfaction than college graduates who had lower incomes.

Hypothesis VII: The forces which motivated persons to attend college did not significantly affect levels of job satisfaction of college graduates.

CHAPTER V

Summary, Findings and Conclusions

Introduction

The final Chapter begins with a review of the four preceding chapters. This is followed with a discussion of the findings. The findings are based on the results of both the "General Information Questionnaire" and the hypotheses tests. The investigator related these findings to the literature as well as providing some speculative observations. The last two sections in the chapter contain the investigator's overall conclusion and recommendations for further study.

Summary of Chapters

Chapter I provided the focal point of the study. It presented the background information which pointed out that gaining a higher education degree has long been perceived by American society as a desirable goal. The emphasis on educational achievements, however, has been youth oriented. As a result, the education system in America has traditionally been designed for and become the domain of youth.

The problem, as contained in the chapter, is the recent emergence of adults as participants in the higher education process. Economic conditions and the aging of America's population have required institutions of higher education to adjust to an older and different student clientele. A major challenge for higher education is its ability or inability to provide answers to students who, by virtue of age and experience, will demand greater accountability. One important

aspect identified in achieving accountability was for higher education to be able to produce some measurable educational outcomes. This study proposed using job satisfaction as an appropriate outcome measure.

Finally, the chapter concluded with what would be considered the conceptual and focal points of the study. These included: the major hypothesis and sub-hypotheses; basic assumptions; operational definitions; and the limitations of the study.

The second chapter contained a review of the literature from three perspectives. The first was a discussion of the historical development of education in America. The discussion centered on educational philosophies toward education generally and higher education specifically. America's core values were also linked to the developing educational process. All of the above provided many of the arguments as to why education in America has traditionally been perceived as a youthful endeavor.

The second section was devoted to the evolution of adult education in America. It was noted that because of past emphasis on educating youth, higher education institutions have not perceived adults as viable college/university clientele. The literature suggested that two recent major events of national concern caused higher education to re-evaluate its stance toward adult students. The first, returning World War II veterans, established higher education as more than a training ground for the young. The second was the predicted decline of 18-22-year-old students for the latter part of the 20th century. This loss of enrollment would require greater participation by adults in the higher education process for the system to survive. Both events were discussed from the standpoint of change

and required change which would need to be undertaken by higher education.

The third and last section in the chapter provided an argument for the investigator's decision to use job satisfaction as an outcome variable. The argument was made, based on evidence, that many students enroll in college for the purpose of improving their own opportunities in the job market. A review of the literature supported this belief to be true for traditional as well as non-traditional students. It was further argued that improving one's opportunities in the job market is closely allied to the "future orientation" and "work success" ethic common to American society. Thus, if the purpose for attaining a college degree meshes with America's core values, job satisfaction becomes a logical, desirable education outcome. After all, satisfaction in one's work often results in greater productivity, hence a correspondingly successful career. Thus, job satisfaction was deemed a viable higher education outcome which was measurable and should be researched.

The eight sections for Chapter III were developed from the following headings: 1) A description of the research design; 2) the study's weaknesses and limitations; 3) a description of the sample; 4) the institutions representing the population from which the sample was drawn; 5) the manner in which the data was collected; 6) a description of the instruments used to survey the sample; 7) a description of the data entry process; and 8) a description of the statistical techniques and a restatement of the hypotheses.

The first section of the chapter explained that the research design used for this study was called a "comparative analysis." This

term was coined after the investigator could not find a model in the literature of research design exactly describing the method used for this study.

Second, the discussion pointed out that certain weaknesses and limitations inherent to research designs similar to the "comparative analysis" model were also evident in this study. Specifically, a major weakness was the inability of the investigator to control and manipulate variables. It was especially so in this research, where the events being measured had occurred in the past or had the possibility of undergoing change due to changing conditions and/or circumstances. Further, there was difficulty in measuring job satisfaction using a "one shot" test. However, some evidence was found in the literature suggesting that even with its weaknesses and limitations, research designs similar to the one developed for this study are gaining respectability due to improved survey methods and technology in applying statistical techniques.

The third section contained an introduction to the research population and the factors which were considered in arriving at the sample to be tested for the study. Specifically, there were 4801 bachelor and associate degree graduates from the three institutions of higher education selected by the investigator. It was decided to sample 10%, or 480 subjects, from the population. Of the 480 who received questionnaires, 268 provided responses.

The institutional data comprised the fourth section of the chapter. The investigator described the three schools from which the sample was drawn: Augustana College, Sioux Falls, South Dakota; Black Hills State College, Spearfish, South Dakota; and The University of

South Dakota, Vermillion. The reasons these schools were selected, their geographic locations, and the general student make-up provided the basis for discussion.

Described in the fifth section was the manner in which the data were collected. Dates when the questionnaires were mailed out, the returns, cut-off date, and total returned questionnaires were included in the section. Further, this section provided a brief summary of respondents' classifications and how they were determined.

A complete description of the two questionnaires used to gather the data was provided in the sixth section. The first questionnaire was described in terms of the subject characteristics information essential to the study. The second questionnaire, the Brayfield and Rothe "Index of Job Satisfaction," was similarly described along with evidence of the instrument's reliability and validity.

"Data Entry" appeared as the seventh section in the chapter. This section identified the statistical languages used for the analysis and contained a brief description of the procedure followed for entering the data in the computer.

