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I am submitting herewith a dissertation written by Ralph David Begley entitled "A Comparison of the Job Satisfaction of Graduates of Vocational Programs and Graduates of Non-Vocational Programs." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Education, with a major in Vocational-Technical Education.

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A COMPARISON OF THE JOB SATISFACTION OF GRADUATES OF VOCATIONAL PROGRAMS AND GRADUATES OF NON-VOCATIONAL PROGRAMS

A Dissertation

Presented for the

Doctor of Education

Degree

The University of Tennessee, Knoxville

Ralph David Begley

August 1985

ACKNOWLEDGEMENTS

The writer wishes to express gratitude and appreciation to Dr. Betty Jean Brown, whose guidance and assistance made this study possible.

Appreciation is also given to the other members of the doctoral committee: Dr. Carroll B. Coakley, Dr. George W. Wiegers, Jr., and Dr. Robert T. Ladd.

The writer wishes to thank Jerry Brenda of the Hyster Company for the opportunity to provide a service to the company.

A special appreciation is given to the writer's mother and father, Magdalene Begley and Melvin Begley, for their encouragement and invaluable assistance throughout his education.

Finally, the writer extends a sincere thanks to his wife, Darlene Begley, for her understanding, patience and encouragement throughout the doctoral program.

ABSTRACT

The problem leading to this study was a need to determine whether or not preparation for an occupation by completion of a vocational program affects job satisfaction.

Three hundred sixty-three employees of a manufacturer of industrial equipment were surveyed using the Job Satisfaction Index developed by Brayfield and Rothe (1951) and demographic questionnaire developed by the researcher. Of the 363 employees surveyed, 349 were included in the study. One hundred fifty-eight of the employees had vocational training, of which 128 graduated from high school and also graduated from a vocational program. One hundred fifty-six of the 191 employees who had not had vocational training graduated from high school. Analysis of variance was used to determine whether there was a significant difference in the job satisfaction among the groups. If a significant difference was found among three or more groups, Duncan's multiple range test was used to determine which groups differed significantly.

There was no significant difference in job satisfaction between vocational graduates and non-vocational graduates. However, vocational graduates who were working in the vocational area in which they were trained were more satisfied than vocational graduates not working in the vocational area in which they were trained.

The job satisfaction of employees did not differ as a result of the type of program from which the employees received their

training or the level of education completed. There was no interaction between the level of education completed and the type of program from which the employees graduated.

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CHAPTER I

INTRODUCTION

Many authors have expressed concern with the productivity of workers in the United States. Some have predicted the next generation will be the first generation in the United States to be less well off from the preceding generation as a result of decreased productivity. In an article in a 1982 Journal of Small Business Management the authors warned:

> With inflation raging and foreign goods flooding the United States' market, the new battle cry is that we must raise productivity to stop inflation and to be competitive in the world market (Kohl, Benedit, and Gerardi, 1982, p. 56).

The productivity of American workers has been of concern to researchers for several years. Since the productivity of a nation is related to the level of skill of its citizenry, vocational education serves a vital role in providing training. The report of the Panel of Consultants gave as one of the standards and objectives:

> The size and scope of the vocational education program should meet the qualitative and the quantitative needs of the Nation for training workers, in a time of rapid technological changes, economic growth, and international challenge (Education for a Changing World of Work, 1963, p. 66).

The responsibility of education does not stop with the requirements of the nation. "Every citizen should have the opportunity to attain occupational competencies compatible with his abilities and interests" (p. 66).

In a review of job attitude research by Herzberg, Mausner, Peterson, and Capwell (1957), positive job attitude was found to be related to higher production, lower rates of absenteeism, lower on-the-job accidents, and psychosomatic illnesses. All these factors contribute to increased national productivity.

Vocational education should provide the skills and competencies required for the individual to succeed in the occupational area desired by the individual. Lofquist and Davis (1969) in relation to their Work Adjustment Theory stated:

> If the individual fulfills the requirements of the work environment, he is defined as a satisfactory worker. If the work environment fulfills the requirements of the individual, he is defined as a satisfied worker (Lofquist and Davis, 1969, p. 46).

The worker must have the skills necessary to fulfill the requirements of the work environment of the job that fulfills his/her requirement.

The individual must correspond with many environments. The correspondence between the individual and any one environment may affect the individual's correspondence with other environments. The economy, as a factor influencing some environments in which the individual must correspond, may affect the individual's ability to correspond in other environments.

Environments change constantly, and the individual must change in order to maintain correspondence in the environments. When unemployment is high, the individual may adjust more rapidly to the work environment. Conversely, when unemployment is low, he/

she may adjust more slowly. Preparation for employment may be a factor that influences workers significantly in their adaptation to their work environments. Adequate skills and competencies provided by that preparation can contribute to satisfaction with the work situation.

Statement of the Problem

Workers who have prepared for an occupation by completing a vocational program may have a different orientation toward work than those who have not completed such a program. If vocational preparation in the form of an organized program is a significant factor in job satisfaction, such programs as those offered by comprehensive high schools, area vocational schools, technical institutes, two- and four-year colleges, and adult education programs have an important role in preparing workers. The problem leading to this study was a need to determine whether or not preparation for an occupation by completion of a vocational program affects job satisfaction.

Purpose of the Study

The major purpose of this study was to determine whether there was a significant difference between the job satisfaction of graduates of vocational programs and the job satisfaction of graduates of non-vocational programs.

Statement of Hypotheses

Differences in job satisfaction were measured by the Job Satisfaction Index (Brayfield and Rothe, 1951). The following hypotheses were tested for differences between the two groups of employees included in this study.

1. There is no significant difference between the job satisfaction of employees who graduated from a vocational program and the job satisfaction of employees who graduated from a non-vocational program.

2. There is no significant difference between the job satisfaction of vocational graduates who were employed in the vocational area in which they received vocational training and the job satisfaction of vocational graduates who were not employed in the vocational area in which they received vocational training.

3. There is no significant difference in the job satisfaction of the employees according to the length of time they had been employed.

4. There is no significant difference between the job satisfaction of employees who received their vocational training from (a) comprehensive high schools, (b) private business schools, (c) two-year post-secondary schools, (d) area vocational schools, and (e) adult education programs.

5. There is no significant difference in the job satisfaction of employees grouped according to their feelings about current economic conditions.

6. There is no significant difference in the job satisfaction of employees grouped according to their expectations of the job as a result of their training.

7. There is no significant difference in the job satisfaction of employees grouped according to the highest level of education completed.

8. There is no significant difference in the job satisfaction of vocational graduates and the job satisfaction of non-vocational graduates according to the highest level of education completed.

Definition of Terms

These terms were used throughout the report of this study.

1. Vocational education--Training in an academic setting which provides skills training and competencies in a specific occupational cluster.

2. Non-vocational education--Academic programs which do not have the major objective of offering skills training and competencies in a specific occupational cluster.

3. Job satisfaction--Job satisfaction and job attitudes are used interchangeably in this paper. "Both refer to affective orientations on the part of individuals toward work roles which they are presently occupying" (Vroom, 1964, p. 58).

4. Job Satisfaction Index--An instrument for measuring job satisfaction developed by Brayfield and Rothe (1951). The

instrument requires participants to respond on a five-point scale to items related to their satisfaction with their work setting.

Limitations and Delimitations

This study was limited to the extent that the participants responded to the items on the questionnaire in the manner which would express their feelings or attitudes about their jobs. In addition, the respondents must be capable of making judgments as to which response best described their feelings or attitudes about their jobs.

Another limitation to this study, in connection with the use of a questionnaire as an instrument to collect data, was that people often respond to items on a questionnaire in a manner which they perceive as being socially acceptable. Their responses may have not expressed their actual feelings about their jobs. Respondents to questionnaire items often avoid the extreme choices. The central choices may or may have not expressed their real feelings about the items on the questionnaire.

Not all individuals who were asked to respond to the items on the questionnaire returned a completed form. Therefore, the study was limited to the extent that the population as a whole was represented by the respondents.

