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ADULT WOMEN STUDENTS IN NURSING PROGRAMS
AT AREA VOCATIONAL-TECHNICAL SCHOOLS

A DISSERTATION

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BY

JAN GEORGE WOMACK

Norman, Oklahoma

1976

A STUDY OF MOTIVATOR AND HYGIENE FACTORS OF
ADULT WOMEN STUDENTS IN NURSING PROGRAMS
AT AREA VOCATIONAL-TECHNICAL SCHOOLS

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A STUDY OF MOTIVATOR AND HYGIENE FACTORS OF
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CHAPTER I

INTRODUCTION AND STATEMENT OF THE PROBLEM

Vocational-technical education is one phase of the educational scheme in this country that is expanding both in numbers of participants and in significance in terms of educational resources that are needed to meet current student demands. The Oklahoma State Department of Vocational and Technical Education prepares an annual statement of its goals and objectives. The increased emphasis on vocational-technical education is apparent from the data compiled by the department.

The Oklahoma State Plan '72-73 (1972) cited the objective of increasing "the number of adult students served by area vocational-technical schools to 9,450 in the fiscal year 1973." By the Oklahoma State Plan '75-76 (1975), the department proposed that 21,463 would be served by area vocational-technical schools. This proposed growth

reflects an increase of 227% over a three year period or an average annual increase in enrollment of 76%.

One factor contributing to this proposed growth is that women are enrolling in part-time and full-time programs in vocational-technical schools in apparently ever increasing numbers. The exact underlying reasons for increased enrollment by adult women are beyond the scope of this study. However, whether women are attempting to prepare for emerging job opportunities or attempting to upgrade job qualifications for existing occupations or attempting to fulfill other personal goals, it is apparent that large numbers of adult women are motivated to participate in vocational-technical educational programs.

The adult woman returning to formal education may be an individual with relatively different needs and motivational patterns than educators are accustomed to dealing with in an educational setting. To the extent that adult women present a different challenge to the educational process, educators must prepare for dealing with differing needs and motivational patterns, if any exist. Educators must ask and attempt to answer "What motivates the adult woman student?"

This study will attempt to answer the question proposed. It will deal with the motivational factors of adult women students in a vocational-technical education setting.

The findings of this study should have implications for motivating adult women students who are enrolling in vocational-technical schools. The implications of the study can provide guidance to school administrators and staff members in structuring

educational opportunities which maximize satisfaction and minimize dissatisfaction for adult women students who are continuing their educations in personal and vocational pursuits.

Knowledge of those factors which cause adult women students satisfaction and dissatisfaction can serve educators in selection of meaningful activities for these students. Identification of motivator and hygiene variables may enable school supervisory personnel to maintain an acceptable level of hygiene factors and to establish a set of motivational factors which will increase the potential for motivation of adult women students. In addition, the findings may have implications for teacher training programs and curriculum development.

Statement of the Problem

The purposes of this study are (1) to identify motivator and hygiene variables in a vocational training setting and (2) to analyze the effects of these variables upon adult women students. The study should determine the sources of student satisfaction and dissatisfaction for adult women students enrolled in area vocational-technical schools.

In order to achieve the purposes stated for the study, the following hypotheses will be tested.

- H₁ High sequence of events will stem from different factors than low sequences of events.
- H₂ High sequences of events will have different effects than low sequences of events.

H₃ The factors leading to high sequences of events will be intrinsic to the respondent.

H₄ The factors leading to low sequences of events will be extrinsic to the respondent.

Definition of Terms

For the purposes of this study, the terms used frequently throughout the study are defined as:

First-level factors: actual situations identified in the sequence of events which are strongly related to the respondent's attitudes.

Second-level factors: needs or drives activated by the actual situations.

Effects: the attitudinal change resulting from first-level and second-level factors.

High sequence of events: actual incidents that brought about good feelings in the respondent.

Low sequence of events: actual incidents that caused bad feelings in the respondent.

Student: adult women enrolled in a full-time licensed practical nursing program at an area vocational-technical school.

Limitations of the Study

This study concerned itself only with those adult women students enrolled in licensed practical nursing programs at three (3) area vocational-technical schools selected for the research. Since the interview schedule required each participant to describe critical incidents in her

educational program, the study is also limited by each respondent's ability to identify and verbalize her feelings and attitudes.

Organization of the Study

This study is presented in six chapters. Chapter I offers an introduction to the nature of the problem and identifies the purposes of the project.

Chapter II is a review of literature pertinent to the problem. Theories of motivational psychology are presented to offer some understanding of human satisfaction and dissatisfaction. The second part of Chapter II reviews educational research focusing on student satisfaction and dissatisfaction with school.

A summary of motivation-hygiene (M-H) theory of job satisfaction is presented in Chapter III. This theory serves as the theoretical foundation for this proposal. In addition, Chapter III contains reviews of research critical of the M-H theory.

Chapter IV previews the methodological organization for the study including the selection of the instrument, the sample, the analytic scheme, and the results of a pilot study.

Chapter V contains an analysis of the data.

Chapter VI presents a summary, the major findings, the conclusions and recommendations based on data analysis.

CHAPTER II

REVIEW OF THE LITERATURE

A variety of theories has been employed in attempts to explain human motivation. The literature examined for this study included the major theories of human motivation. Additionally, a review of educational research was made which indicates that inquiry into student satisfaction and dissatisfaction with school is a relatively new phenomenon resulting from industrial research on job satisfaction and dissatisfaction.

Major Theories of Human Motivation

The major theories of human motivation are summarized below by generally accepted characterizations. These theories are general theories of human motivation propounded by psychologists, and they are not specifically related to motivation in an educational setting. However, these theories have had and still have impact and significance for any study which attempts to explain human motivation in any particular setting.

Hedonism

Hedonism has played a major role in the development of theory relating to human motivation. Psychological hedonism is a doctrine of motivation found in the writings of Aristippus and Epicurus and developed in the writings of Hobbes, Locke, Hume, Bentham, John Stuart Mill, and Spencer (Young, 1936). It perceives life directed by the desire to attain pleasure and to avoid pain. The search for pleasure and the avoidance of pain are viewed as the underlying forces in human behavior.

More recent hedonic theories have been postulated by Young (1961) and McClelland (1961). These psychologists offer a supplemental theory of experimental hedonism. This theory allows for innate physiological mechanisms in an individual which seek pleasure and avoidance of pain.

Instinct Theory

The instinct doctrine as an important explanation for behavior was developed by Darwin, James, Freud, and McDougall (Murray, 1964). Instincts are basic motives which determine behavior. McDougall (1932) viewed instincts as primary agents in human motivation that were innate rather than learned.

Instinct theory has been mainly attacked for its varying and sometimes lengthy lists of basic instincts and its explanations for observed behavior. Laboratory experiments by Hess (Coffler & Appley, 1964), Tinbergen, and Beach (Murray, 1964) are reviving elements of the instinct theory. These studies give credence to the role of instinctive behavior in certain physiological pursuits.

Drive Theory

Drive theory was first introduced by Woodworth in 1918 and greatly advanced by Cannon's concept of homeostasis in 1932 (Murray, 1964). The drive theory accepted by many psychologists today is closely identified with the names of Mowrer, Hull, Miller, Dollard, and Spence (Bindra, 1959).

The drive theory interprets behavior in terms of primary and secondary drives and reinforcers. Basic and primary drives are generally identified with certain physiological states whereas secondary drives are learned drives that account for other motivated behavior. Drive theory lends itself to experimental research and operational definitions.

Incentive Theory

The incentive theory of motivation developed from theoretical considerations and scientific studies on the effects of reinforcers on behavior. Hull and Brown played major roles in the formulation and refinement of this theory; Spence, Logan, Hebb, Olds, Bindra, and Skinner are also credited for contributing to incentive theory (Madsen, 1965). The incentive theory offers a cue-stimulus explanation for behavior. As a theory of motivation, it assumes that all behavior is under the control of stimuli (Hilgrad, 1962).

Personality-dynamics Theory

Personality-dynamics theory has as its basic construct need. The best known personality-dynamics theories are those of Cattell, Lewin, Maslow, McClelland, and Murray (Madsen, 1965). Although need is recognized as the driving force motivating behavior, the theorists

differ on number of needs and origin of these needs.

These theorists view need fulfillment as being directly related to human growth and health. It is through this fulfillment that human satisfaction can be achieved.