The eighth and final section in the chapter described the statistical techniques used to analyze the data. Basically, the study used four statistical techniques. They include: 1) Summary statistics; 2) Chi Square; 3) ANOVA; and 4) Kendall Coefficient of Concordance: W. A brief discussion was also provided which elaborated on the functions of the various statistical techniques used for the study.

Chapter IV contained the analysis and results of the study. An introductory discussion briefly set out the format of the chapter. This was followed by a series of twenty-three tables which displayed

subject response by number, and the appropriate corresponding percentages taken from the "General Information Questionnaire." A brief discussion explained each table and the findings. It was discovered that in most instances the traditional and non-traditional students/graduates had similar characteristics. What differences that did occur were predictable. For example: the non-traditional students/graduates were older; spent more time earning the degree; were more often employed full-time while earning the degree; took more correspondence and extension courses; had longer work records; and were less motivated by family and parents to attend college than were traditional students/graduates. The two groups were very similar, however, in terms of: gender; continuing education interests; major areas of study pursued as an undergraduate; initial enrollment in college; age when completed high school; occupational pursuits at the time of the survey; income level; perspective of the effect education had on earning potential; and, generally, the factors which influenced them to attend college.

The third section of the chapter contained the analysis of the data. A brief review of the statistical techniques was provided along with a statement of the null hypotheses. Each of the hypotheses was then presented by providing a brief analysis, a table showing subject response and percentages, the appropriate statistical test, and a discussion of the finding. Again, the findings revealed few major differences. Overall, the traditional and non-traditional students/graduates experienced similar levels of job satisfaction. Several of the sub-hypotheses were also reported to be similar. For example: job satisfaction levels did not vary significantly when the

data was controlled for "continuing education of research subjects." There were similar "no difference" findings when job satisfaction scores were compared to job longevity, income levels of respondents, and factors influencing respondents to attend college.

A significant difference in job satisfaction was discovered among respondents who listed their occupations as "laborer," "unemployed" and "homemaker" when those occupations were compared to other occupational variables. Also, students who were employed full-time while attending college had significantly higher job satisfaction scores than those who were not employed full-time while attending college.

Discussion of Findings

General Information Questionnaire

The study revealed that traditional and non-traditional students/graduates were in many ways more similar than different. Examining the characteristics of the two, it was discovered that when differences did occur they were almost predictable. For example, a distinguishing factor used to separate respondents into respective categories, age, predicted certain other responses. Consider the difference whereby traditional students/graduates were found to be far more inclined to have earned terminal degrees than non-traditional students/graduates. Age would seem to be a factor influencing the decision because there are more years available to the younger students to earn an advanced degree and still realize its perceived benefits.

Perhaps equally important, more than 50% of all traditional college students enter their undergraduate program of study with aspirations of completing an advanced degree following college (Astin, 1979, pp. 112-114). It would only be reasonable that a large number of students so motivated would indeed go on to complete a terminal degree.

The same attitude would not prevail among non-traditional students. Adults often have deep reservations about going back to college even for the undergraduate degree. Many regard themselves as being "too old" to learn and study (Peterson and Associates, 1979, pp. 84-85). If such a person is ultimately so motivated and does earn the undergraduate degree, the age question would loom even higher in the adults' consideration of earning an advanced degree.

To a very great extent it was also predictable that traditional students would be more inclined to pursue their studies full-time and complete the undergraduate degree in a prescribed time. Non-traditional students are inclined to be less mobile due to job and family considerations (Peterson and Associates, 1979, p. 85). As such, the non-traditional student generally spent more time in earning the degree than traditional students. Non-traditional students/graduates also availed themselves of learning modes such as correspondence courses and extension classes more often than traditional students/graduates. These findings all reflect on the age of the students. The older the student, the greater the possibility that family, job and home would preclude a full-time student status.

The employment status of the two groups while they were attending college also produced a predictable characteristic difference. The

findings in the study revealed that 59.5% of the non-traditional students/graduates were employed full-time while completing undergraduate degree requirements compared with 7.1% for traditional students/graduates. This figure was consistent with a national study conducted by Cross, Valley and Associates (1976, pp. 16-17) in which they reported that 55% of the adults involved in varying forms of life-long learning had full-time jobs. In many instances, the adult student is not only a student but a family provider as well.

The findings also showed that non-traditional students/graduates had longer work records than traditional students/graduates. While this finding was expected because more non-traditional graduates were employed full-time to begin with, the findings showed that many who were employed while enrolled as a student continued on in the same jobs following completion of their degrees. This finding was unexpected by the investigator since the assumption was that in many instances adults would return to college to make themselves more mobile in the job market. Yet, more than a fourth of the subjects apparently chose to continue in the same job after earning the undergraduate degree.

One other predictable difference also produced some unexpected results. One could predict, for example, that family and parents influence would be a greater factor motivating the high school graduate to attend college than it would for the adult. It was found to be true in this study. Family/parent influence ranked third in "first choice" selections of traditional students/graduates. It ranked a weak eighth among non-traditional students/graduates.

The unexpected occurred with the responses of both type of

students/graduates in terms of the other factors influencing college attendance. Except for family/parent influence, the reasons listed for attending college were almost identical. This finding was the first of several indicators which caused the investigator to begin to speculate that tradtiional students may be more like non-traditional students than was originally thought and reported in the literature.