This study did not attempt to study job satisfaction or attitudes as determined by any of the existing theories or

classifications of factors. The study used an established job satisfaction survey with high reliability.

The population used in this study was assumed to be representative of vocational and non-vocational graduates of programs in the educational institutions or programs cited.

The data gathering instrument, the Job Satisfaction Index (Brayfield and Rothe, 1951), was assumed to be valid for this study. The product-moment correlation coefficient between Hoppock's (1935) job satisfaction survey and the instrument was .92. The split-half coefficient for the instrument has been reported to be as high as .87. Therefore, data about job satisfaction furnished by respondents was judged as representative of their attitudes toward their work.

CHAPTER II

REVIEW OF THE LITERATURE

A review of the literature was broken down into two sections. The first section was concerned with job satisfaction in general. This section dealt with the history of job satisfaction and the use of attitude survey instruments. The second section dealt with job satisfaction with regard to vocational education. The review of the literature did not reveal a study specifically dealing with the problem studied in this investigation.

Major Theories of Job Satisfaction and Motivation

Frederick Winslow Taylor (1947) developed a management system known today as Scientific Management. This system was task oriented, so he called it the "task system." Taylor identified managers' duties as these:

> 1. To develop a science for each element of man's work . . .
> 2. . . . scientifically select and then train, teach and develop the workmen . . . . .
> 3. To cooperate heartily with the men so as to insure all the work being done is in accordance with the principles of the science which has been developed.
> 4. To insure there is an almost equal division of work and responsibility between management and the workmen (Taylor, 1947, pp. 36-37).

Taylor viewed the workman as the economic man; that is, the workman would perform the tasks in accordance with the economic reward associated with that performance. Another idea behind Taylor's

Scientific Management was specialization. Jobs were to be broken down into the simplest elements so workmen did not have to think about the entire job. Taylor's Scientific Management ignored the workers' job satisfaction and concentrated on production. The attitudes of the workers were not taken into account. The task was viewed as the key to increased productivity.

During the five-year period from 1927 to 1932, Elton Mayo conducted studies at the Hawthorne operations of Western Electric Company in an attempt to determine what made employees productive (Dowling and Sayles, 1971). These studies produced voluminous amounts of material and data. One of the studies often referred to as the relay worker's study was a study of five women assembling telephone relays. The five women were placed in a room where environmental conditions such as light, temperature, and humidity could be controlled. The setup also permitted and encouraged feedback from the workers, and the workers were allowed to set their own production quotas. They were encouraged to talk about their jobs. Each change was timed and production measured.

The results of each change was increased productivity. Changes in environmental conditions were not the causes of the increased productivity. The changes in productivity were a result of the fact that the workers were being recognized. Dowling and Sayles concluded:

> It was difficult, after Hawthorne, to view the rank-and-file employee as a pure economic being, to maintain that optimum output was a function of an appropriate wage scale with a minor assist from good physical working conditions (Dowling and Sayles, 1971, p. 7).

Basic Needs Theory

Maslow's (1954) theory, known as the "needs theory," is based on a hierarchy of human needs which begins with the lowest level of physiological needs and progresses to safety needs, belongingness and love needs, esteem needs, and the need for self-actualization. The individual is first motivated by the lower-level needs. Physiological needs must be met before safety needs motivate the individual. Safety needs must be met before belongingness and love needs will motivate the individual. The belongingness and love needs must be met before the self-esteem needs motivate the individual. In turn, self-esteem needs must be met before self-actualization needs motivate the individual. The lower needs need not be completely met in order for the next higher level need to motivate the individual. Maslow believed that "in fact, most members of our society who are normal are partially satisfied in all of their basic needs at the same time" (Maslow, 1954, p. 100). Examples of the five levels of needs are:

1. Physiological needs--Hunger, thirst, and sleepiness are needs which motivate the individual to behave in a manner that will satisfy the need.

2. Safety needs--The presence of a threat to one's physical well-being triggers a safety need. The individual will attempt to alleviate the treat. "The healthy, normal, fortunate adult in our culture is largely satisfied in his safety needs" (Maslow, 1954, p. 87).

3. Belongingness and love--Once physiological needs and safety needs have been satisfied, the individual ". . . will hunger for affectionate relations with people in general, namely, for a place in his group, and he will strive with great intensity to achieve this goal" (Maslow, 1954, p. 89).

4. Esteem Needs--Individuals need to have a high evaluation of themselves for self-respect or self-esteem and for esteem from others. Some of these needs are strength, achievement, adequacy, mastery, and competence. In relation to these needs is a second group: prestige, status, recognition, attention, and importance.

5. Need for Self-Actualization--"Even if all these needs are satisfied, we may still often (if not always) expect that a new discontent and restlessness will soon develop, unless the individual is doing what he is fitted for" (Maslow, 1954, p. 91). This need refers to the individual's desire to become what the individual is capable of becoming. "What a man can be, he must be" (Maslow, 1954, p. 91).

Motivational-Hygiene Theory

Herzberg (1967) developed the Motivational-Hygiene Theory. Human needs are classified into two categories: satisfiers are motivation factors and dissatisfiers are hygiene factors.

The satisfiers "seem to describe man's relationship to what he does: his job content, achievement on a task, recognition for task achievement, the nature of the task, responsibility for a

task, and professional advancement or growth in task capability" (Herzberg, 1967, p. 74).

The dissatisfiers ". . . describe his relationship to the content or environment in which he does his job" (Herzberg, 1967, p. 67). According to Herzberg, "the major dissatisfiers are company policy and administration, supervision, salary, interpersonal relations, and working conditions" (Herzberg, 1967, p. 74). Hygiene factors can lead to unpleasantness. The changes necessary to alleviate unpleasantness will not motivate the employee but will avoid dissatisfaction. Motivators fulfill the human need for growth and self-actualization or achievement. The factors which allow the individual to grow and achieve are distinctly different from the factors of the job environment.

Herzberg (1967) described the two sets of factors as being in two completely different dimensions. An analogy used to illustrate the difference is the difference between vision and hearing. To increase the volume of sound will enable an individual to hear the sound better but will have no effect on sight.

Valence-Instrumentality Expectancy Theory

Vroom (1961) developed the Valence-Instrumentality Expectancy Theory. The Valence-Instrumentality Expectancy Theory by Vroom concerning job satisfaction was defined in this way:

> The valence of a job to a person performing it is a monotonically increasing function of the algebraic sum of the product of the valences of all other outcomes

> and his conception of the instrumentality of the job for the attainment of these other outcomes (Vroom, 1964, p. 279).

A person's job is directly related to the extent to which his/her job is instrumental in the attainment of outcomes valued by the person. A person's job satisfaction will increase as the valued outcomes of the job perceived by the person increases.

Theory of Work Adjustment

Lofquist and Davis (1969) formulated the Theory of Work Adjustment. The basic assumption of this theory is "each individual seeks to achieve and maintain correspondence with his environment" (Lofquist and Davis, 1969, p. 45). Correspondence implies a mutually complimentary relationship between the individual and the individual's environment. The individual may have several environments in which to correspond--home, school, work and others. The correspondence achieved and maintained in one environment may affect the correspondence achieved and maintained in other environments.

Correspondence in the work environment ". . . can be described in terms of the individual fulfilling the requirements of the work environment and the work environment fulfilling the requirements of the individual" (Lofquist and Davis, 1969, p. 45). The individual corresponds with the work environment with the skills the individual possesses. The work corresponds with the individual with certain rewards such as wages, prestige, and co-workers relationships. Since both the individual and the work environment are constantly changing, the individual must constantly adjust to the

changing environment in order to maintain the correspondence. The process of adjustment to the work environment is called the "work adjustment." "Satisfactoriness is an external indicator of correspondence" (Lofquist and Davis, 1969, pp. 46-47). The degree of job satisfaction is an indicator of the success of the individual in achieving and maintaining correspondence with the work environment.