Cognitive Theory

A cognitive dissonance theory of motivation first offered by Festinger in 1957 has stimulated both experimental and empirical research on human motivation (Madsen, 1974). The theory holds that dissonant relations among cognitive elements "create pressures to reduce the dissonance or avoid increases in dissonance." (Festinger, 1957). Festinger maintains that the existence of dissonance motivates the individual to reduce the dissonance thereby achieving a state free of dissonance.

Educational Motivation Research

Inquiry into job satisfaction has generated research into student satisfaction and dissatisfaction with school. Earlier research into student satisfaction and dissatisfaction with school was concerned with the study of student achievements, attitudes and abilities, intellectual ability and psychological-functioning levels. Only the last decade has seen inquiry into the sources and effects of student satisfaction and dissatisfaction with school. The identification of variables acting as sources of student satisfaction and dissatisfaction was of primary concern in only a limited amount of research, and no study was found that attempted to identify sources of satisfaction and dissatisfaction for students in a vocational training setting.

Hand (1949) reports a study in which the Mooney Problems Check List was administered to students in 57 Illinois high schools in 1947-48. The survey revealed that the most reported problems of students were connected with the school. Students responded that the greatest problems were related to, first, the adjustment to school work and, second, curriculum and teaching procedures.

Jackson and Getzels (1959) surveyed students to measure student satisfaction and dissatisfaction with school. The Student Opinion Poll was administered to selected students enrolled in grades seven through twelve. Various psychological health factors were related to dissatisfaction with school. The researchers concluded that dissatisfaction with school is a function of a student's perception of himself and his environment. Scholastic variables were not found to be of major importance as a source of student dissatisfaction.

Contrary to the study by Jackson and Getzels (1959) Brodie (1964) found that satisfied students generally did better academically than dissatisfied students. A comparison of satisfied and dissatisfied students to their scores on the Iowa Tests of Educational Development revealed that the group of satisfied students attained higher scores than the dissatisfied group. Brodie concluded that satisfied students outperformed dissatisfied students on academic skills as a result of their more positive feelings toward classroom objectives and activities.

A study by Jackson and LaHaderne (1967) investigated the accuracy of teachers' perceptions of their students' satisfaction with school. The study also attempted to identify the relationship between student satisfaction with school and achievement in school. The

researchers reported that teachers were able to estimate students' satisfaction or dissatisfaction with greater than chance accuracy. No significant correlation was found between student satisfaction and scholastic achievement. However, teachers perceived achievement and satisfaction to be more closely related than they actually were.

Clements and Oelke (1967) surveyed Georgia schools to study problems reported by adolescents. The Mooney Problems Check List was administered to students. The highest incidence of school-related problems were expressed by students in schools with a high teacher-pupil ratio and no organized counseling program. The inquiry found that students in schools staffed with personnel who made time available for personal problems of students reported the least number of school-related problems.

Levine and Weitz (1968) used a specially developed instrument to measure job satisfaction among graduate students. The Graduate Student Questionnaire included items related to student satisfaction and dissatisfaction with school. The general quality and competence of faculty members were recognized as variables related to both student satisfaction and student dissatisfaction. The lack of student input into departmental policy decisions was a source of dissatisfaction.

A study conducted by Diedrich and Jackson (1969) investigated the relationship between a number of variables and student satisfaction and dissatisfaction with school. A sample group of high school juniors was surveyed to identify the relationship between satisfaction with school and the variables of academic success, intellectual ability, social class, and personal values. No significant relationship was

found between student satisfaction and intellectual ability and academic success. Only negligible differences were found between student satisfaction and the variables of social class and values.

Beelick (1970) interviewed 217 high school students to identify sources and effects of student satisfaction and dissatisfaction with school. The study also ascertained student satisfaction and dissatisfaction with school by means of a specially developed questionnaire. Achievement, recognition, school activities and interesting schoolwork were the major sources of satisfaction for the participants. The major sources of student dissatisfaction were teachers' behavior, school policy and administration and interpersonal relationships with peers. The study further found that student satisfaction and dissatisfaction with school effects performances in school, attitudes toward school, personalities, attitudes toward educational goals and health of a substantial number of students.

Hughes (1970) surveyed secondary students to gain insight into their feelings about school and the problems of student activism. Student activists were significantly more dissatisfied with school than were non-activists. However, both student activists and non-activists were dissatisfied with the liveliness and interest of classes, the lack of student involvement in planning and evaluating class activities, the staff's consideration of student feelings, the amount true democracy is practiced at school, and the control grades have over pupils' lives. The school policy on suspension and expulsion, the policy on taking field trips, and the role that was given to the student government in the schools also contributed to high dissatisfaction expressed by respondents.

Gregg (1972) surveyed graduate students to identify factors affecting graduate school satisfaction. The study revealed that the collegiate relationship between faculty and students is a good predictor of academic satisfaction, but a highly competitive relationship between graduate students results in a lower level of satisfaction.

Amir and Krausz (1974) studied students in higher education to identify factors which cause satisfaction and factors which cause dissatisfaction. A significant finding was that motivation variables were more important to students than were hygiene factors. However, no support was found for the hypothesis that motivators bring about satisfaction while the absence of hygiene factors cause dissatisfaction.

Arlin (1974) surveyed elementary school students to determine the influence of classroom treatment and the psychological trait "academic locus of control" on pupil attitudes. Locus of Control was measured by the Intellectual Achievement Responsibility scale. Locus of control whether perceived by the student as a consequence of his own actions or unrelated to his own behavior played a significant role in pupil satisfaction.

The Feild, Holley, and Armenakis (1974) study was designed to investigate the effects of various intrinsic and extrinsic variables on student satisfaction. A specially designed questionnaire was administered to graduate students to ascertain the role of intrinsic factors in overall student satisfaction. The study revealed that intrinsic factors were no better predictors of student satisfaction than were extrinsic factors.

Nafziger (1975) conducted a study of college students to determine those characteristics of students and colleges which aid in

student satisfaction. One significant finding of the study was that the satisfied student was generally considered a typical student in his college and had a personality pattern that was well defined and consistent.

Summary

In attempting to explain human behavior, psychologists have recognized the role of prior experiences, physical characteristics, cognitive processes, and situational components as factors influencing motivation. The differing theories provide a picture of the complexity of human motivation.

The educational research has been primarily concerned with the relationship between student satisfaction-dissatisfaction and achievement, attitudes and abilities, intellectual ability and psychological health factors. With the exception of Brodie, research has not indicated a significant relationship between student satisfaction and abilities or achievement. The studies by Beelick, Hughes, Gregg, and Levine and Weitz identified variables contributing to student satisfaction and dissatisfaction with school for secondary and college-level students. Feild, et al. found that intrinsic factors were no more significant than extrinsic factors in predicting student satisfaction.

The next chapter deals in detail with the motivation-hygiene theory of motivation which is a current and controversial theory of motivation.

CHAPTER III

THEORETICAL FOUNDATION FOR THE STUDY

Industrial research into worker satisfaction has been an impetuous for educators and psychologists to investigate student satisfaction. This project looks to the theory of job satisfaction proposed by Frederick Herzberg for guidance in forming the hypotheses to be tested. A summary of the theory and a review of the criticisms of the theory are included in this chapter.

Motivation-Hygiene Theory of Motivation

Motivation-Hygiene (M-H) theory as a psychological theory of motivation became controversial shortly after Frederick Herzberg propounded it in 1959. The controversy concerning its validity and its underlying methodology continues.

Herzberg begins with the question that industrial psychologists are constantly seeking to answer: "What do people want from their jobs?" (Herzberg, Mausner, & Snyderman, 1959). Of course, the M-H theory as conceived by Herzberg not only purports to answer that question, but it also concludes with specific notions concerning how to

motivate the worker to strive for successful performance of his job.

M-H theory makes a distinction between two groups of job factors. One group of factors is associated with the environmental setting of the job, i.e., those conditions that "surround the doing of the job" (Herzberg, et al., 1959) as opposed to factors which are associated with the job itself. The former factors are factors of hygiene. Hygiene factors in a work setting are analogous to principles of hygiene in a medical setting in that they remove health hazards in the environment while not necessarily affecting the internal condition of man.

Hygiene factors relate to the human needs for pain avoidance. Hygiene factors act in a preventive role but not in a curative role.

Herzberg includes the following factors as hygiene factors: supervision, interpersonal relations, physical working conditions, salary, company policies and administrative practices, benefits, and job security. These factors are environmental in nature; they are factors which surround the job or work itself. According to M-H theory, whenever the quality of these factors falls to an unacceptable level for the worker, job dissatisfaction results.