There was cause for additional speculation that the two groups were similar when the investigator found character similarities among the respondents concerning other educational interests. Again, except for one area of academic concentration, both traditional and non-traditional students pursued similar programs of study. The difference, "natural sciences," suggests the influence of professional degree interests of the traditional students as most medical students have a strong background in the "hard" sciences. Other than the natural science area, both groups predominately pursued degrees in the teaching field, the social sciences, and business.

Whether the above finding could be explained by the fact that most non-traditional students are returnees to college could not be determined. That is to say, the finding of this study indicated that non-traditional students/graduates generally enroll in college out of high school much like their traditional counterpart. Upon returning to complete their education, the determination could not be made if the earlier program of study pursued by the returning students required a continuation by virtue of an accumulation of credits in a particular area. If the above were true, it would explain the similarity. The investigator was not inclined to make such an argument, however. If the literature truly reflects adult attitudes about their education,

the pragmatic adult would choose a major area of study based on needs and interest. Therefore, if a conclusion were to be made, it would be that traditional and non-traditional students/graduates are inclined to share similar areas of study while completing undergraduate requirements.

Again, the above finding received some support from another finding in the study. Even after graduation from college and at least five years later, traditional and non-traditional students had similar career pursuits. Consistent with the major areas of study, respondents were found to be in corresponding occupations with "business" and "teaching" being predominant. The third and fourth ranking were "health services" and "public services" with the traditional student category having the greater number in health services and the reverse for public services. Only the "professional" category showed a dominance of one respondent group, but this too reflected earlier findings. The "professional" category included careers in medicine, law, and other occupations requiring advanced or terminal degrees. The traditional student was shown to be far more inclined to pursue these kinds of degrees, and thus were apt to be found in the "professional" category.

The similarity of incomes between traditional and non-traditional students/graduates presents some interesting points for reflection. All things being equal, one would expect higher income levels among the older and more job tenured respondents. This was not the case. Income levels were, in fact, found to be similar. One only needs to review the income trends for college graduates to arrive at a reasonable interpretation. According to the Bureau of Census Reports,

college graduates not only have higher life-time earnings than the general population, they also have higher initial earnings. The non-traditional students/graduates in this study completed their undergraduate degrees at the same time as the traditional graduates. While the non-traditional graduates were actually in the job situation longer than the traditional graduate, they entered the job market initially without the benefit of the degree. It would appear then, that the Bureau of Census report is correct. Upon graduation from college and regardless of age and experience, the two groups enter the job market on the basis of equal incomes. This would also suggest that, in the long term, traditional students can expect a higher life-time income than the non-traditional student.

Hypotheses Summary

In the preceding chapter the hypotheses were presented in null form for statistical purposes. The discussion of the hypotheses in this chapter will be based on their positive application. That is to say, the original statement for each hypothesis charged that the data would show a significant difference between variables. The discussion below reflects these original hypothesis statements.

Hypothesis I

The analysis of the major hypothesis revealed that there was no significant difference in job satisfaction levels between traditional and non-traditional students/graduates. There are several inferences one could make as a result of this finding. First, if people are generally satisfied with their work, the college experience would do little to alter this positive attitude. There is some support for such a suggestion. Among blue collar workers, "being satisfied" does not

mean they do not desire change in their work. Rather, a prescribed income and "filling time" are in and of themselves a source of satisfaction for this type worker (Work in America, 1973, pp. 14-15; Feinberg, Tanofsky and Tarrant, 1975, pp. 122-123). The "dissatisfiers" tend to relate more to "the amount of variety, autonomy, and meaningful responsibility associated with an employee's job (Work in America, 1973, p. 15).

If one assumes attitudes among the respondents in this study and those of blue-collar workers are similar, the "no difference" finding has less significance. Such a finding would then clearly mean that this study would have required the introduction of many more variables before any major inferences could be made about the findings.

The second inference is related to the first, but questions directly the use of job satisfaction as an outcome variable. There is a school of thought which argues that job satisfaction is not, in fact, a true indicator of motivation (Herzberg, 1966, p. 75). It goes on to suggest that in order to accurately assess work motivation, one needs to identify the "dissatisfiers" which are the true cause of worker distress. This argument also has merit, but goes beyond the interest of this study. The investigator in this instance was more concerned with the comparative aspects of the two student/graduate groups. The use of job satisfaction as an outcome variable, while important, was secondary to the comparison.

The third interpretation seems, for the investigator at least, to be the sounder argument. That is, traditional and non-traditional students are perhaps more alike than different. Most of the data collected describing respondent characteristics show that work related

expectations were very similar. They entered college for many of the same reasons, pursued the same area of study, and were employed in the same occupational areas. To assume the two respondent groups would react similarly to questions regarding work attitudes seems reasonable and reinforces the contention that they are less different than one is led to believe.

Hypothesis II

Sub-hypothesis II also produced no significant difference in levels of job satisfaction when controlled for the continuing education efforts of the subjects. There was some concern on the part of the investigator that students/graduates who were continuing their education would consider their employment as tenuous. As a result, those students continuing their education might show lower job satisfaction levels. This assumption was not shown to be true. In fact, the data produced almost identical responses for both those continuing their education and those who were not involved in such educational programs.

Hypothesis III

A significant difference occurred when job satisfaction scores were applied to the occupation variable. There were nine categories of occupations identified in the data (see Chapter IV, Table IV-27). The categories showing significantly lower levels of job satisfaction were: "labor," "unemployed" and "homemaker."