As evidenced by the reviews of job attitudes by Herzberg, Mausner, Peterson, and Capwell (1957), Brayfield and Crockett (1955), and Roberts (1958), researchers are not in total agreement as to the factors and classification of factors affecting job attitude. Herzberg et al. (1957) identified ten major factors as a result of reviewing 345 studies. The factors were: intrinsic aspects of the job, supervision, working conditions, wages, opportunity for advancement, security, company management, social aspects of the job, communication, and benefits.

Maslow (1943) classified the factors of motivation according to human needs. Maslow's classification of human needs began with the lowest level needs, those required for the organism to exist, and continued to the highest level, self-actualization. Vroom (1964) considered, as determinates of job satisfaction, the following classifications: supervision, work group, job content, wages, promotional opportunities, and hours worked. Herzberg, Mausner, and Snyderman (1959) identified elements which contribute to the workers' good or bad feelings about the job: (1) recognition, 2) achievement, (3) possibility for growth, (4) advancement, (5) salary,

(6) interpersonal relations, (7) supervision-technical, (8) responsibility, (9) working conditions, (10) work itself, (11) company policy and administration, (12) factors in personal life, (13) status and (14) job security.

Further, many researchers have studied the relationship of job satisfaction to workers' behavior. Herzberg et al. (1957) found that job attitude was related to productivity, absenteeism, accidents and illnesses. The relationship of job attitude and productivity was found to be positive. That is, workers with positive job attitudes had higher production. Workers with negative job attitudes had higher rates of absenteeism than workers with positive job attitudes. It was found in the review that negative job attitude was associated with higher rates of accidents and psychosomatic illnesses.

Brayfield and Crockett (1955) did not find a relationship between job attitude and productivity in their review of job attitude. This review did not cover the same studies as Herzberg et al. (1957).

Vocational Versus Non-Vocational Preparation

The primary purpose of this study was to compare the job satisfaction of employees who have had vocational training with the job satisfaction of employees who have not had vocational training. A review of the literature did not reveal a study which specifically compared the job attitudes of employees who had previously had vocational training with the job attitudes of employees

who had not had vocational training. Ruebens (1974) implied the lack of such information when she said, "To the extent that one can rely on individual opinions, high school vocational graduates seem to be somewhat more satisfied . . ." (Ruebens, 1974, pp. 25-27).

The review of literature included follow-up studies of vocational programs which reported on the job satisfaction of former vocational students. Some of the follow-up studies of both vocational and non-vocational graduates did report a comparison of job satisfaction as one of the items in their study. The follow-up studies were not designed for the specific purpose of collecting employee attitude data and comparing the results from former vocational and non-vocational students.

The Conroy and Diamond Study

Conroy and Diamond (1976) reported on a six-year study on the impact of secondary occupational education programs on the lifestyle of Massachusetts students. The findings reported in the study were sex bias; comparison of earnings of occupation and non-occupational students; earnings of trade and industrial students compared with earnings of other students; comparison of the length of employment of students; a comparison of labor market experience of students; how students acquired their first job; students obtaining jobs related to training; comparison of the activity of occupational students with non-occupational students in local, state, and national elections; comparison of the attitudes of occupational

students with the attitudes of non-occupational students toward their high school experience and their job; and the relationship of grade point average, attendance, and length of enrollment in occupational programs to earnings.

The findings, based on weighted population samples, included job satisfaction. The findings on job satisfaction showed categories of "very satisfied," "satisfied," and "dissatisfied." Fifty-nine percent of the occupational students responded to "very satisfied" while 52% of non-occupational students were very satisfied. Conroy and Diamond (1976) reported the differences were significant.

From the data gathered, Conroy and Diamond (1976) were able to determine that more non-occupational students attended post-secondary schools than did occupational students. The findings showed that 81% of non-occupational students attended post-secondary schools, while 48% of occupational students attended post-secondary schools.

This study was designed to determine the impact of occupational education on the students and not a study designed to determine whether occupational students were more satisfied with their job than non-occupational students. The finding concerning job satisfaction was that occupational students expressed a stronger positive attitude toward their jobs than did non-occupational students.

The Sewell Study

Sewell (1974) conducted a cost-benefit study of vocational-technical education at Southeast Wisconsin Vocational-Technical Institute. Data were collected from graduates of the accounting clerk program, the business administration-accounting program, and persons who applied and did not attend the program. One of the variables compared in this study was job satisfaction. Sewell (1974) reported the graduates were more satisfied with their present jobs than the non-attenders.

The Mertens Study

Mertens (1981) conducted a study which was published in 1981 that identified, categorized, and summarized all the studies on the effects of vocational education on its participants. The study was limited to those reported from 1968 to 1979.

The researcher screened nearly 1500 titles for studies that were relevant and for studies that met specific research methods. The criteria for the research studies were:

> . . . had a sample size over twenty-five, included an adequate description of its methodology, had a response rate of 40% or more (or the researcher reported on non-respondents), and included some standards of comparison (e.g., vocational vs. nonvocational students) (Mertens, 1981, p. 2).

The category of employment included unemployment rate, training-related placement, earnings, employee satisfaction, and employer satisfaction with the vocational graduates.

Based on eleven state and local studies which compared vocational and non-vocational high school graduates' employment, Mertens found that the results suggested the employment rate for vocational graduates upon graduation was higher than the employment rate for non-vocational graduates.

Some of the studies indicated that male vocational education graduates did not have a labor market advantage over the male non-vocational graduates. However, the female vocational graduates did have less unemployment than the female non-vocational graduates.

Two comparative studies of participants at the post-secondary level revealed that post-secondary vocational education graduates had less unemployment than individuals who had no post-secondary training or who were enrolled in non-vocational education post-secondary programs.

At the secondary level Mertens found there was a difference in the employment rate of vocational graduates from different program areas. However, there was no difference in the employment rate of post-secondary graduates from different program areas.

Mertens found 88 studies which reported the percentages of secondary vocational students who were employed in the occupational area in which they received training. Twenty-two of the studies reported over 50% of vocational students were employed in the occupational area in which they were trained. Forty-eight of the studies reported over 70% of vocational students were employed in the occupational area in which they had received training.

On the post-secondary level Mertens found 14 studies which reported 62 different percentages on employment in the occupational area in which the students were trained. Fifty-seven of the percents were greater than 50% and 49 were over 70%.

Mertens surveyed studies which reported on the graduates' satisfaction with their jobs and satisfaction with their training. One of the most frequently found subjects in the follow-up studies was job satisfaction. It was almost unanimously agreed that vocational students were satisfied with their jobs.

On the issue of students' satisfaction with their training, Mertens found that 80-90% of the secondary students were satisfied with their training. The majority of the post-secondary students indicated they were satisfied with their training.

The Bice and Brown Study

In the fall of 1972, Garry Bice and Ralph Brown began to collect specific data about vocational-technical education in Tennessee. An update form was administered again in January of 1973 to collect data from students entering vocational-technical education programs for the second semester. Another update was administered in May of 1973. The researchers felt that virtually every teacher and student of vocational-technical education in Tennessee was represented. In the fall of 1973, each teacher was asked to supply more information.

The various delivery systems had a total of 163,084 persons enrolled in secondary, post-secondary, and adult programs in

vocational-technical education. Of this number 11,447 secondary students were available for placement and 7,182 of them were employed full-time in fields related to their training. The adult programs had 6,243 students available for placement and 5,286 were placed in an area related to their training.

These data were collected on students for the 1972-73 school year. It was assumed the data on placements in areas related to training came from teachers in the fall of 1973. The number of placements in related areas may have been higher if more time had transpired between completion date and the follow-up.

This report did not deal with job satisfaction and dealt only with vocational-technical education students. Therefore, no comparison could be made between vocational and non-vocational or job satisfaction.

The Bowlby and Schriver Study

In a study by Bowlby and Schriver which was published in 1969, it was reported that vocationally trained workers had higher mean labor force participation and higher mean occupational mobility.

The study utilized an experimental group, persons who had training in Tennessee Area Vocational-Technical Schools, and a control group, cohorts specifically matched to individuals of the experimental group. The vocational-technical education trained group averaged one year of training. The control group had not received any additional training.