This part of M-H theory was neither surprising to industrial psychologists nor did it generate wide-spread controversy. For that matter, most managerial personnel found this notion intrinsically comforting. However, Herzberg concludes that while these factors, at an unacceptable level, cause job dissatisfaction, even an optimal level of hygiene factors does not contribute significantly to positive attitudes or job satisfaction.

The second group of factors are associated with the job itself.

These factors effect positive job attitudes, and they relate to the human need for growth and self-actualization.

Herzberg identifies the following factors which relate to job satisfaction: achievement, recognition for achievement, work itself, responsibility, advancement and growth. These factors are deemed to be motivators which is consistent terminology for the positive factors in a work setting. It is this group of factors which result in job satisfaction.

The basic proposition of M-H theory is that an unacceptable level of hygiene factors causes dissatisfaction, but job satisfaction results from motivation factors. While both groups of factors act to satisfy human needs, it is the motivators that produce the high quality of performance that industry seeks from its workers.

Hygiene factors can be measured from the feeling dimension of discomfort-relief on a continuum from no dissatisfaction to dissatisfaction. Motivators can be measured from the feeling dimension of fulfillment-emptiness on a continuum from no satisfaction to satisfaction. Thus, M-H theory requires that two feeling dimensions be used. Hygiene factors cannot cause satisfaction or fulfillment, and motivation factors cannot cause discomfort.

The basic distinction between hygiene factors and motivators is central to Herzberg's analysis of industry failure to motivate workers. M-H theory leads to the conclusion that hygiene factors must be at an acceptable level to avoid poor attitudes and job dissatisfaction, but motivators must also be present in the job itself so that job satisfaction and high performance result. According to M-H theory,

people want two needs satisfied on the job: (1) an acceptable level of hygiene factors and (2) a set of motivational factors in the job itself.

Criticisms of the Motivation-Hygiene Theory

Grigaliunas and Wiener (1974) in an analysis of the studies critical of the M-H theory, found research testing the M-H theory "was characterized by methodological flaws, misrepresentation of results and gross misunderstanding of M-H theory" in the realms of: (1) bi-dimensionality; (2) overall job satisfaction; (3) individual differences; (4) methodology; (5) importance of factors; (6) implications for performance; and (7) explanations offered.

The M-H theory assumes two levels of job factors, motivators underlying the feeling of satisfaction and hygiene factors underlying the feelings of dissatisfaction. The studies of Hulin and Smith (1967), Schacter and Singer (1962), Graen and Hulin (1968), Waters and Waters (1969), Waters and Roach (1971) and Lahiri and Srivastva (1967) did not use the critical incident methodology. The rating scale techniques employed by these researchers assessed satisfaction and dissatisfaction on a continuous scale, not on separate levels according to Grigaliunas and Wiener (1974).

M-H theory has been misconstrued as "employing overall job satisfaction as a basic construct" (Grigaliunas and Wiener, 1974). The M-H theory is based on two distinct sets of factors, motivators and hygienes, that contribute to satisfaction and dissatisfaction not to overall satisfaction. This misconception of the M-H theory has

been incorporated into research by Hinrichs and Mischkind (1967), Wolf (1967), Kosmo and Behling (1969), Armstrong (1971), Weissenberg and Gruenfeld (1967), Gruenfeld and Weissenberg (1970), Graen (1968), and Ewen, Smith, Hulin, and Locke (1966). Grigaliunas and Wiener (1974) point out although these studies use M-H terminology, they fail to test the principle actually set out in the theory.

M-H theory is criticized for not allowing for individual differences of subjects. Dunnette, Campbell and Hakel (1967) and Schwab and Heneman (1970) demand "perfect prediction" to support the M-H theory. The Schwab and Heneman (1970) data indicates that "95.3 per cent of the individual responses were either totally or partially correct" (Grigaliunas and Wiener, 1974). That individual responses were not correct 100 per cent of the time is possibly explained "by errors of measurement inherent in any psychological procedure" (Grigaliunas and Wiener, 1974).

The M-H theory is criticized for using the critical incident methodology. Although Dunnette, et al. (1967) argue that the critical incident method is a subjective method since it requires the experimenter to make decisions which may bias the results, no research supports this proposition (Grigaliunas and Wiener, 1974). Schwab and Heneman (1970) found high coding reliability in the critical incident method. Hinrichs and Mischkind (1967) criticized the research design because respondents were not limited to their present job situation. Davis and Allen (1970) and Grigaliunas (1970) concluded that feelings related to sequences vary as a result of a time factor.

M-H theory places no value of good or bad on motivator and

hygiene factors. Hulin and Smith (1967), Armstrong (1971), and Hinton (1968) incorporated an importance question into their research to test the M-H theory and, thus, refuted the theory. The M-H theory proposes that motivators and hygiene factors are equally important and will vary with differing groups of people.

Since it is a theory of human motivation, the M-H theory has implications for worker performance. Schwab, DeVitt and Cummings (1971) confused the factor from the critical incident as being the cause of performance rather than a feeling associated with the job (Grigaliunas and Wiener, 1974). M-H theory deals with the motivational implications of motivator and hygiene factors rather than with measurable differences in job performance as a result of motivator and hygiene factors.

Some researchers have been critical of the explanations offered in the M-H theory. Vroom (1964), Dunnette, et al. (1967), and Wall (1973) suggest that the defensive nature of man may be the reason for the differences between sources of satisfaction and dissatisfaction. They contend that individuals are likely to attribute the causes of satisfaction to their own achievements and accomplishments and to attribute dissatisfaction to the work environment rather than to their own inadequacies or deficiencies. The findings of Schwab, et al. (1971) and Bobbitt and Behling (1972) do not support this social desirability argument.

The controversy surrounding the methodology of the M-H theory remains, and the methodology of criticism of M-H theory remains controversial. This researcher has chosen to employ the M-H methodology as a sound, logical and empirically desirable methodology. Except for the

criticisms regarding the time frame in the critical incident methodology, the criticisms of M-H methodology are deemed unsound for purposes of this study, and the researcher has chosen to employ the M-H techniques to test the proposed hypotheses. The following chapter details the methodology employed in this study.

CHAPTER IV

METHODS AND PROCEDURES USED IN THE STUDY

In the present study interview procedures were used to identify motivator and hygiene variables in a vocational training setting and to analyze the effects of these variables upon adult women students. Participants were interviewed using a semistructured interview similar to that used by Herzberg and his colleagues studying job satisfaction. Responses were categorized according to first-level and second-level factors and the effects of these factors on the adult women students.

The methods and procedures used in the study were classified as follows: (1) pre-interview procedures; (2) interview procedures; and (3) data analysis procedures. Each of these areas is discussed in this chapter.

Pre-Interview Procedures

The pre-interview procedures included those tasks the researcher completed before the actual collection of data began. The most important of these responsibilities are discussed in the following sections.

Choice of Research Design

Research design serves as a tool by which the investigator obtains answers to research questions and controls variance. Research design involves the overall plan of the research, the structure or outline of the variables involved, and the strategy to be used in the gathering and analysis of the data.

The research design chosen for the present experiment was a semistructured interview schedule research design preceded by the random sampling of participants enrolled in nursing programs at the three (3) area vocational-technical schools. Critical incidents discussed by respondents were content analyzed for motivator and hygiene variables and their effects on these students.

Choice of Sample Participants

Adult women students were randomly selected from those female students enrolled in full-time licensed practical nursing programs at Central Tech Area Vocational-Technical School, Gordon Cooper Area Vocational-Technical School, and Mid-America Area Vocational-Technical School. The sample was drawn from a population of twenty-four (24) adult women students at Central Tech, thirty (30) adult women students at Gordon Cooper, and twenty-five (25) adult women students at Mid-America.

Selection and Development of the Instrument

The instrument suggested for this research was modeled after the Job Attitudes Patterned Interview designed by Herzberg, et al. (1959) for their research in industry. The interviewing technique used by

Herzberg was a semistructured interview in which the interviewer asks specified questions but is free to pursue lines of inquiry suggested during the course of the interview. In conducting the research in industry, researchers elicited responses from employees of specific events during which they felt exceptionally good or bad about their jobs. These critical incidents were analyzed to identify motivator and hygiene variables and their effects.

The interview schedule used in this investigation is similar to the Job Attitudes Patterned Interview. However, the time frame was limited to each students' present educational program, and phraseology in selected items designed to elicit more complete responses or pursue stated responses was changed to make the statements more effective in obtaining the desired data. The final data collection instrument developed for the present study is given in Appendix A.