The fact that the occupation, labor, scored such low marks on the job satisfaction scale is probably not unusual. A number of studies cited in Chapter II support this finding. The contention is that

workers often experience low job satisfaction when they bring greater skills to a job than the skills required to do the work. Another study cited suggests that as worker education increases there must also be an increase in required job skills to maintain worker satisfaction. Both examples would apply to the respondents in this study. All respondents possessed at least a bachelor's degree. As such, they would generally have higher expectations in terms of job requirements. Jobs which have the classification of "laborer" are generally not seen by American society, and certainly not by college graduates, as a challenging endeavor. Thus, the lower job satisfaction scores for this hypothesis could be expected.

The two other categories, "no response" and "homemaker," also recorded significantly lower job satisfaction scores. Any speculation on the findings for these two categories would be suspect for the reasons stated in Chapter IV.

Hypothesis IV

One of the more interesting results emerged when the data for Hypothesis IV were analyzed. Initially, the investigator's concern centered on whether there would be a difference in job satisfaction on the part of students who may have been going to school part-time in an effort to escape from an unhappy job situation. The question at the time was whether, indeed, this kind of student is thus successful in his/her quest for job mobility and correspondingly greater job satisfaction.

The results of the study required that the investigator rethink the question. On the first run of the data, students who were employed

full-time while attending college scored significantly higher on the job satisfaction scale than those who were not so employed. Students who had been employed full-time produced a mean score of 71.8 compared to 63.1 for the other group.

The second run of the data was even more significant. In this instance, the non-traditional category was controlled for employment status while attending college. The "non-traditional employed" averaged 72.8 compared to 55.2 for the non-traditional unemployed.

After due consideration, the findings became more plausible. It appeared that students who were employed full-time while attending college were doing so for reasons other than job change. Rather, the results suggested that school might have provided an outlet for an otherwise satisfied and happy employee. Education in this instance would have little effect on the job satisfaction level of such a person regardless of when the job satisfaction test was given.

The non-traditional student who was unemployed provides an altogether different scenario. Education and educational achievement have a more direct relationship with job satisfaction. This person was probably in a job which, for many reasons, may have been an unhappy situation. In turn, the employee made the decision to quit the job and return to school. The objective of attending college was to use the resulting education as a stepping stone to improved status upon returning to the work world. The student's desired result, in this instance, did not work out. Rather, the unhappy employee left the job, returned to school and upon re-entering the job market, discovered that nothing had changed. Work was still an unpleasant experience.

The investigator is aware that the above scenario is supposition.

However, this supposition is logical and is buoyed by the literature. The employee who quit a job and returned to or entered college did so with unrealistic expectations of what an education would accomplish (Peterson and Associates, 1979, pp. 112-119). For the respondents in this study, those expectations apparently did not bear fruit.

It is also logical to argue that the employed non-traditional student views educational achievement from a different perspective. In fact, the interrelationship between job and educational achievements for the non-traditional students are quite secondary. This person's decision to return to or enter college is based more on self-fulfillment than on developing job mobility.

Hypothesis V

It has almost become tradition to include longevity on the job as a variable when studying job satisfaction. This inclusion is certainly evident in the literature. Work in America (1973, p. 77) reported on one study which was conducted over a 15-year period, in which it was concluded that longevity was the strongest predictor of employee work satisfaction. Most of the above studies have focused on blue collar occupations where seniority and rituals of passage are important, not only in terms of peer acceptance, but also indicates greater participation in organizational and social activities, Portwood, Pierson and Schmidt, 1981, pp. 276-280).

Hypothesis V in this study, on the other hand, focused on college graduates and whether longevity played such an important role in their level of job satisfaction. Statistically, the findings suggested there was no significant difference in job satisfaction

regardless of years employed. In fact, when considering just mean scores, the college graduate who was employed for less than one year scored the highest among the various categories (see Table IV-29). This may be a basis for arguing that the college graduate does indeed approach a job with some optimism. Where the blue-collar worker sees little opportunity for advancement or even acceptance, the college graduate may see the job from a more opportunistic view. While the job may be just as routine, the college graduate may feel advancement opportunities are at least open in the future.

When the non-traditional students/graduates category was compared with the traditional in terms of tenure and job satisfaction, the two groups were again not significantly different. The results in this instance, however, are suspect. The non-traditional category just did not have enough numbers when broken out according to tenure.

Hypothesis VI

Finding "no difference" in job satisfaction for this hypothesis provided findings which were more unexpected than any part of the study. Whether looking at one's own job situation or the literature, income levels seem to play an important part in overall satisfaction and certainly job satisfaction (Green, 1979, pp. 215-218; Rosow, 1978, p. 142; Work in America, 1973, p. 95).

The respondents in this study did not seem to be so influenced by income. Certainly, percentage-wise the highest income level also produced the highest job satisfaction mean score of the ten income categories. However, the fourth highest scores were produced in the second to lowest income bracket. Also, the lowest income bracket

ranked sixth in level of job satisfaction. This diversity in income, when compared to job satisfaction, is another strong indicator of respondent similarity.

If one were to offer an explanation for the similarity of the findings, it probably would rest with the fact that the respondents were all fairly young, both in terms of age and years on the job. Nearly all ranged in age from 25 to 34 years old. Of the 268 respondents, 173 had been employed less than five years. If, as postulated earlier, these "new" employees are more optimistic about future opportunities than existing conditions, the discovered similarity in job satisfaction is a reasonable respondent reaction. In fact, the literature provides some support for such an argument. It has been found, for example, that wages are generally not at the top of the list of priorities for most workers (Work in America, 1973, p. 13). It seems to this investigator that this would be also be true for the person just beginning a career.