The data were collected using a mail-out questionnaire designed for that specific purpose. There was about a 70% return rate after a follow-up. The returns resulted in 129 matched pairs, of which 58 matched pairs were determined to be usable.

The result showed that vocationally trained individuals had fewer total non-work weeks, fewer non-participation weeks, and fewer unemployment weeks than did the non-vocationally trained individuals. The vocationally trained individuals had higher occupational mobility than did the non-vocationally trained workers.

This study did not deal with job satisfaction, delivery systems, length of employment, or different levels of education. However, it indicated that vocationally trained persons were positively affected by their training in the labor market.

The Carter Study

Edith H. Carter, Director of the Office of Institutional Research of New River Community College, Dublin, Virginia, conducted a follow-up study of the 1974 graduates of the college's occupational-technical programs. The data were collected by mailing questionaires to each of the 237 graduates, of which 167 were returned. The questionnaire was designed to collect data that would allow the researcher to:

1. Identify the present status of the graduates including their educational status.
2. Determine employment opportunities, salary and placement of the graduates.
3. Evaluate the college program (Carter, 1974, p. 9).

The results of the survey showed a total of 71% of the graduates were employed in occupational areas which were at least somewhat related to the areas in which they received their training. Eight percent of the graduates were employed in unrelated areas.

In the section of the study dealing with the graduates' evaluation of the college program, over 40% of the graduates rated their college program as excellent. Another 49% of the graduates rated their college program as good.

The Clark Study

Clark conducted a follow-up study of Maple Woods Community College, Kansas City, Missouri occupational graduates from 1970 through 1974. The purpose of the study was to follow up the graduates of the disciplines of aviation, electronics technology, secretarial science, business administration, and administration justice.

The data were gathered using a questionnaire designed to gather information about:

1. Appropriateness of the course of study to the work situation.
2. Work history including the number of years/months at the present job and the number of jobs prior to the present job.
3. The name and address of the present employer and supervisor.
4. The nature of the work.
5. Ways the course of study could be improved (adding courses, topics, changes of emphasis, or addition of emphasis).
6. Salary ranges.
7. Use of college placement services, provided they are available for employment.
8. If not employed, whether the respondents were available for employment.

9. Whether the respondents were in the Armed Services (Clark, 1975, pp. 4 and 5).

Clark found that 81% of the graduates were employed in an occupational area related to the area in which they received their training. Sixty-one percent of the graduates had been in the same job since graduation.

In response to the section of the questionnaire about the course work, 29.1% of the graduates reported the course work was excellent and 43.3% reported the course work was good. A total of 72.4% rated the course work as good or better.

The Creech, Freeberg, Rock, Wilson and Young Study

Creech et al. (1972) conducted a study of 18,000 high school seniors prior to graduation. The data for the study were collected by using questionnaires and academic records from the schools. Again 18 months after graduation, the students were contacted and given a second questionnaire.

Of the total students responding to the second questionnaire, 29% of the class of 1972 indicated they had received vocational training while attending high school. Sixty percent of these students indicated they had made use of the training. Seventy-one percent of the students who had had vocational training indicated they had been able to use most of what they had learned in the training.

In comparison of the job satisfaction of vocational graduates with the job satisfaction of graduates of other curricula, Creech and others concluded that graduates of the vocational curriculum were

more satisfied with their jobs. When the job satisfaction of males and females was compared, females were more satisfied than males. Creech offered as a possible explanation for this condition that females who have worked in an office environment may be more satisfied than the males who experienced more adverse working conditions. This study was designed to compare postsecondary and educational outcomes of the 1972 high school class.

The Davison Study

Three years following the June 1965 graduation of the community colleges of City University of New York, Davison conducted a follow-up study of 925 of the graduates. The follow-up study used a mail-out questionnaire which had a 47% return rate.

Fifty-three percent of the respondents had been in other classes since graduation. Some of these respondents were in four-year college programs. In addition, 20% had completed a baccalaureate degree and 10 of these were enrolled in graduate school.

At the time of the follow-up, 350 of the respondents were employed. Of this group, 80% were working in an occupational area directly related to their occupational training.

Immediately upon graduation, 298 took jobs. Almost 90% of these jobs were directly related to the graduates' area of occupational training. At the time of the follow-up, almost half of the respondents had held only one job, while about one-third had held only two jobs.

This follow-up study did not address the subject of job satisfaction. The subjects of the study were such that no comparison of vocational and non-vocational graduates could be made since all the subjects were graduates of occupational education programs.

The Eninger Study

Eninger (1972) conducted a survey of the class of 1970 graduates of vocational education from major cities in the United States. For the purposes of this study, cities with a population of 250,000 or more were classified as major cities. In 1970, there were 56 such cities. The study used 22 of these cities. From the 22 major cities, there were 34,710 vocational graduates surveyed. Of this group, there were over 15,000 questionnaires returned (Eninger, 1972).

The graduates were asked about the relation of their present job to their vocational course of study. Of the 38% who were employed full-time, 22% were employed in the same occupational area as their vocational course of study.

When questioned about the reason for not being employed in the occupational area in which they received their training, the following choices were given:

1. Tried, but could not find a job.
2. Did not feel sufficiently qualified.
3. Decided I did not like type of work.
4. Found out pay was too low.
5. Too little opportunity for advancement.
6. Better type job came along first.
7. Never really planned to do so.
8. Reasons other than above (Eninger, 1972, p. 3-93).

In response to a question about the adequacy of their vocational course of study for their present job, more than 95% rated their training good and excellent.

The Felstehausen Study

Felstehausen et al. (1973) conducted a study of the occupational alumni from 102 Illinois high schools. The participants were graduates in 1970. The data were collected using a mail-out survey, and collection involved three mailings. The first mailing was a packet containing a cover letter from the local school district, a questionnaire, and a stamped envelope. The second mailing was a reminder postcard sent 10 days after the first mailing. The third mailing was another cover letter from the local school district, a questionnaire, and a stamped envelope. The mailings yielded a 46.6% rate of return. Of the total 12,021 graduates 5,203 usable responses were received.

The questionnaire used to collect the follow-up data contained one item in which the respondents were to indicate their feelings about their job. The respondents could choose one of five responses:

1. I like it very much.
2. I like it.
3. It's OK.
4. Not what I'd hoped.
5. It's awful (Felstenhausen et al., 1973, p. D-6).

Felstehausen et al. reported, "Thirty-six percent of the respondents indicated very high job satisfaction, 31.4% indicated high

job satisfaction, and 23.8% indicated moderate job satisfaction" (Felstehausen et al., 1973, p. 38). Only 7.7% of the respondents were dissatisfied with their jobs.

The study revealed that 23% of the employed respondents were employed in an occupational area related to the occupational area in which they received their training. This study did not collect data on non-occupational graduates. Therefore, no comparison of job satisfaction could be made between vocational (occupational) and non-vocational graduates.

The Kaufman and Lewis Study

Kaufman and Lewis (1972) conducted a study which compared two groups of high school dropouts who came back to school to further their education. One group was in a general education program which led to a high school diploma. Another group was in a program that offered job skills training in three vocational areas. The dropouts could choose either the general education program or one of the three job skills areas. The group that received job skills training was compared with two other control groups. One control group was high school graduates of 1966. Another control group was made up of high school dropouts who were not in either the general education program or the job skills training program. The high school graduates were made up of two groups, vocational and non-vocational graduates.

The researchers completed a follow-up study in which job satisfaction was one of the areas on the survey. The respondents

were to indicate on a scale from one to seven, one being low satisfaction and seven being high satisfaction, how they felt about different areas of their job: work, pay, hours, supervision, opportunity, co-workers, and respect.