Conduct of a Pilot Study

To prepare for the dissertation study, the researcher conducted a pilot study. The primary purposes of this preliminary study were to determine possible problems in the data collection instrument selected for the major study and possible problems in coding and analysis of the data collected in the interview. Five (5) adult women students enrolled in the licensed practical nursing program at Moore-Norman Area Vocational-Technical School were interviewed to obtain data for testing the hypotheses stated in Chapter I.

Results of the Pilot Study

In the pilot study a categorical system was developed for

analyzing data collected during the interviews. Results of the study are given in Tables 1, 2, and 3. The primary conclusion drawn from completing the pilot study was the questions related to effects of the high and low job-attitude sequences should be expanded. The interview schedule was altered to reflect this change. The data analysis procedures were deemed acceptable for purposes of the major study.

Interview Procedures

The second area of methods and procedures was the data collection procedures. These activities began when all preliminary procedures were complete and ended when the last interview had been conducted. The data collection procedures are explained in this section.

Every effort was made to establish good rapport with each interviewee. A preliminary statement to each student outlined the project prior to the interview, the confidentiality of the responses was emphasized, and the use of the tape recorder was explained as a way to facilitate the researcher in collection of data.

Each student interviewed was asked to identify a time when she felt exceptionally good or exceptionally bad about the educational program in which she was currently involved. Additional questions were asked during the semistructured interview to encourage the respondent to reflect more fully on attitudes and effects related to these critical incidents. The interview contained one question related to both the high sequence of events and the low sequence of events in which the respondent ranked how seriously the event affected

TABLE 1

Percentage of Each First-Level Factor Appearing in High and Low Attitude Sequences

N = 5

Factor	Percentages [*]	
	High	Low
Work Itself	60	
Achievement	40	20
Recognition	20	
Interpersonal Relations-Supervisors		40
Supervision		40
School Policy		40

* The percentages total more than 100 percent, since more than one factor can appear in any single sequence of events.

TABLE 2

Percentage of Each Second-Level Factor Appearing in High and Low Attitude Sequences

N = 5

Factor	Percentages [*]	
	High	Low
Achievement	60	20
Possible Growth	40	20
Work Itself	40	
Recognition	20	
Fairness-Unfairness		60

* The percentages total more than 100 percent, since more than one factor can appear in any single sequence of events.

TABLE 3

Percentage of Effects of High and Low Attitude Sequences

Effect	High	Low
Performance	40	100
Mental Health		40
Interpersonal Relations	60	100
Attitudinal	80	60
Staying in School	40	60
Career	80	20

her feelings about school. The question allowed a ranking from one (1) having the least effect to twenty-one (21) having the greatest effect. After the first sequence of events was completed, the respondent was asked for a second sequence of events. If she gave a high, she was then asked for a low; or if she gave a low, she was asked for a high. Each interview searched for first-level and second-level factors as well as the effects of these factors.

Data Analysis Procedures

The third major area of methods and procedures was the data analysis procedures. These procedures began when the data collection process was complete and ended when the data had been analyzed and the hypotheses tested.

All interviews were transcribed from the tape recordings onto index cards. For each student interviewed there were two (2) index

cards, one card having student responses to a time when the student felt exceptionally good about school and one card having student responses to a time when the student felt exceptionally bad about school.

All responses were read and broken into thought units. A thought unit was defined as "a statement about a single event or condition that led to a feeling, a single characterization of a feeling, or a description of a single event" (Herzberg, et al., 1959). Each thought unit was typed on a separate index card. These cards were grouped into three categories: first-level factors, second-level factors, and effects. The three categories were divided into subcategories relative to the kinds of thoughts within each major category.

After the categorical scheme was completed, the detailed analysis began. Each sequence of events was coded using categories and subcategories previously devised. The responses were coded by two coders. Differences in coding were discussed and complete agreement was necessary for further analysis.

The data collected through the student interviews was tabulated in numbers of responses relative to the categorical scheme. Responses are presented in percentages according to agreement on motivator and hygiene variables.

CHAPTER V

RESULTS OF THE STUDY

Interview responses of selected adult women students in three area vocational-technical schools were analyzed to determine motivator and hygiene variables and the effects of these variables on the respondents. Results obtained in this study are presented in three parts: (1) the analytic scheme; (2) the factors; and (3) the effects.

The Analytic Scheme

The development of a systematic scheme for the analysis of data consisted of four parts:

- (1) the definition of a sequence of events;
- (2) the identification of first-level factors,
those objective elements or actual situations
in the sequence of events;
- (3) the identification of second-level factors,
those needs or drives of the respondent; and
- (4) the definition of effects of job attitudes.

Definition of Sequence of Events

One goal of the interview schedule was to elicit from respondents sequences of events acceptable for purposes of analysis. The criteria established for evaluation of each sequence of events involved five aspects. First, the sequence of events should relate to an actual incident. There must be an objective situation that could be recognized. Second, the sequence of events must occur during the current enrollment in the nursing program. However, there was an exception to this. One story related to an enrollment one year earlier that was abruptly terminated. This student was now enrolled again in the same program. Third, each acceptable sequence must have a recognizable beginning and ending. Fourth, the sequence must relate to a time when the student felt either exceptionally good or exceptionally bad about school. Fifth, the respondent's good or bad feelings must be an effect of the sequence described and not directly effected by some objective happening unrelated to school.

Identification of First-Level Factors

The material analyzed for first-level factors came from a respondent's answers to the statement, "Think of a time when you felt exceptionally good or exceptionally bad about the education program you are currently enrolled in. Tell me what happened."

First-level factors are actual situations identified in the sequence of events which are strongly related to the respondent's attitudes. These factors help to explain attitudinal changes of the respondents. The factors are defined as they have meaning for this study, and the

following definitions are the ones used for coding purposes.

Recognition. Recognition involves those sequences in which some positive or negative form of recognition was given to the respondent. Recognition came from many sources: school personnel, hospital personnel, patients, or patients' families. Some cases included reward; some included punishment.

Achievement. The definition of achievement includes both the presence and absence of achievement. Sequences referred to successful completion of jobs, failure in jobs, seeing results of work, and not seeing results of work.

Interpersonal Relations - Peers (Students). This category includes characteristics of interaction between the respondent and another student or students. Such stories referred to interaction between students working in the clinical area as well as interaction between students in the mechanics of classroom activities. Respondents mentioned cooperation of the people with whom they worked and their role as a member of the group.

Interpersonal Relations - Supervisors (Teachers). This category is used to identify those instances of interaction between the respondent and a supervisor(s) or teacher(s). Responses involving some specifically mentioned interaction were categorized as follows: friendly relations with supervisor, learning from supervisor, receiving support from supervisor with administration, getting help from supervisor with personal problems, and unwillingness of supervisor to listen to suggestions.

Possibility of Growth. The definition of possibility of growth considers both positive and negative situations. Responses referred to

objective happenings in which the growth in skills or the lack of growth in skills was evident.

The Work Itself. Work itself includes the actual work or elements of the work. Stories which contained specific mention of characteristics of the job such as its varied or creative nature, its difficulty, or the opportunity to do a whole job were coded here.

Working Conditions. Sequences mentioning the amount of work or the physical conditions of work are categorized under working conditions.

Supervision - Technical. This category refers to those incidents in which the supervisor was consistently critical or showed favoritism to certain students while carrying out her supervisory role.

School Policy. This category involves those elements of the school mentioned specifically as the cause of exceptional feelings. Stories referred to those elements of the school involving organization of the work required and policies regarding student behavior.

Identification of Second-Level Factors

The material analyzed for second-level factors came from the answers given by the respondents to the question, "What did these events mean to you?" The answers were analyzed for second-level factors. The respondent was forced to engage in self-analysis to determine her needs and her value system and what in her needs and value system caused her present attitude toward her educational program. Of course, the results and conclusions reached are dependent upon the respondent's ability to analyze herself and verbalize her feelings. This research is primarily dependent upon analysis of verbal answers to questions designed to elicit

thoughtful and insightful answers. The individual respondents naturally have varying abilities to analyze and verbalize their innermost feelings.

The second-level factors and their sub-categories follow:

1. Feelings of recognition
 - a. First-level factors perceived as source of feelings of recognition.
 - b. First-level factors perceived as source of failure to obtain recognition.
 - c. First-level factors perceived as source of disapproval.
2. Feelings of achievement
 - a. First-level factors perceived as source of achievement.
 - b. First-level factors perceived as source of failure.
3. Feelings of possible growth
 - a. First-level factors perceived as leading to possible growth.
 - b. First-level factors perceived as block to growth.
 - c. First-level factors perceived as evidence of actual growth.
4. Group feelings
 - a. Feelings of isolation - social.
 - b. Feelings of isolation - sociotechnical.
 - c. Positive feelings toward group.
 - d. Negative feelings toward group.
5. Feelings of interest or lack of interest in the work itself
 - a. First-level factors leading to interest in performance of the job.