Hypothesis VII

What motivates students to attend college has been the subject of many studies (Henry, 1975, pp.). Whether this motivating force is capable of influencing job satisfaction was the focus of the seventh and final hypothesis.

Again, statistically there was no significant difference in the findings. That is to say, regardless of the level of job satisfaction, respondents were in agreement in terms of the reasons they attended college (see Table IV-31).

To fully appreciate the similarity of this motivation factor, it

is well to compare the findings of the hypothesis and the results from the General Information Questionnaire (see Table IV-23). In both instances, the job and career orientation of the respondents are quite high. None of the schools from which the samples were drawn consider themselves or their students to be so oriented. The two larger schools are traditional liberal arts colleges while the smaller, Black Hills State College, offers more of a general education with an emphasis in teacher training. Yet, the findings suggest that most students going through the programs of study at each of the institutions saw education as a means to an end, a job.

Inferences and Conclusions

Consistent findings in a research project indicating support for the null hypotheses often produces anxiety on the part of the investigator. A similar first reaction was experienced by this investigator at the conclusion of this study. However, in carefully reflecting on the findings, it gradually became clear that the similarities found between the groups tested may have been more significant than any differences which may have occurred.

For example, in Chapter II, considerable discussion was devoted to the fact that the academic community was vitally concerned with the projected emergence of a new and different kind of student clientele in the 1980's, the adult. The concern was enough to prompt scholars to study and report on the capacity for both the adult and institutions of higher education to deal effectively with the other. It was reported, and seemingly with some surprise, that the adult was indeed able to function very well in the academic environment. These findings

suggested that, intellectually at least, there did not seem to be a significant difference between traditional and non-traditional students.

The literature review went on to tentatively report that if there was a difference between the two types of students, it probably related more to the maturity of the adult. These studies suggested that the adult tended to be pragmatic, goal oriented, and actively participative during the education process. It was somehow assumed that the traditional student was less inclined to display these characteristics. This was a threatening discovery for higher education as it was perceived as something which would require change. Academicians would be required to apply theory to real world situations, change curricula, and revise teaching methods. Historically, these kinds of change have not been an easy task for higher education. Yet, demographic changes and economics created an exigency for academe which required response. As noted earlier, change has occurred in higher education. Curricula, teaching methods and accessibility have been enhanced and directed toward attracting this new and different adult student.

The brief review above seems to require response to at least two questions. First, why did the results of this study show that, in most areas tested, there was so little difference between traditional and non-traditional students when the literature almost assumed otherwise? The second question is more basic. Assuming that the literature is correct and there is a difference, will the change undertaken by higher education to benefit the adult student prove to be a disadvantage for the traditional student? Without appearing too

presumptuous, the investigator will attempt to respond to both questions.

After reflecting on the findings, and reviewing the literature and the investigator's own experience as an adult student, it might be well to propose a new hypothesis. Perhaps it is not the non-traditional student who is different. Rather, it is the traditional student who represents a different kind of person. That is to say, the "model" student which has traditionally filled our college campuses may not "fit" the mold academicians have designed. In fact, the traditional student may be more like the non-traditional student than the non-traditional student is different.

The literature to some extent, and certainly this study, supports such a hypothesis. For example, most scholars conclude that societies, generally, transmit their values to the young at an early age (Johanningmeier, 1980, pp. 3-133; Pulliam, 1982, pp. 1-64). The same is true in America. The home, elementary school, secondary education, and the environment have a much longer period of time to influence a young person's value orientation than four to six years of college. These earlier formative years are quite naturally shared by the traditional and non-traditional students. This study revealed, in fact, that up until entering college both groups complete the same preparatory education, graduate from high school at the same age, are motivated to attend college for the same reasons, and experience the same level of job satisfaction in work world. The fact that the non-traditional students wait until adulthood to enter college provides little evidence that this makes them different from the traditional student.

The investigator does not argue against the premise that non-traditional students are more pragmatic and demand a more relevant education. In more realistic terms, work, maturity and experience gained while not attending college may make them cognizant of what one needs to know in order to succeed. The traditional student does not have this experience, so is reluctant to speak out against what might, in fact, be a totally irrelevant fare of educational offerings. This difference in worldly experiences does not seem, to this writer at least, to be a basis for concluding that both types of students need to have or even desire a different college experience.

The answer to the second question is almost a moot point. "Will all the change undertaken by higher education, to attract the adult, detract from the traditional student's educational experience?" The answer is obviously "no." This argument is based on the assumption that if the "model" or traditional student is similar to the non-traditional adult student, the changes made by higher education to attract adults will be equally beneficial to traditional and non-traditional students. Both have similar value indoctrinations, pre-college educational experiences and motivational orientations. It is almost presumptuous to assume traditional students do not have the same educational needs and desires at the college level.

It would be well to point out that the investigator is not proposing in this discussion that the literature which suggests that non-traditional students are different is wrong. Nor is it proposed that this study has produced a new educational concept. Rather, it is suggested that the perception higher education has of the non-traditional student is also an accurate description of the

traditional student.

If the above is true, the reasons for the misperception harbored by higher education are certainly understandable. Few would argue that academicians are somehow above being socialized by their peers and the academic environment. Most organizations and professions suffer from the same malady. People with similar work goals often form strong social bonds based on a sense of oneness and their common interests and interactions (Huse and Bowditch, 1977, pp. 158-182). The academic community is probably little different in this respect.