The study revealed, "Usually, co-workers or people's respect for the job ranked highest in satisfaction while opportunities for promotion ranked last" (Kaufman and Lewis, 1972, p. 56). The general education group and the high school graduate group differed from the other groups in the area of respect people had for their job. The researchers concluded, "In general, there were few differences among groups and the subjects seemed to be the most satisfied with those aspects of their jobs that were not directly related to the nature of their work but instead of a personal or social nature" (Kaufman and Lewis, 1972, p. 59).

The Richardson Study

Richardson (1975) conducted a survey to determine what factors were associated with the earnings of Indiana high school vocational graduates. The study randomly selected 25 schools which offered at least three occupational programs for the 1972-73 school year. From the schools, 1000 graduates were selected.

The data were collected using a mail-out questionnaire with three other follow-ups over a period of eight weeks. Four mailings yielded a 68% usable return rate.

The study revealed that the vocational graduates who liked their jobs earned significantly more than those vocational graduates

who disliked their jobs. In relation to job relatedness, there was no significant difference between the earnings of those vocational graduates who were employed in an occupational area which was related to the area in which they received their training.

This study was geared to looking for variables which affect earnings of vocational graduates. The comparisons were made of earnings with no comparisons of job satisfaction with other variables.

The Tarr and Lewis Study

Tarr and Lewis (1977) conducted a follow-up study of the physically handicapped graduates in Pennsylvania for the years 1973 through 1976. The research utilized two groups of handicapped graduates. One group was the graduates of the vocational institutions of Pennsylvania. The control group was the graduates of general education programs. The study included the areas of job relatedness and job satisfaction with the first full-time job. A total of 52% of the vocational graduates and 53.7% of the general education graduates indicated their first full-time jobs were not related to their training. The researchers concluded, ". . . that in most cases occupational training was not at all related to first regular full-time jobs" (Tarr and Lewis, 1977, p. 39).

When the graduates were asked about their satisfaction with their job, 70% indicated they were satisfied to very satisfied. Over 73% of the vocational graduates were satisfied to very satisfied with

their jobs, while 71% of the general education graduates were satisfied to very satisfied with their jobs.

Summary

Studies were reviewed in this chapter which were related to job satisfaction in general and the job satisfaction of vocational graduates. Major theories of job satisfaction and motivation and studies dealing with those theories were reviewed. No studies were found which were designed to compare the job satisfaction of vocational graduates and non-vocational graduates. However, several follow-up studies were reviewed which included job satisfaction as one of the items on the follow-up questionnaire. The follow-up studies found that vocational graduates were satisfied with their jobs. Those studies which included vocational and non-vocational graduates found vocational graduates were more satisfied with their jobs.

CHAPTER III

METHODS AND PROCEDURES

This chapter describes the procedures that were followed in selecting and preparing a survey instrument, selecting a population for the study, and collecting, processing, and analyzing the data.

The Survey Instrument

An investigation of research on job satisfaction was conducted to determine whether vocational or non-vocational preparation was a factor in the attitude of workers toward their jobs. Various studies were found that included preparation as a secondary factor, but none were found which had as their central focus an investigation of job satisfaction of vocational graduates. As a result, an investigation of job satisfaction among workers in one company and an analysis of their vocational preparation for their work was selected as the topic for this study.

The instrument chosen for the study was the Job Satisfaction Index developed by Brayfield and Rothe (1951). This instrument was chosen because it is a measure of overall job satisfaction. The instrument was designed to reflect general job attitudes across different occupations. In previous research, the instrument was found to have a reliability coefficient of .87 and a product-moment correlation coefficient of .92 with the Hoppock Blank, a well-established instrument.

The instrument has sixteen statements about how individuals feel about their jobs. Following each statement were five responses from which the respondents were to select the one which best described their feelings with regard to the statement about their job. The statements asked about positive and negative feelings about jobs. Positive and negative terms appear in a non-patterned order. The responses to the items on the questionnaire were: "Strongly agree," "agree," "undecided," "disagree," and "strongly disagree."

The researcher prepared a demographic questionnaire to precede the questionnaire to collect data necessary for this study:

1. The length of time the employee had held the present job.

2. Whether the employee had received training through a vocational program.

3. Whether the employee was working in the occupational area in which the individual received vocational training.

4. The type of educational institution from which the individual had received vocational training.

5. Whether the employee had graduated from the program from which the individual received the vocational training.

6. The highest level of education completed.

The demographic data questionnaire and the Job Satisfaction Index were reduced 67% and placed on an 8-1/2" x 11" sheet of paper for making the copies to use in the survey administration. A cover letter was prepared and attached to the sheet

containing the demographic data questionnaire and the Job Satisfaction Index. The cover letter explained the purpose of the survey and assured the respondents that each individual's responses would remain anonymous. A copy of the cover letter and the questionnaire are in the Appendix.

Selection of the Population for the Study

The personnel directors of eleven corporations which would have employees meeting the criteria set for participation in the study were contacted and invited to participate in the study. Some of the companies had policies against outside surveys of their employees. One organization reported that due to the number of such requests, they could not participate in all studies and to be fair to all educational studies the organization did not participate in any of the studies. One company did not, at that time, have a need for the information obtained from the survey. Some organizations had just recently surveyed their employees. Others were involved in research projects at the time. One organization needed to administer its own survey instrument in addition to the researcher's survey instrument.

The Hyster Company invited to participate met all criteria for participation. The geographic area in which it is located has four-year institutions offering curricula in vocational and non-vocational programs, adult education classes in vocational and non-vocational programs, two-year technical institutes, private business

colleges, area vocational schools, and comprehensive high schools. Although all workers were not native to that area, a substantial portion would have completed their education in that area. In addition, the company had been in operation for at least ten years; therefore, workers within the company could have been employed for ten years or more. The personnel director of that corporation agreed to participate and to assist the researcher in surveying workers on three shifts.

Administering the Survey Instrument

Upon conferring with the director of personnel, a schedule was set for administering the questionnaire on the job and collecting the questionnaires immediately afterward. The survey was administered in a classroom in the training area away from the immediate work area. The employees were scheduled so as to fill the classroom for each administration of the survey. Each group was allowed ample time to complete the forms. The first group of employees to be surveyed was the third shift. Workers were surveyed just prior to the end of the shift. The first shift, being the largest shift, was surveyed throughout the day until all had been surveyed. The second shift was the last shift to be surveyed. Each employee was handed a packet containing the cover letter, demographic questionnaire, and a Job Satisfaction Index. Verbal instructions were given to the employees as to the purpose of the study and how to complete the questionnaire. The employees were encouraged to

complete the forms, and the researcher offered individual assistance in completing the forms or answering individual questions if any should arise. Workers were assured their responses would be kept confidential, and they were asked not to identify themselves on the questionnaire. Pencils were given to any employee who did not have one to complete the form. The employees were instructed to place the completed questionnaires in a box before they left the area.

Analysis of the Data

The data on the completed forms, the demographic data questionnaire and the Job Satisfaction Index, were coded to provide numerical data for analysis. A coding scheme was used so as to equate a positive feeling with a larger number than that of a negative feeling. For the positively stated items on the questionnaire, "strongly agree" was equal to five, "agree" was equal to four, "undecided" was equal to three, "disagree" was equal to two, and "strongly disagree" was equal to one. For the negatively stated items on the questionnaire, "strongly disagree" was equal to five, "disagree" was equal to four, "undecided" was equal to three, "agree" was equal to two, and "strongly agree" was equal to one.

The responses to the items on each demographic questionnaire and Job Satisfaction Index as a packet were marked on individual forms designed to be read by a scanner. The data file was created on the Dec-10 System using an optical mark reader as the input device.

The data were analyzed using the SPSS (Statistical Package for the Social Sciences), Statpac, and SAS statistical packages. The data were treated as interval level data. Analysis of variance was used to determine whether there was a significant difference between the job satisfaction of vocational graduates and the job satisfaction of non-vocational graduates. The level of significance was set at .05.

Analysis of variance was used to determine whether there was a significance difference; and, if a significant difference was found, Duncan's Multiple Range Test was used to determine which groups differed significantly.