- b. First-level factors leading to lack of interest in performance of the job.
- 6. Feelings of fairness or unfairness
 - a. First-level factors perceived as fair.
 - b. First-level factors perceived as unfair.
 - c. First-level factors perceived as source of feelings of disappointment in others.
- 7. Feelings of pride or shame
 - a. First-level factors as source of feelings of pride.
 - b. First-level factors as source of feelings of shame.

Definition of the Effects of Job Attitudes

The effects of job attitudes are the attitudinal changes resulting from first-level and second-level factors. The material analyzed for effects came from answers to the following questions:

- 1. Did these feelings affect the way you did in school? How?
- 2. Can you give me a specific example of the way in which your performance at school was affected?
- 3. Did what happened affect you personally in any way?
- 4. Did what happened affect the way you felt about school? How?
- 5. Did what happened affect your educational goals? How?
- 6. Did what happened affect your career goals? How?

An analysis of effects revealed four major categories of effects.

A description of the scheme of effects is as follows:

- 1. Performance Effects. This category includes those statements by respondents indicating negative or positive changes in quality or

output of work and statements showing positive changes in rate or amount of time spent in work.

2. Mental Health Effects. Most mental health effects related to tension symptoms. Statements included negative effects of overeating, loss of appetite, loss of sleep, anxiety, headaches, backaches, etc. More positive effects were revealed in statements indicating improvement in tension symptoms.

3. Effects on Interpersonal Relations. Those changes in interpersonal relations with family, friends, supervisors, or classmates are included in this category. Those changes that resulted in an improvement as well as a breakdown in interpersonal relations were coded.

4. Attitudinal Effects. This category was set up to code evidence of changes in attitudes towards the respondent herself, her education, her career, or the school. Both positive and negative statements were incorporated into the scheme.

The Factors

The present study was designed to identify motivator and hygiene variables. These variables are described in terms of first-level and second-level factors gathered from each acceptable sequence of events. Of those students selected for the study: (1) two were unable to identify sequences of events related to exceptionally bad feelings about school; (2) one could not identify a time when she felt exceptionally good about school; (3) one could not recall incidents resulting in either exceptionally good or exceptionally bad feelings about school; and (4) one requested that she not be interviewed. The following

discussion begins with an analysis of the high sequences of events followed by the presentation of results of the low sequences of events.

The High Sequences: First-Level Factors

There were 35 high job-attitude sequences. Table 4 lists each of the first-level factors in the order of its frequency of appearance. These factors have significance in terms of what results in feelings of satisfaction for adult women students.

Achievement appeared more frequently in the 35 high sequences than any other first-level factor. Seventy-one percent of the high sequences referred to achievement as the source of exceptionally good feelings about school. Stories revealed successful completion of the work or some aspect of it and seeing results of work. More than half of the stories identified actual examples of achievements directly related to patient care. There were other stories about successful completion of the work that involved experiences in the classroom or learning laboratory. Achievement plays a significant role in what makes these students happy with their work.

Recognition was the second in the list of first-level factors appearing in high sequences of events. It appeared in more than half of the sequences analyzed. Each one of this group of stories related to praise of the respondent's work. The praise came from school personnel, hospital personnel, patients, or patients' families. Some achievement such as satisfactory patient care, a high grade, capping, or striping often served as the basis for the recognition. One student told of her responsibilities in caring for two particular patients one day early in

TABLE 4

Percentage of Each First-Level Factor Appearing in
High Attitude Sequences

N = 35

Factor	Total [*]
1. Achievement	71
2. Recognition	51
3. The Work Itself	34
4. Interpersonal Relations-Peers	6
5. Interpersonal Relations-Supervisors	6
6. Possibility of Growth	3

^{*} The percentages total more than 100 percent, since more than one factor can appear in any single sequence of events.

the program and then of writing her evaluation of the day's activities. She summed it up by saying, "I wrote my evaluation exactly like it was, and I got a 100 that day. It was like it was the best feeling I ever had in my life."

Another respondent who had experienced failure in the program one year earlier but had now enrolled again told of her capping experience, "I didn't make it last time, but then there I was at capping with the other students and my whole family watching. One of the instructors told me how proud she was of me for coming back and accomplishing what I had. I'm going to make it this time." Praise from a person the

student had come to admire or respect during the program was significant in stories relating to recognition.

Third in the order of frequency of mention was the work itself. It appeared in 34 percent of the high sequences of events. Stories relating to this factor involved certain characteristics of the job: its varied nature, its creative or challenging nature, or the opportunity to do a whole job. Several stories revealed exceptionally good feelings associated with patient care in nursing homes and the opportunity to provide the geriatric patients with emotional and mental support as well as the necessary nursing care.

The three factors described above are the ones which played a significant role in increasing the job satisfaction for the adult women students in this sample. These factors were more closely related to the job itself than the other first-level factors. Recognition, achievement and work itself revolve around the actual doing of the job, one's interest in the job, success in doing the job, and recognition associated with the job.

Interpersonal relations and one's possibility for growth were infrequently mentioned as factors related to exceptionally good feelings about school by the women students sampled. Three first-level factors played no part in the high job-attitude sequences. The working conditions, supervision, and school policy were not mentioned in any of the stories relating to exceptionally good feelings about school. It is significant that these first-level factors which describe the job situation were not instrumental in bringing about high job attitudes.

The importance of recognition, achievement, and work itself was

further evident in the interrelatedness of these factors. Table 5 gives the percentage frequency with which these factors interact with other first-level factors. In those sequences of events involving recognition as a first-level factor, achievement was present in 84 percent of the incidents. Recognition was coded in 64 percent of the stories involving achievement. Therefore, achievement appeared more times without recognition than did recognition appear independently of achievement. Recognition occurred less frequently without accompanying acts of achievement. Achievement interacted more often with work itself than did recognition. That these three highly job related factors interact so frequently with each other as a source of good feelings about the job is significant.

TABLE 5

Interrelationships among Most Frequent First-Level
Factors in the High Attitude Sequences *

	Percentage of Appearance
1. Recognition with achievement	84
work itself	21
2. Achievement with recognition	64
work itself	32
3. The work itself with achievement	67
recognition	33
interpersonal relations-peers	8

* This table gives the percentage frequency with which the factors on the left occurred in sequences in which the factors on the right were also found.

The High Sequences: Second-Level factors

Table 6 lists each of the second-level factors in the order of their frequency of appearance in the 35 high sequences of events. Recognition and achievement were feelings most often associated with an increase in job satisfaction. Respondents mentioned feelings of achievement in describing more than three-fourths of the high sequences. It was the feeling of achievement that adult women students in this sample identified as most frequently activated by the actual sequences. Feelings of recognition were mentioned in 37 percent of the sequences. The work itself and feelings of pride were equally present in 20 percent of the high sequences. The category possibility of growth appeared as a second-level factor quite rarely.

The Low Sequences: First-Level Factors

Table 7 presents the frequencies with which each of the first-level factors appear in the 36 low job-attitude sequences. Those first-level factors appearing most frequently are significant for the understanding of what makes adult women students dissatisfied with their work.

Failure to achieve was mentioned in 26 percent of the stories involving exceptionally bad feelings about school. These low sequences were associated with the respondents' failure to perform successfully a function or procedure in the clinical area or in the learning laboratory.

Second in the order of frequency of mention was working conditions. Almost 90 percent of the sequences describing working conditions referred to the amount of work. Less than 10 percent of the stories identified physical surroundings as the source of exceptionally bad feelings about school.

TABLE 6

Percentage of Each Second-Level Factor Appearing
in High Attitude Sequences

N = 35

Factor	Total*
1. Achievement	77
2. Recognition	37
3. The Work Itself	20
4. Feelings of Pride or Shame	20
5. Possible Growth	6
6. Feelings of Fairness or Unfairness	6
7. Group Feeling	3

* The percentages total more than 100 percent, since more than one factor can appear in any single sequence of events.

TABLE 7

Percentages of Each First-Level Factor Appearing
in Low Attitude Sequences

N = 36

Factor	Total*
1. Achievement	26
2. Working Conditions	22
3. Supervisions	14
4. School Policy	14
5. Interpersonal Relations-Peers	14
6. Recognition	11
7. Interpersonal Relations-Supervisors	8
8. The Work Itself	6

* The percentages total more than 100 percent, since more than one factor can appear in any single sequence of events.