Therefore, it is not unreasonable to assume that academicians have a fairly universal perception of what a model student ought to represent. More often than not, this perception is probably based on the academic's own student experience and his/her affinity for students who are the "best and the brightest." However, in the real world, the "central tendency theorem" is at work. The academic and the best and brightest students are not the norm, they might, in fact, represent what is different. It is postulated here then, that what is in fact "different" may have become inappropriately identified as the norm and labeled as the "traditional student."

In retrospect, this investigator wonders whether this study, and many of its predecessors, may have been better served if the emphasis of the investigation had been directed at the traditional rather than the non-traditional student. Higher education research in the area of non-traditional students may ultimately resemble the discovery of Pogo of comic strip fame in his quest for the "enemy." One only need substitute one of Pogo's words and it may describe our research efforts. "We went looking for the (difference) and when we found it,

it was us."

Recommendations

This study was an attempt to examine but one issue of several larger issues facing higher education. The continued societal demands for institutional accountability have resulted in a greater public scrutiny of all public institutions, including higher education. To the investigator, one of the most important products for which higher education should be accountable is the student. That is the focus of this study and the recommendations presented in this section reflect that interest.

In the past, higher education has viewed the students and the means for their education from the perspective of "how it has always been done" (Pulliam, 1982, pp. 2-4). This historical perspective provides the student with a predetermined agenda with expectations of student conformity to that agenda. The students, their needs, desires, and ambitions often have ranked far down on the list of priorities established by academic policy makers (Carnegie Commission, 1974, pp. 288-291). As a result, the traditional student, with rare exceptions, has marched lock-step through programs of study designed by and for academicians. What change has occurred has been slow, painful, and often met by bitter resistance on the part of college and university faculty.

It is not, however, the intent of the investigator to present evidence to indict academicians for their often parochial view of education. In fact, higher education probably reacts no differently than other organizations when confronted with imminent change.

Research suggests that resistance to change is especially evident in organizations where "interdependence of activities has achieved a high level of sophistication" (Moore, 1975, p. 34). This may be true, but if higher education is to achieve the accountability necessary to maintain its role as an institution destined to meet the needs of the future, it must be willing to undergo change.

The recommendations emerging as a result of this study are as follows:

1. Higher education administrators and faculty must reassess and change their existing view of students. Students entering college in the future will no longer represent, and perhaps never did, the typical inexperienced 18-year-old high school graduate of the past. The demographic change occurring among America's college student population has moved up the clock. The older student may not be just a student looking to make decisions in the future. Rather, as well as being a student, this person may be a participant and, possibly a decision maker in developing major social policy. Students can no longer be considered as the "future" generation but must be perceived in terms of "now."
2. Higher education should take steps to initiate greater research efforts relative to educational outcomes. Not only would this be an indication of higher education achieving accountability, it would provide traditional and non-traditional students valuable information in terms of the benefits and limitations of their education.

3. A greater effort should be made on the part of higher education to identify what actual differences do exist between traditional and non-traditional students. Where differences do in fact exist, higher education should adjust appropriately to meet the respective needs of both types of students. It is no longer acceptable for higher education to operate from the narrow perspective it had of students in the past. This recommendation is consistent with the Carnegie Commission's recommendation, which proposes that everyone should have an equal opportunity to learn (Carnegie Commission, 1974, p. 421). Higher education must be willing to provide programs which will benefit the entire range of student clientele it will be serving in the future.
4. Higher education must strive to keep current. Social and technological advances have often preceded needed changes in education by many years. Decisions affecting the direction of higher education may require wider participation in the decision making process. Graduates, industry and current students may be able to contribute far more in terms of institutional development than an isolated and often self-interest influenced group of college or university faculty.

Implications for Further Research

Speaking first in a positive sense, this study produced some interesting and unexpected results. Much of the information gleaned

from the two types of students/graduates revealed similarities, for this population at least, which had not surfaced in previous research. In an original sense, this study represents one of the few where comparisons were made of traditional and non-traditional students based on an educational outcome. From these two standpoints alone, further research in the area seems almost necessary.

From the outset of this study, however, the questions regarding the veracity of job satisfaction measures posed by Maslow, Herzberg and others, loomed high in the mind of the investigator. It was well into the study before the investigator was able to put these questions aside and approach the remainder of the study with any degree of confidence.

Certainly job satisfaction is an elusive and difficult variable to measure. So many factors influence attitudes about work that survey results often pose more questions than answers. Yet, the investigator feels that job satisfaction is an important variable which bears investigation when educational outcomes are considered. The link between work, American values, and personal success almost demands its inclusion.

However, there are several points to ponder in conducting similar research. First, a subject response representing a wider and more diverse population would make for more valid conclusions. The population for this study was comprised mostly of people from the upper plains states. The three South Dakota colleges draw the major portion of their students from South Dakota, and to a lesser degree from Minnesota, Iowa, Nebraska and Wyoming. As such, the respondents would be apt to express values and job attitudes consistent with those

in the region.

The three schools are also relatively small. The programs of study available to students are correspondingly limited. This obviously limits the career options for their graduates. Thus, the careers represented in this study may not represent the range of responses possible if the sample had come from schools with a more diverse array of courses and programs.