CHAPTER IV

ANALYSIS

The overall purpose of this study was to determine whether there was a significant difference in the job satisfaction of employees who graduated from vocational programs and the job satisfaction of employees who graduated from non-vocational programs. The data for this study were collected by using a demographic questionnaire and a job satisfaction questionnaire. The population for this study was the employees of a manufacturer of industrial equipment.

Analysis of variance was used to determine whether there was a significant difference among the groups. If a significant difference was obtained among three or more groups, Duncan's multiple range test was used to determine which groups differed significantly.

Analysis of Data Collected from All Employees

Three hundred sixty-three questionnaires were distributed and returned to the researcher. Of the 363 questionnaires, 349 had no blanks and were used in the study; 14 had incomplete data and were not included. The rate of usable survey forms returned was 96.1%. The company had hired 113 of these employees, or 32.4%, within the last year. However, 161 (46.1%) of the employees had been employed for a period of five to ten years (see Table I).

TABLE I

YEARS OF EMPLOYMENT WITH COMPANY

Years	Number	Percentage
Less than 1 year	113	32.3
1-5 years	69	19.8
6-10 years	161	46.1
11-15 years	3	.9
More than 15 years	3	.9
Totals	349	100.0

One hundred fifty-eight of the employees had received vocational training, of which 134 graduated from the vocational program. Of the 134 employees who graduated from the vocational program, 128 also graduated from high school. Three hundred two of the employees had completed high school.

Of the 349 employees used in this study, 128 employees graduated from vocational programs and completed high school. One hundred fifty-six of the employees graduated from high school and had not received vocational training. Graduates of vocational programs who did not graduate from high school were not included in the analysis; only graduates of vocational programs at the secondary level or higher were classified as "vocational graduates" for this study. Table II shows the number of employees with vocational education and the types of training of employees in the study. Table III shows the type of vocational program completed by the employees. The largest percentage (69.6%) had received their vocational training at an area vocational school. The largest percentage (61.9%) of the employees had completed high school; 13.8% had not graduated from high school. Approximately 10% were college graduates (see Table IV).

For a positively stated item, each "strongly agree" response was assigned 5 points; each "agree," 4 points; each "undecided," 3 points; each "disagree," 2 points; and each "strongly disagree" 1 point. For a negatively stated item, each "strongly agree" response was assigned 1 point; each "agree", 2 points; each "undecided,"

TABLE II

VOCATIONAL EDUCATION AND TRAINING OF EMPLOYEES

	Number	Percentage	Total
Employees with Vocational Training	158	45.3	
Employees without Vocational Training	191	54.7	
			349
Employed in Occupational Area in which Training was Completed	90	57.0	
Not Employed in Area in which Training was Completed	68	43.0	
			158
Graduate of Vocational Program	134	84.8	
Not Graduate of Vocational Program	24	15.2	
			158

TABLE III

TYPE OF INSTITUTION OR PROGRAM IN WHICH VOCATIONAL TRAINING WAS COMPLETED

Institution or Program	Number	Percentage
Comprehensive High School	20	12.7
Area Vocational School	110	69.6
Private Business School	2	1.3
Two-Year Post-Secondary School	9	5.7
Four Year College or University	11	7.0
Adult Education Program	6	3.8
Totals	158	100.1

TABLE IV

LEVELS OF EDUCATION OF EMPLOYEES

Level Completed	Number	Percentage
Less than High School	48	13.8
High School	216	61.9
Less than Two Years of Post-Secondary School	30	8.6
Two Years of Post-Secondary School or College	26	7.4
Four Years of College or University	18	5.2
Some Graduate Work	11	3.2
Totals	349	100.1

3 points; each "disagree," 4 points; and each "strongly disagree," 5 points. A mean job satisfaction score on each item was computed from those assignments of points. The higher the mean score, the larger the number of employees who strongly agreed with the statement. The item receiving the highest mean score from employees who had received vocational training was item 13, "Due to economic conditions I am fortunate to have a job." Forty-six employees strongly agreed with the statement, 81 agreed, 10 were undecided, 16 disagreed, and 5 strongly disagreed. For employees without vocational training, item 13 also received the highest mean score. Forty-six strongly agreed with the statement, 105 agreed, 20 were undecided, 15 disagreed, and 5 strongly disagreed. In response to each of the items on the job satisfaction questionnaire, the employees who received vocational training had mean item response scores ranging from 2.13 to 3.93 out of a possible score on each item of 5. The overall mean job satisfaction score for the employees who had received vocational training was 40.34 out of a possible 60 (see Table V). The employees who had not received vocational training had mean item response scores ranging from 2.08 to 3.90 and an overall job satisfaction score of 39.94 out of a maximum score of 60 (see Table VI). Chi Square analysis of employees who had received vocational training and employees who had not received vocational training was used for each item on the job satisfaction questionnaire to determine whether there was a significant difference in the responses of the two groups. The two groups, employees who received vocational

TABLE V

MEAN RESPONSES TO EACH ITEM ON JOB SATISFACTION QUESTIONNAIRE AND MEAN JOB SATISFACTION SCORE FOR ALL EMPLOYEES WHO RECEIVED VOCATIONAL TRAINING N=158

Job Satisfaction Questionnaire Items	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Mean Score
1. My job is like a hobby to me.	12	42	23	61	20	2.78
2. My job is usually interesting enough to keep me from being bored.	20	98	16	21	3	3.70
3. I consider my job rather unpleasant.	6	21	23	83	25	3.63
4. I enjoy my work more than my leisure time.	8	10	25	66	49	2.13
5. I feel fairly well satisfied with my present job.	19	94	16	25	4	3.63
6. Most of the time I have to force myself to go to work.	5	12	17	93	31	3.84
7. I am satisfied with my job for the time being.	20	105	13	17	3	3.77
8. I feel that my job is no more interesting than others I could get.	9	48	27	55	19	3.17
9. I feel that I am happier in my work than most other people.	15	71	44	22	6	3.42
10. Most days I am enthusiastic about my work.	8	85	35	28	2	3.44
11. Each day of work seems as though it will never end.	8	19	23	94	14	3.55
12. I find real enjoyment in my work.	10	64	48	31	5	3.27
13. Due to economic conditions I am fortunate to have a job.	46	81	10	16	5	3.93
14. My training was exactly what I needed for this job.	18	57	30	45	8	3.20
15. When economic conditions improve, I will try to change jobs.	16	36	35	52	19	3.14
16. This job is what I expected it to be.	12	91	30	19	6	3.53

*The mean job satisfaction score for employees who received vocational training was 40.34.

TABLE VI

MEAN RESPONSES TO EACH ITEM ON JOB SATISFACTION QUESTIONNAIRE AND THE MEAN JOB SATISFACTION SCORE FOR EMPLOYEES WITHOUT VOCATIONAL TRAINING N=191

Job Satisfaction Questionnaire Items	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Mean Score
1. My job is like a hobby to me.	12	37	27	93	22	2.60
2. My job is usually interesting enough to keep me from being bored.	28	107	21	28	7	3.63
3. I consider my job rather unpleasant.	6	25	29	97	34	3.67
4. I enjoy my work more than my leisure time.	4	23	14	94	56	2.08
5. I feel fairly well satisfied with my present job.	18	116	27	24	6	3.61
6. Most of the time I have to force myself to go to work.	10	19	12	106	44	3.81
7. I am satisfied with my job for the time being.	17	128	13	28	5	3.65
8. I feel that my job is no more interesting than others I could get.	8	65	28	76	14	3.12
9. I feel that I am happier in my work than most other people.	15	84	56	32	4	3.39
10. Most days I am enthusiastic about my work.	15	108	38	25	5	3.54
11. Each day of work seems as though it will never end.	8	24	25	110	24	3.62
12. I find real enjoyment in my work.	11	86	36	50	8	3.22
13. Due to economic conditions I am fortunate to have a job.	46	105	20	15	5	3.90
14. My training was exactly what I needed for this job.	10	84	43	42	12	3.20
15. When economic conditions improve, I will try to change jobs.	20	44	57	53	17	3.02
16. This job is what I expected it to be.	15	115	28	25	8	3.54

*The mean job satisfaction score for employees who did not receive vocational training was 39.94.

training and employees who did not receive vocational training, differed significantly in their responses to item 4 on the job satisfaction questionnaire, "I enjoy my work more than my leisure time." (See Table VII.) On all other items the two groups did not differ significantly.