Although school policy was not cited in any high sequences of events, it was a factor in 14 percent of the answers given by respondents when asked about exceptionally bad feelings about school. The sequences were almost equally distributed between those stories referring to faulty organization of schoolwork assignments and policies on student discipline and behavior codes.

Supervision was considered to be an important factor in 14 percent of the low job-attitude sequences. Stories were told of supervisors being consistently critical of students work in the learning laboratory and of supervisors showing favoritism to students who had prior hospital work experience.

Interpersonal relations with peers also accounted for 14 percent of the responses about exceptionally bad feelings about school. Isolation from the group was a significant factor in low job attitudes for the adult women students in this sample.

Recognition was listed sixth in order of frequency of appearance in low sequences of events. All of the stories involving recognition were related to low grades. A supervisor was the source of recognition in each case.

The work itself and interpersonal relations with supervisors accounted for less than 10 percent of exceptionally bad feelings about school. Difficulty of the work described those situations in which work itself was coded in a low sequence.

The interpersonal relations with supervisors was a factor in 8 percent of the low sequences. Stories revealed problems in communications with supervisors resulting in exceptionally bad feelings about school.

Table 8 presents the frequency with which the first-level factors interact with other factors in low attitude sequences. Two satisfiers were present in analyzing interrelationships of first-level factors in the lows. Failure to achieve appeared in 25 percent of the stories in which failure to be recognized was coded as a first-level factor. Achievement, however, was more independent of recognition; recognition was present in only 11 percent of the achievement stories.

Interpersonal relations, supervision, and school policy were the more highly interrelated factors in low sequences. These dissatisfiers describe the job situation and are characteristic of the context in which the job is done rather than descriptive of the actual job itself.

The Low Sequences: Second-Level Factors

Table 9 presents the frequencies with which each of the second-level factors appears in the low stories. The most frequent second-level factor appearing in low job-attitude sequences was a feeling of unfairness. Exceptionally bad feelings were associated with the way the individual was treated as a member of the group, the infliction of certain school policies and codes on her as an adult student, and the lack of concern for her as an individual. These feelings of unfairness were apparent in more than one-half of the low stories.

A feeling of shame was mentioned in 25 percent of the stories involving exceptionally bad feelings about school in the sample of adult women students. Two-thirds of those critical incidents coded feelings of shame revolved around the respondents' failure to complete some aspect of the work required of her.

TABLE 8

Interrelationships among First-Level Factors
in the Low Attitude Sequences*

	Percentage of Appearance
Recognition with achievement	25
Achievement with recognition	11
Interpersonal relations-peers with school policy	20
Interpersonal relations-supervisors with supervision	33
Supervision with school policy	40
interpersonal relations-supervisors	20
School policy with supervision	40
interpersonal relations-peers	20

* This table gives the percentage frequency with which the factors on the left occurred in sequences in which the factors on the right were also found.

TABLE 9

Percentage of Each Second-Level Factor Appearing
in Low Attitude Sequences

N = 36

	Total*
1. Feelings of Fairness-Unfairness	53
2. Feelings of Pride-Shame	25
3. Achievement	22
4. Recognition	11
5. Possibility of Growth	11
6. Group Feeling	8

* The percentages total more than 100 percent, since more than one factor can appear in any single sequence of events.

Achievement appeared in less than one-fourth of the low sequences. Respondents identified feelings of failure in 22 percent of the low stories when asked, "What did these events mean to you?"

High versus Low Job-Attitude Sequences

There are several major differences between first-level factors in high and low sequences (cf. Table 10).

1. The range of percentages among the nine factors was not as large in the lows as in the highs.
2. The basic satisfiers, recognition, achievement, and work itself appeared more frequently in the highs than in the low sequences of events. These factors appeared in as many as one-third of the high sequences.
3. Three factors that directly surround the doing of the job, i.e., working conditions, supervision, and school policy, were mentioned only in stories relating to exceptionally bad feelings about school. These factors played no role in job satisfaction.
4. The differences in the percentages among the factors in the lows was much smaller. Six of the factors in the lows had percentages between 11 and 26 percent.
5. Although achievement ranked highest in both high and low job-attitude sequences, it appeared in almost three times more of the high sequences than in the low sequences.
6. Like achievement, recognition was mentioned in significantly more high stories than low ones.

TABLE 10

Percentage of Each First-Level Factor Appearing in High and Low Attitude Sequences

Factor	Percentage *	
	High	Low
Achievement	71	26
Recognition	51	11
The Work Itself	34	6
Interpersonal Relations-Supervisor	6	8
Interpersonal Relations-Peers	6	14
Possibility of Growth	3	0
Working Conditions	0	22
Supervision-Technical	0	14
School Policy	0	14

* The percentages total more than 100 percent, since more than one factor can appear in any single sequence of events.

7. The work itself appeared in only a negligible number of the low sequences of events. However, it was a significant factor in the highs.

There were several differences in the frequency of appearance of the second-level factors when high and low sequences are compared (cf. Table 11).

1. The most frequent second-level factor appearing in the high stories was achievement. It appeared in more than three times as many sequences involving exceptionally good feelings as compared to those stories of exceptionally bad feelings about school.
2. Feelings of unfairness were mentioned in significantly more low than high sequences. Stories telling of feelings of fairness were rarely mentioned in high job-attitude sequences.
3. Feelings of increased interest in the performance of the job were present in one-fifth of the high stories. No stories about exceptionally bad feelings mentioned this factor.
4. More than three times as many high attitude stories than low attitude stories told of feelings of recognition.
5. In contrast with the highs, there were more feelings of blocks to growth revealed in low sequences than feelings of possible growth in high stories.
6. Like blocks of growth, feelings of isolation were experienced more in low than were positive group feelings identified in high stories.

TABLE 11

Percentage of Each Second-Level Factor Appearing in High and Low Attitude Sequences

Factor	Percentage *	
	High	Low
Achievement	77	22
Recognition	37	11
The Work Itself	20	0
Feelings of Pride or Shame	20	25
Feelings of Fairness or Unfairness	6	53
Possible Growth	3	11
Group Feeling	3	8

* The percentages total more than 100 percent, since more than one factor can appear in any single sequence of events.

The interrelationships of the second-level factors appear in Table 12. A comparison of these relationships revealed differences in second-level factors in high and low sequences.

1. Recognition was most often associated with feelings of achievement in the high sequences. In the lows, it was most frequently interrelated with feelings of shame.
2. The possibility of growth most frequently accompanied feelings of recognition and feelings of achievement in high job-attitude sequences. In contrast, it interacted most often with feelings of unfairness in low-attitude stories.
3. Feelings of unfairness were mentioned in one-third of the low stories coded with feelings of isolation from the group.
4. Feelings of achievement were noted in 43 percent of the incidents involving an increased interest in performance of the job.
5. Eighty-six percent of the high stories describing feelings of pride also mentioned feelings of achievements.
6. Feelings of fairness and group involvement did not interact with any other second-level factors in high job-attitude sequences.

Figure 1 is a comparison of satisfiers and dissatisfiers. Each line indicates the directional effect of the first-level factor on job satisfaction and job dissatisfaction. Achievement, recognition and work itself were major factors in producing job satisfaction for adult women students in this sample. In contrast, the role of achievement, recognition, and work itself had little effect in producing low job attitudes. However, achievement appeared 20 percent of the time in low stories, and recognition was present in 11 percent of the low sequences. This would

TABLE 12

Interrelationship of Each Second-Level Factor to
Other Second-Level Factors*

Factors	Percentage	
	High	Low
Recognition with achievement	92	25
work itself	15	
pride - shame	15	75
fairness - unfairness		25
Achievement with recognition	44	13
pride - shame	22	13
work itself	11	25
Possibility of growth with recognition	50	
achievement	50	25
fairness - unfairness		50
Group feeling with fairness - unfairness		33
Work itself with achievement	43	
recognition	29	
Fairness - unfairness with possibility of growth		11
pride - shame		5
recognition		5
Pride - shame with achievement	86	
recognition	29	33
fairness - unfairness		11

* This table gives the percentage frequency with which the factors on the left occurred in sequences in which the factors on the right were also found.