Another major dilemma encountered in this study was the low number of non-traditional students/graduates in comparison to the traditional category. Because there was no way to identify those who were non-traditional until the survey questionnaires were returned, the investigator did not have another option. A larger sample would obviously have resulted in more returns, but that option was also limited due to the investigator's lack of resources.

Further, the study surveyed only the graduates for the three years of 1975, 1976, and 1977. This was a conscious decision of the investigator based on the belief that this time period would produce a sufficient number of non-traditional student responses. As mentioned in an earlier chapter, South Dakota has only a fairly recent involvement in the area of adult education. At the same time, a number of years had to elapse for respondents to gain work experience to ensure an objective job attitude response. Again, the conclusions would have been more valid if respondents had represented the range of years in terms of both graduating classes and work experience.

Finally, consistent with the criticism of Herzberg, et al, to using job satisfaction in and of itself as a measure of work attitudes, this study provides a basis for the same objections. No one

is more aware than the investigator that levels of job satisfaction may vary over time and be influenced by a number of factors occurring throughout one's working life. A "one shot" job satisfaction survey does not take the above factors into consideration. Further research in this area may be strengthened, however, by both the use of a larger population and a series of job satisfaction tests over time. Both would tend to dispell some of the criticism evident in job satisfaction tests. A series of tests with a larger and more diverse population on an ongoing basis would allow a investigator to determine certain norms for a variety of occupations. Such an effort would provide a basis for determining the job expectations college graduates have of certain occupations based on more accurate and valid data than provided by this study. The same determinations could be made for the non-college graduate. On the long term, comparisons with select groups, occupations, and educational levels would then allow a researcher to arrive at more meaningful and applicable conclusions.

In conclusion, the exact benefits derived from a college education are debatable and subject to many interpretations. It does seem, however, that research in educational outcomes is a needed scholarly endeavor. If the social and economic conditions continue, more and more questions will be asked relative to the cost effectiveness of a college education. Whether the questions have to do with lifetime income, job satisfaction or the host of other researchable outcomes, students and potential students are entitled to know the benefits and/or the limitations of their investment.

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APPENDICES

APPENDIX A

Instructions for General Information Questionnaire

GENERAL INFORMATION QUESTIONNAIRE

INSTRUCTIONS

Please respond to all questions on the questionnaire. On questions #7, 8, 10, 11 and 17, if you earned a Bachelor's degree, but did not complete Associate degree requirements, leave the space following "associate degree" blank. Conversely, if you earned the Associate degree and not the Bachelor's, leave the space following "bachelors degree" blank. The remainder of the questions may be responded to by all questionnaire participants.

If you do not fully understand a question or wish to elaborate on any of your responses, feel free to include written remarks in the section provided at the end of the questionnaire.

All individual information you provide will be strictly confidential. The number appearing on the "return" envelope will be used for any required follow-up. When you return the completed questionnaire, all identifying numbers, random name files, or other means of identifying participants in this research will be destroyed.

Thank you very much for your participation.

APPENDIX B

General Information Questionnaire

GENERAL INFORMATION QUESTIONNAIRE

1. What is your present age? _____

2. Sex:

   a) Male _____
   b) Female _____

3. Are you presently enrolled in any college/university courses?

   a) Yes _____
   b) No _____

4. What is your present education level? (Completed degrees only)

   a) Doctoral Degree _____ (Which Doctoral degree do you have? _____)
   b) Masters Degree _____
   c) Bachelors Degree _____
   d) Associate Degree _____

5. What was your age when you initially enrolled in college as an undergraduate?

   a) 19 or below _____
   b) 20-24 _____
   c) 25-29 _____
   d) 30-34 _____
   e) 35-39 _____
   f) 40-44 _____
   g) 45-older _____

6. If for some reason your undergraduate education was interrupted, what was your age when you re-entered college to complete your undergraduate degree?

   a) 25-29 _____
   b) 30-34 _____
   c) 35-39 _____
   d) 40-44 _____
   e) 45-older _____
   f) Not applicable _____

7. What was your age when you completed each of the following degree(s)?

   a) Bachelors Degree _____
   b) Associate Degree _____
   c) High School _____

8. What was the total number of years spent in earning your undergraduate degree(s)? Include the time when you were enrolled either full or part time.

   a) Bachelors Degree: _____ years
   b) Associate Degree: _____ years

9. Were you employed full-time (40 hours per week or more) while pursuing any of your undergraduate college/university undergraduate programs of study? (This does not pertain to occasional full-time employment such as summer jobs or similar seasonal employment.)

   a) Yes _____
   b) No _____

10. In which degree program(s) were you so employed?

    a) Bachelors _____
    b) Associate _____

11. If you were employed full-time while completing undergraduate requirements, what was the average number of semester hour credits you were enrolled in per term?