The mean job satisfaction scores on each item for all graduates of both vocational and non-vocational programs ranged from 2.02 to 3.89 out of a maximum 5.00 score (Table VIII). The overall mean job satisfaction score for the graduates was 40.08 out of a maximum score of 60.00 (see Table IX).

In establishing reliability and validity of the Job Satisfaction Index, Brayfield and Rothe administered the questionnaire to 231 female office employees. The adjusted mean for the group was 42.53. The questionnaire was administered to a group of students enrolled in an evening class in Personnel Psychology at the University of Minnesota who were employed in non-personnel occupations. The adjusted mean for the group of students was 43.6. Job satisfaction scores for this study were similar to Brayfield and Rothe's scores. For vocational graduates the mean score was 40.34; for non-vocational graduates, 39.94; and for both groups combined, 40.08.

Vocational Training vs. Non-Vocational Training

Ho 1: There is no significant difference between the job satisfaction of employees who graduated from a vocational program

TABLE VII

CHI SQUARE ON JOB SATISFACTION QUESTIONNAIRE: EMPLOYEES WITH VOCATIONAL TRAINING AND EMPLOYEES WITHOUT VOCATIONAL TRAINING

		Chi Square	Probability*
1.	My job is like a hobby to me.	4.2992	0.37
2.	My job is usually interesting enough to keep me from being bored.	1.9008	0.75
3.	I consider my job rather unpleasant.	0.3850	0.98
4.	I enjoy my work more than my leisure time.	11.9099	0.02
5.	I feel fairly well satisfied with my present job.	2.4679	0.65
6.	Most of the time I have to force myself to go to work.	4.1285	0.39
7.	I am satisfied with my job for the time being.	2.6055	0.63
8.	I feel that my job is no more interesting than others I could get.	3.6710	0.45
9.	I feel that I am happier in my work than most other people.	1.6768	0.79
10.	Most days I am enthusiastic about my work.	3.3599	0.50
11.	Each day of work seems as if it will never end.	1.4438	0.84
12.	I find real enjoyment in my work.	7.0806	0.13
13.	Due to economic conditions I am fortunate to have a job.	3.3721	0.50
14.	My training was exactly what I needed for this job.	7.6222	0.11
15.	When economic conditions improve, I will try to change jobs.	3.5372	0.47
16.	This job is what I expected it to be.	1.1926	0.88

*Probability must be 0.05 or less to be significant at the .05 level of significance.

TABLE VIII

MEAN RESPONSES FOR EACH ITEM AND MEAN JOB SATISFACTION SCORE FOR ALL GRADUATES OF BOTH VOCATIONAL PROGRAMS AND NON-VOCATIONAL PROGRAMS

Job Satisfaction Questionnaire Items	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Mean Score
1. My job is like a hobby to me.	20	71	36	120	37	2.71
2. My job is usually interesting enough to keep me from being bored.	39	163	31	42	9	3.64
3. I consider my job rather unpleasant.	10	38	42	147	47	3.64
4. I enjoy my work more than my leisure time.	7	22	32	132	91	2.02
5. I feel fairly well satisfied with my present job.	29	172	37	38	8	3.62
6. Most of the time I have to force myself to go to work.	9	26	25	162	62	3.85
7. I am satisfied with my job for the time being.	26	193	20	37	8	3.68
8. I feel that my job is no more interesting than others I could get.	15	86	43	111	29	3.19
9. I feel that I am happier in my work than most other people.	23	123	86	44	8	3.38
10. Most days I am enthusiastic about my work.	19	160	57	41	7	3.50
11. Each day of work seems as though it will never end.	9	33	44	170	28	3.62
12. I find real enjoyment in my work.	16	122	69	66	11	3.23
13. Due to economic conditions I am fortunate to have a job.	73	149	27	27	8	3.89
14. My training was exactly what I needed for this job.	24	116	57	73	14	3.22
15. When economic conditions improve, I will try to change jobs.	30	61	76	88	29	3.09
16. This job is what I expected it to be.	23	163	45	40	13	3.50

*The mean job satisfaction score for all employees who graduated was 40.08.

TABLE IX

MEAN JOB SATISFACTION SCORES FOR VOCATIONAL GRADUATES AND NON-VOCATIONAL GRADUATES

Type of Program From Which Employee Graduated	Number of Graduates	Mean Job Satisfaction Score
Vocational	128	40.39
Non-Vocational	156	39.83
	284	

and the job satisfaction of employees who graduated from a non-vocational program.

The 128 employees who graduated from a vocational program had a higher mean job satisfaction score than did the 156 employees who graduated from a non-vocational program. Analysis of variance was used to determine whether the difference was significant at the .05 level of significance. The results of the analysis of variance are presented in Table X. The resulting F value was not significant at the .05 level. Null hypothesis 1 was not rejected.

Working in the Vocational Area in Which Trained

Ho 2: There is no significant difference between the job satisfaction of vocational graduates who are employed in the vocational area in which they received vocational training and the job satisfaction of vocational graduates who are not employed in the vocational area in which they received vocational training.

The participants were divided into two groups, vocational graduates and non-vocational graduates. The vocational graduates were asked whether they were working in the vocational area in which they had received vocational training. The vocational graduates who were working in the vocational area in which they were trained had a higher mean job satisfaction score than the vocational graduates who were not working in the vocational area in which they were trained (see Table XI).

Analysis of variance was used to determine whether the mean job satisfaction score of the vocational graduates who were working

TABLE X

ANALYSIS OF VARIANCE OF JOB SATISFACTION OF GRADUATES OF VOCATIONAL PROGRAMS AND GRADUATES OF NON-VOCATIONAL PROGRAMS

Source	Sum of Sq.	D.F.	Mean Sq.	F	Probability*
Between	22.34375	1	22.34	0.4357	0.5098
Within	14462.79	282	15.29		
Total	14485.14	283			

*Probability must be 0.05 or less to be significant at the .05 level of significance.

TABLE XI

MEAN JOB SATISFACTION SCORES OF VOCATIONAL GRADUATES WHO WERE WORKING IN THE VOCATIONAL AREA IN WHICH TRAINED AND VOCATIONAL GRADUATES NOT WORKING IN THE VOCATIONAL AREA IN WHICH TRAINED

Working in Vocational Area in which Trained	Number	Mean Job Satisfaction Score
Yes	75	41.60
No	53	38.68

in the vocational area in which they were trained was significantly different from the mean job satisfaction scores of vocational graduates who were not working in the vocational area in which they were trained. There was a significant difference at the .05 level of significance (see Table XII). Null hypothesis 2 was rejected.

Length of Time Employed

Ho 3: There is no significant difference in the job satisfaction of the employees according to the length of time employed.

The employees were divided into groups depending on the length of time employed. The groups were as follows: Group 1, less than one year; group 2, 1 to 5 years; group 3, 5 to 10 years; group 4, 11 to 15 years; group 5, more than 15 years of employment.

Analysis of variance was used to determine whether there was a significant difference between the job satisfaction scores of employees grouped according to the length of time employed. There was a significant difference in the job satisfaction scores at the .05 level of significance of the employees according to the length of time employed (see Table XIII). Null hypothesis 3 was rejected.

Duncan's multiple range test was used in order to determine which groups' mean job satisfaction scores differed significantly at the .05 level of significance. The means having a common vertical line in Table XIV do not differ significantly. Only those employed less than one year and those employed 11 to 15 years differed from each other on mean job satisfaction scores.