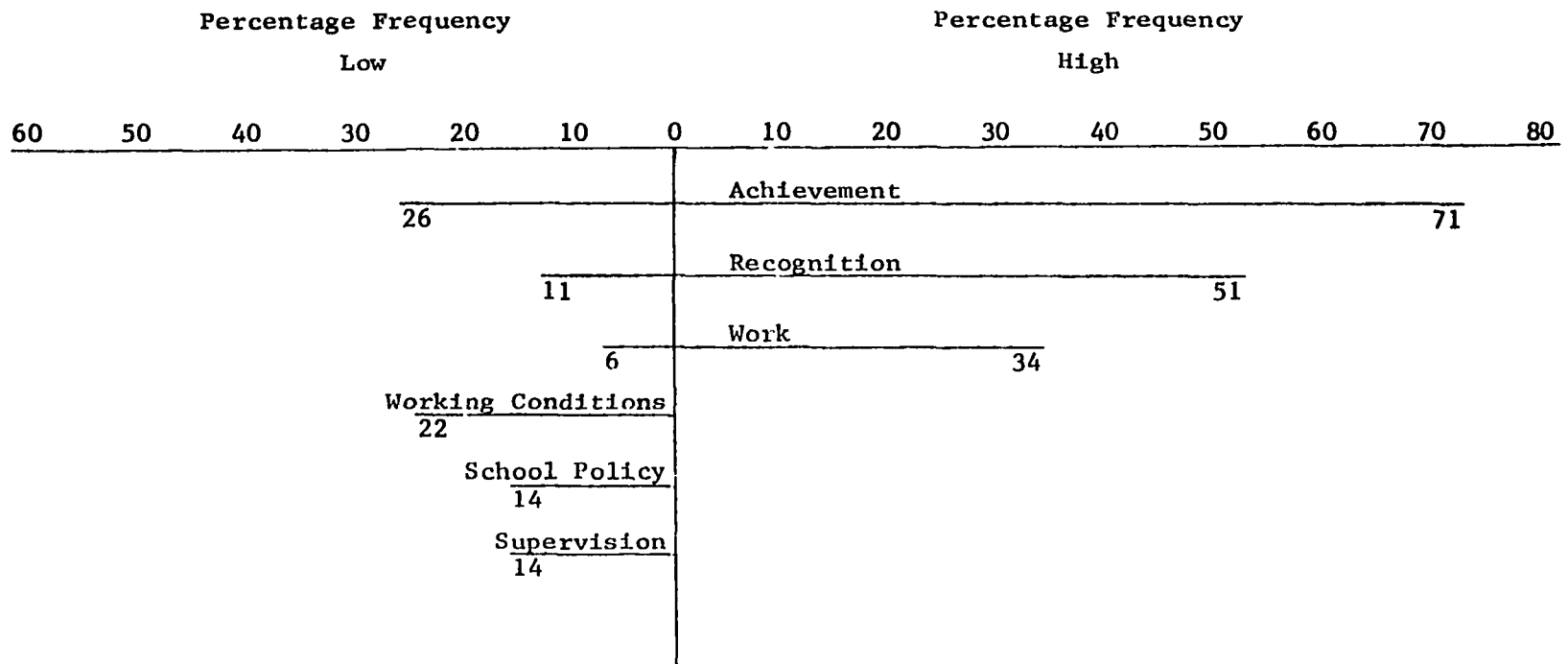


Figure 1. Comparison of satisfiers and dissatisfiers.

indicate that these two factors have a greater role in increasing job satisfaction than in decreasing job satisfaction.

The job context factors, working conditions, school policy and administration, and supervision led to job dissatisfaction for these adult women students. The major job dissatisfiers were not effective in producing positive job attitudes.

The Effects

Respondents told of the effects of the exceptionally good or exceptionally bad feelings. The effects were limited by the nature of the questions asked. The results on effects came from specific questions directed toward certain kinds of behavior. The interview probed for changes in performance of work, mental health, interpersonal relationships, and attitudes. The specific items designed to elicit data on effects can be seen in Appendix A.

The categories established for coding effects is a part of Appendix C. The results on effects are presented in the following sequence: performance effects, mental health effects, interpersonal relations effects, and attitudinal effects. Table 13 lists the effects revealed by this sample of adult women students.

Performance Effects

Respondents reported positive increases in work performance in nearly seven out of every ten of the high stories. Responses concerning the effects of attitudes upon performance included the following statements:

TABLE 13

Percentage of Effects of High and Low
Attitude Sequences

Effect	High N = 35	Low N = 36
Performance	69	50
Mental Health	26	39
Interpersonal Relationships	60	58
Attitudinal	86	75
School	54	47
Education	66	31
Career	40	28
Confidence	60	36

"After that, I really studied. I brought my C average back up to a B . I had been just floating along not doing much of anything, and I really felt like if I was going to be the best benefit to these patients, I had to know a lot more than I did, and the more I knew, the more I could do for them. Working in intensive care really helped me a lot."

"My whole week was ecstatic. We had a performance test on handling equipment, surgical equipment, and I had no difficulty. I felt real secure and I didn't make any mistakes."

"I was more enthused about studying and seeing the end results of what we are doing day by day. I worked harder and related better to the patients as a result."

Statements concerning effects of attitudes upon performance were reported in one-half of the low sequences. Students revealed these changes in performance in the following ways:

"Well, I felt very incompetent, like I wouldn't be able to answer any questions correct after that. I did terrible on the next test."

"I was very depressed; I didn't do something I knew I should. All I could think of was that needle just wouldn't go in. I just couldn't study after that."

"I resented the whole situation. I couldn't study or absorb what I really should have and I felt a strain and I felt closed in. I really resented the whole world, and the school, and yet I was stubborn enough not to quit. But my grades did fall off, and I felt extra pressure from ...

[supervisor]."

And there were those statements revealing an increased determination to perform better as a result of a low sequence. Respondents revealed the following changes in performance of work:

"Well, it had a positive effect on the way I do in school because right now I'm out to prove that, just because I'm slightly different, it does not mean that I am a bad student because I am a good student and I'm working hard to show that I'm going to be a good nurse."

"When I got that grade, I felt really bad, but it made me try a lot harder and spend more time studying so I wouldn't do it again."

"It made me pay more attention to everything. It was good for me that it made me more aware. I had just been playing with ... [the patient] and not paying any attention to my work."

The specificity of the statements varied; however, responses indicated positive or negative changes in: (1) quality or output or work and/or (2) rate or amount of time spent in work. A substantial number of both high and low sequences included performance effects.

Mental Health Effects

There was no evidence of high or low sequences contributing to neurotic or psychotic behavior. The women in this sample told stories identifying tension symptoms or improvements in tension symptoms. More low sequences revealed increases in presence of tension symptoms than did high stories indicate an improvement in tension symptoms.

Interpersonal Relations Effects

Many of the respondents indicated that the high or low sequences which they experienced as students had an effect on their families. Positive or negative effects in interpersonal relationships with families, friends, or classmates were identified. It appeared that these students take the satisfying and dissatisfying aspects of their jobs home with them.

Attitudinal Effects

Queries about attitudinal effects reflected positive or negative changes in attitudes toward school, education, career, or one's self-confidence. Specific items in the interview schedule elicited information regarding (1) attitudes toward school, (2) attitudes toward educational goals, and (3) attitudes toward career goals. Reflections on one's confidence was obtained by spontaneous responses during the interview to any of the questions directed towards factors or effects.

Four of the participants mentioned a change in career goals from that of a licensed practical nurse to a registered nurse. An important factor they associated with this change related to the success they were presently experiencing in the vocational-technical schools.

Students ranked high job-attitude sequences higher on the 1 - 21 criticalness rating scale than low sequences. Stories about exceptionally good feelings averaged 18 compared to an average of 13 for sequences about exceptionally bad feelings.

The major differences between the kinds of attitudinal effects of the high and low sequences were found in more positive feelings toward

one's confidence, educational goals and career goals in the highs. Quantitatively, high positive feelings produced more effects on job attitudes than low feelings.

Comparison of Effects of High and Low Sequences of Events

There were differences in the effects of incidents relating to exceptionally good feelings and exceptionally bad feelings about school.

1. A quantitative difference was evident in effects of high and low job-attitude sequences.
2. Satisfying experiences were more closely associated with positive increases in performance of work than were dissatisfying experiences.
3. More attitudinal effects occurred in high stories than in low stories.
4. Both high and low sequences exhibited significant effects of job attitudes.

CHAPTER VI

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The present study was designed to identify motivator and hygiene variables in a vocational training setting and to analyze the effects of these variables upon adult women students. In conducting the study, the researcher interviewed thirty-six (36) adult women students currently enrolled in licensed practical nursing programs at three (3) area vocational-technical schools.