	Bachelors Degree	Associate Degree
a) 3 to 6 credits	_____	_____
b) 7 to 11 credits	_____	_____
c) 12 or more credits	_____	_____
d) Not applicable _____		

12. Indicate the portion of your undergraduate degree earned through extension courses and/or correspondence courses.

	Bachelors Degree	Associate Degree
a) Less than 10%	_____	_____
b) 10% to 24%	_____	_____
c) 25% to 49%	_____	_____
d) 50% and over	_____	_____
e) Not applicable _____		

13. Are you now employed by the same agency as you were while earning your undergraduate degree(s)? (If self-employed respond to the question in the same manner.)

    a) Yes _____
    b) No _____

14. What occupation(s) or position(s) have you held? List most recent or present position first.

    a) Position _____ Total Years Employed _____
    b) Position _____ Total Years Employed _____
    c) Position _____ Total Years Employed _____
    d) Position _____ Total Years Employed _____
    e) Position _____ Total Years Employed _____

15. What is <u>your</u> approximate income? Do not include family income. Check one.

    a) Less than $4,999.00 _____
    b) $5,000 to $6,999 _____
    c) $7,000 to $9,999 _____
    d) $10,000 to $12,999 _____
    e) $13,000 to $16,999 _____
    f) $17,000 to $20,999 _____
    g) $21,000 to $24,999 _____
    h) $25,000 to $29,999 _____
    i) $30,000 to $39,999 _____
    j) $40,000 and over _____

16. In your opinion, what effect has your undergraduate education had on your earning potential?

a) Increased in greatly _____
b) Increased it some _____
c) Has had no effect _____
d) Decreased it some _____
e) Decreased it greatly _____

17. For each undergraduate degree program, rank in order of importance your reason for enrolling/returning to college to complete your studies. (1 representing most important to 10 representing least important.)

	Bachelors Degree	Associate Degree
a) Parents/family influence	_____	_____
b) College/university social activities	_____	_____
c) Available financial assistance for attending	_____	_____
d) Develop a deeper understanding of social and ethical issues	_____	_____
e) Increase technical and job skills	_____	_____
f) Preparation for advanced or professional education	_____	_____
g) Increase my potential in the job market	_____	_____
h) Increase upward mobility in my chosen profession/career	_____	_____
i) Proximity of the college/university to my home	_____	_____
j) Increase my income potential	_____	_____

18. Remarks:

APPENDIX C

Index of Job Satisfaction

JOB QUESTIONNAIRE

INSTRUCTIONS

The research in which you are participating is attempting to determine how people feel about their jobs. This test contains eighteen statements about jobs. You are to cross out the phrase below each statement which best describes how you feel about your present job. There are no right or wrong answers. Please provide your honest opinion about each of the statements.

Find below a sample item numbered (0) for you to work out before going on to the rest of the test.

0. There are some conditions concerning my job that could be improved.

STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE

Now, please respond to the next 18 statements. When you have finished, please place all the completed forms in the samped self-addressed envelope and drop it in the mail.

Thank you again for your participation.

1. My job is like a hobby to me.

STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE

2. My job is usually interesting enough to keep me from getting bored.

STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE

3. It seems that my friends are more interested in their jobs.

STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE

4. I consider my job rather unpleasant.

STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE

5. I enjoy my work more than my leisure time.

STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE

6. I am often bored with my job.

STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE

7. I feel fairly well satisfied with my present job.

STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE

8. Most of the time I have to force myself to go to work.

STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE

9. I am satisfied with my job for the time being.

   STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE

10. I feel that my job is no more interesting than others I could get.

    STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE

11. I definitely dislike my work.

    STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE

12. I feel that I am happier in my work than most other people.

    STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE

13. Most days I am enthusiastic about my work.

    STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE

14. Each day of work seems like it will never end.

    STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE

15. I like my job better than the average worker does.

    STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE

16. My job is pretty uninteresting.

    STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE

17. I find real enjoyment in my work.

    STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE

18. I am disappointed that I even took this job.

    STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE

APPENDIX D

Letters

Dear Alumni:

I am conducting my doctoral dissertation research and would appreciate your participation in providing a portion of the data. The research will attempt to determine certain differences between and among college graduates. Hopefully the results will not only allow me to complete degree requirements, but provide information for other publications.

Enclosed you will find two questionnaires which I would like you to complete and return to me in the stamped self-addressed envelope at your earliest convenience. Total time to complete both questionnaires should not take you more than twenty minutes.

The first questionnaire is information I need about you. Please answer all questions as each will be crucial to the findings. You can be assured of complete anonymity.

The second questionnaire is a job satisfaction scale. Again, be totally honest and respond to all questions.

Thank you and should you have any questions, please feel free to contact me.

Sincerely,

Jim Rumbolz
Associate Director
Criminal Justice Studies Program

JR/mjm

MICHIGAN STATE UNIVERSITY

UNIVERSITY COMMITTEE ON RESEARCH INVOLVING
HUMAN SUBJECTS (UCRIHS)
238 ADMINISTRATION BUILDING
(517) 355-2186

EAST LANSING • MICHIGAN • 48824

March 12, 1982

Dr. Eldon R. Nonnamaker
Administration and Curriculum

Dear Dr. Nonnamaker:

Subject: Proposal Surveying Alumni from Three Colleges in South Dakota Concerning Their Job Satisfaction After Graduation by James Rumbolz

I am pleased to advise that this project is eligible for an exemption from full UCRIHS review and approval is herewith granted for conduct of the project.

You are reminded that UCRIHS approval is valid for one calendar year. If you plan to continue this project beyond one year, please make provisions for obtaining appropriate UCRIHS approval prior to March 12, 1983.

Any changes in procedures involving human subjects must be reviewed by the UCRIHS prior to initiation of the change. UCRIHS must also be notified promptly of any problems (unexpected side effects, complaints, etc.) involving human subjects during the course of work.

Thank you for bringing this project to my attention. If I can be of any future help, please do not hesitate to let me know.

Sincerely,

Henry E. Bredeck
Chairman, UCRIHS

HEB/jms

cc: Jim Rumbolz