The respondents identified critical incidents associated with exceptionally good feelings and exceptionally bad feelings about school. The interviews were content analyzed to develop a categorical scheme for identifying factors which cause satisfaction and dissatisfaction and to examine the effects of these satisfiers and dissatisfiers on the students.

To achieve the purposes of the study, four hypotheses were formulated.

- H₁ High sequences of events will stem from different factors than low sequences of events.

H₂ High sequences of events will have different effects than low sequences of events.

H₃ The factors leading to high sequences of events will be intrinsic to the respondent.

H₄ The factors leading to low sequences of events will be extrinsic to the individual.

Major Findings

An analysis of the data produced the following major findings:

H₁ was supported by the results of the comparison of factors in high and low sequences of events. Achievement, recognition, and work itself were highly interrelated and responsible for high sequences of events. Low sequences of events were related to working conditions, supervision, and school policy. Achievement was also a primary factor in low sequences but in a significantly smaller number of low sequences.

H₂ was supported by the results of the comparison of effects of high and low sequences of events. High sequences had a greater effect on performance of work and attitudinal factors than did low stories. Mental health was more greatly affected by low job-attitude sequences.

H₃ was supported by the characteristics of the satisfiers. An analysis of second-level factors indicate that these factors are intrinsic to the individual and relate to the human need for growth and self-actualization.

H₄ was supported by the characteristics of the dissatisfiers. The working conditions, supervision, and school policy are extrinsic to the individual. The essential nature of these variables are extraneous to the individual.

Conclusions

The results of this study do not lead to a detailed program for increased motivation of adult women students. However, certain conclusions and goals seem obvious to the writer.

The various teachers play a major role in the educational lives of their students. The individual instructor is a major source for recognition through the vehicles of praise and grades. The grade received after any particular activity is an interrelated source of achievement and recognition or the lack of either for the student. Students seem to place a great emphasis on grades as a measure of achievement, and the notion that grade level in a particular course is a deep and satisfying accomplishment may be one that instructors should try to dispell.

Insight into the practical effects instructors have upon development of the learning attitudes of students may lead to the development of instructional skills which motivate students. The teacher cannot assume a high motivational pattern in students simply because of the subject matter involved. The instructor must develop the ability to organize the presentation of information and the work load in a realistic manner while recognizing the role of skillful recognition of good work and appropriate rewards in high-level motivation.

Recommendations

The findings and conclusions of this study suggest the following recommendations:

1. Special effort should be made for adult women students to experience achievement, recognition for achievement, and varied and creative schoolwork.
2. Teachers must organize daily activities and assignments in a meaningful way in terms of needs of adult women students.
3. Extra effort should be made to help the adult women students develop beneficial learning attitudes and study habits.
4. School policies and codes should be established in realization of adult women students' ages and maturity levels.
5. Longitudinal studies should be conducted to determine if licensed practical nurses experience the same motivation and hygiene factors as licensed practical nursing students experience.
6. Studies should be conducted to determine if the factors of achievement in a vocational training course are significantly different from factors of achievement on the job.
7. Supervisory practices of vocational-technical instructors should be analyzed to determine if these practices maximize motivation factors while maintaining hygiene factors at an acceptable level.
8. Findings from research on adult male students in area vocational-technical schools should be compared with the results of this study to determine if extrinsic and intrinsic factors are significantly different for male and female students.
9. Studies should be conducted to identify ways to incorporate motivation-hygiene findings into educational program design.

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APPENDIX A

INTERVIEW SCHEDULE

Think of a time when you felt exceptionally good or exceptionally bad about the education program you are currently enrolled in. Tell me what happened.

1. What did these events mean to you? What were your feelings at the time?
2. Did these feelings affect the way you did in school? How?
3. Can you give me a specific example of the way in which your performance at school was affected?
4. Did what happened affect you personally in any way? Did it change the way you got along with people in general or your family? Did it affect your sleep, appetite, digestion, general health?
5. Did what happened affect the way you felt about school? How?
6. Did what happened affect your educational goals? How?

7. Did what happened affect your career goals? How?
8. How seriously were your feelings (good or bad) about school affected by what happened? Pick a spot on the line below to indicate how strong you think the good or bad feelings were.

<u>Least</u>			<u>Average</u>															<u>Greatest</u>		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21

Note: 1 should be used for a sequence that hardly affected your feelings at all; 21 should be used for a sequence that affected your feelings as seriously as the most important events in your school experience.

9. Is there anything else you would like to say about the sequence of events you have described?

For Second Sequence

Now that you described a time when you felt _____ about your school, please think of another time, one during which you felt exceptionally _____ about your school.

APPENDIX B

ANALYSIS OF FACTORS

1. Recognition - first level
 0. Not mentioned.
 1. Work praised - reward given.
 2. Work praised - no reward.
 3. Inadequate work blamed or criticized - punishment given.
2. Achievement - first level
 0. Not mentioned.
 1. Successful completion of job, or aspect of it.
 2. Failure in job, or aspect of it.
 3. Seeing results of work.
 4. Not seeing results of work.
3. Interpersonal relations - peers (students) - first level
 0. Not mentioned.
 1. Cooperation of people worked with.
 2. Was part of a cohesive group.
 3. Was isolated from group.
4. Interpersonal relations - supervisor (teachers) - first level
 0. Not mentioned.
 1. Friendly relations with supervisor.
 2. Learned a great deal from supervisor.
 3. Supervisor did not support her with administration.
 4. Supervisor willing to help with personal problems.
 5. Supervisor unwilling to listen to suggestions.

5. Possibility of growth - first level
 0. Not mentioned.
 1. Growth in skills.
 2. Lack of growth in skills.
6. The work itself - first level
 0. Not mentioned.
 1. Varied.
 2. Creative.
 3. Too difficult.
 4. Opportunity to do a whole job - all phases.
7. Working conditions - first level
 0. Not mentioned.
 1. Too much work.
 2. Poor physical surroundings.
8. Supervision - technical - first level
 0. Not mentioned.
 1. Supervisor consistently critical.
 2. Supervisor showed favoritism.
9. School policy and administration - first level
 0. Not mentioned.
 1. Harmful or ineffective organization of work.
 2. Harmful personnel policies.
10. Recognition - second level
 0. Not mentioned.
 1. First-level factors perceived as source of feelings of recognition.
 2. First-level factors perceived as source of failure to obtain recognition.
 3. First-level factors perceived as source of disapproval.
11. Achievement - second level
 0. Not mentioned.
 1. First-level factors perceived as source of achievement.
 2. First-level factors perceived as source of failure.
12. Possible growth - second level
 0. Not mentioned.
 1. First-level factors perceived as leading to possible growth.
 2. First-level factors perceived as block to growth.
 3. First-level factors perceived as evidence of actual growth.

13. Group feeling - second level

- 0. Not mentioned.
- 1. Feelings of isolation - social.
- 2. Feelings of isolation - sociotechnical.
- 3. Positive feelings toward group.
- 4. Negative feelings toward group.

14. The work itself - second level

- 0. Not mentioned.
- 1. First-level factors leading to interest in performance of the job.
- 2. First-level factors leading to lack of interest in performance of the job.

15. Feelings of fairness or unfairness - second level

- 0. Not mentioned.
- 1. First-level factors perceived as fair.
- 2. First-level factors perceived as unfair.
- 3. First-level factors perceived as source of feelings of disappointment in others.

16. Feelings of pride or shame

- 0. Not mentioned.
- 1. First-level factors as source of feelings of pride.
- 2. First-level factors as source of feelings of shame.

APPENDIX C

ANALYSIS OF EFFECTS

1. Performance effects

- 0. Not mentioned.
- 1. General statements regarding positive change in quality or output of work.
- 2. General statements regarding negative change in quality or output of work.
- 3. Positive changes in rate or amount of time spent in work.
- 4. Specific reports of positive changes in quality or nature of work.

2. Mental health effects

- 0. Not mentioned.
- 1. Loss of sleep.
- 2. Psychological effect of tension (anxiety, loss of appetite, headaches, etc.).
- 3. Improvement in tension symptoms.

3. Interpersonal relations effects

- 0. Not mentioned.
- 1. Positive effects on family.
- 2. Negative effects on family.
- 3. Positive effects on friends.
- 4. Negative effects on friends.
- 5. Positive effects on classmates.

4. Attitudinal effects

- 0. Not mentioned.
- 1. Positive toward school.
- 2. Negative toward school.
- 3. Positive toward education.
- 4. Negative toward education.
- 5. Positive toward career.
- 6. Negative toward career.
- 7. Positive effects regarding confidence.
- 8. Negative effects regarding confidence.