TABLE XII

ANALYSIS OF VARIANCE OF JOB SATISFACTION OF VOCATIONAL GRADUATES WORKING IN THE VOCATIONAL AREA IN WHICH TRAINED AND VOCATIONAL GRADUATES NOT WORKING IN THE VOCATIONAL AREA IN WHICH TRAINED

Source	Sum of Sq.	D.F.	Mean Sq.	F	Probability*
Between	264.9219	1	264.9	5.324	0.0227
Within	6269.547	126	49.76		
Total	6534.469	127			

*Probability must be 0.05 or less to be significant at the .05 level of significance.

TABLE XIII

ANALYSIS OF VARIANCE OF JOB SATISFACTION SCORES OF ALL EMPLOYEES GROUPED BY LENGTH OF TIME EMPLOYED

Source	D.F.	Sum of Sq.	Mean Sq.	F	Probability*
Between	4	1580.1265	395.0316	8.52	0.0001
Within	344	15944.8191	46.3512		
Total	348	17524.9456			

*Probability must be 0.05 or less to be significant at the .05 level of significance.

TABLE XIV

MEAN JOB SATISFACTION SCORES OF EMPLOYEES GROUPED ACCORDING TO LENGTH OF EMPLOYMENT

Group	N	Mean Score*
Less than 1 year	113	43.035
1 to 5 years	69	39.783
6 to 10 years	161	38.379
More than 15 years	3	37.333
11 to 15 years	3	34.333

*Means marked with a common vertical line do not differ significantly at the 0.05 level of significance.

Type of School

Ho 4: There is no significant difference among the job satisfaction of employees who received their vocational training from (a) comprehensive high schools, (b) area vocational schools, (c) private business schools, (d) two-year post-secondary schools, (e) four-year colleges or universities, and (f) adult education programs.

Analysis of variance was used to determine whether there was a significant difference in the mean job satisfaction scores of all employees who received vocational training based on the type of school from which they received training. The findings are summarized in Table XV. There was no significant difference in the job satisfaction of employees according to the type of school from which they received training. Null hypothesis 4 was not rejected.

Economic Conditions

Ho 5: There is no significant difference in the job satisfaction of employees grouped according to their feelings about current economic conditions.

The job satisfaction questionnaire contained two items related to employees' feelings about the economy and their job. Those items, 13 and 15 on the job satisfaction questionnaire, were "Due to economic conditions I am fortunate to have a job" and "When economic conditions improve, I will try to change jobs." Scores on the two

TABLE XV

ANALYSIS OF VARIANCE OF JOB SATISFACTION OF EMPLOYEES WHO RECEIVED VOCATIONAL TRAINING GROUPED BY TYPE OF SCHOOL IN WHICH TRAINING WAS RECEIVED

Source	Sum of Sq.	D.F.	Mean Sq.	F	Probability*
Between	78.53320	5	15.71	0.3249	0.8974
Within	7348.688	152	48.35		
Total	7427.221	157			

*Probability must be 0.05 or less to be significant at the .05 level of significance.

items were combined to arrive at a single score. Higher scores indicated the employees strongly agreed they were fortunate to have a job with economic conditions at that time and they would not attempt to change jobs when the economy improved. A score of 10 indicated the employees strongly agreed they were fortunate to have a job at that time and when economic conditions changed they would not try to change jobs. The possible range for the score was 2 through 10. Employees were categorized into nine groups according to their scores on items 13 and 15.

Analysis of variance was used to determine whether there was a significant difference among the mean job satisfaction scores of the employees grouped according to their combined item responses on items about the economy. There was a significant difference, at the .05 level of significance (see Table XVI). Null hypothesis 5 was rejected.

Duncan's multiple range test was used to determine which groups of mean job satisfaction scores differed significantly. The mean job satisfaction scores connected by a common vertical line in Table XVII are not significantly different.

Duncan's multiple range procedures analyze pairs of means. The mean job satisfaction scores of employees differed in these ways:

1. Employees who had a summed score of 10 on items 13 and 15 differed significantly from the mean job satisfaction scores of those employees who had summed scores of 8, 7, 6, 5, 4, 3, and 2 on items 13 and 15.

TABLE XVI

ANALYSIS OF VARIANCE OF JOB SATISFACTION OF EMPLOYEES GROUPED BY FEELINGS ABOUT ECONOMIC CONDITIONS

Source	Sum of Sq.	D.F.	Mean Sq.	F	Probability*
Between	5300.500	8	662.6	18.43	0.0001
Within	12224.45	340	35.95		
Total	17524.95	348			

*Probability must be 0.05 or less to be significant at the .05 level of significance.

2. Employees with a summed score of 9 on items 13 and 15 differed significantly from the mean job satisfaction scores of those employees who had summed scores of 7, 6, 5, 4, 3, and 2 on items 13 and 15.

3. Employees with a summed score of 8 on items 13 and 15 differed significantly from the mean job satisfaction scores of those employees who had summed scores of 5, 4, 3, and 2 on items 13 and 15.

4. Those with a score of 6 on items 13 and 15 differed significantly from the mean job satisfaction scores of those employees who had summed scores of 3 and 3 on items 13 and 15.

5. Employees with a score of 7 on items 13 and 15 differed significantly from the mean job satisfaction scores of those employees who had summed scores of 3 and 2 on items 13 and 15.

6. Those with a score of 5 on items 13 and 15 differed significantly from the mean job satisfaction scores of those employees who had summed scores of 3 and 2 on items 13 and 15.

7. Employees with a summed score of 4 on items 13 and 15 differed significantly from the mean job satisfaction scores of those employees who had a summed score of 3 on items 13 and 15.

To simplify reporting, the groups of mean job satisfaction scores were combined into groups based on the findings reported in Table XVII. The summed scores on items 13 and 15 were grouped as follows: Group 1 (the summed scores of 9 and 10), group 2 (the summed scores of 5, 7, and 8), group 3 (the summed scores of 2, 4,

TABLE XVII

MEAN JOB SATISFACTION SCORES OF EMPLOYEES GROUPED ACCORDING TO THEIR FEELING ABOUT THE ECONOMY

Employees Grouped by Summed Score on Items 13 and 15	N	Mean Job Satisfaction Score*
1: Score of 10	21	49.000
2: Score of 9	36	44.944
3: Score of 8	86	41.663
4: Score of 6	84	39.167
5: Score of 7	70	38.943
6: Score of 5	28	35.036
7: Score of 4	14	34.714
8: Score of 2	4	31.250
9: Score of 3	6	27.333

*Means marked with a common vertical line do not differ significantly at the 0.05 level of significance.

and 5), and group 4 (the summed score of 3). Duncan's multiple range test was used to determine which groups of job satisfaction scores differed significantly. The results of the Duncan's multiple range test are shown in Table XVIII. All four pairs of mean job satisfaction scores differed significantly from each other. No two means are connected by a common vertical line. Null hypothesis 5 was rejected as a result of both analysis of variance and Duncan's multiple range test.

Pearson Product-Moment Correlation was used to determine the relationship between job satisfaction and the summed scores of items 13 and 15, those items relating to how the employees felt about the economic conditions. As shown in Table XIX, there was a positive relationship between job satisfaction and the employees' feelings about the economic conditions. The correlation coefficient of .5221 was significant at the .0001 level of significance.

Job Expectation

Ho 6: There is no significant difference in the job satisfaction of employees grouped according to their expectations of the job as a result of their training.

Two items, 14 and 16, about job expectation and training for the job were included on the job satisfaction questionnaire. Those two items were, "My training was exactly what I needed for this job," and "This job is what I expected it to be." The responses to the two items were combined to arrive at a single score. The summed score had a possible range of 2 to 10.

TABLE XVIII

MEAN JOB SATISFACTION SCORES OF EMPLOYEES GROUPED ACCORDING TO THE GROUPED SCORES ON THEIR FEELINGS ABOUT THE ECONOMY

Employees Grouped by Summed Scores on Items 13 and 15	N	Mean Job Satisfaction Scores*
1: Scores of 9 - 10	57	46.439
2: Scores of 6 - 8	240	39.996
3: Scores of 2 - 4 - 5	46	34.609
4: Scores of 3	6	27.333

*Means are significantly different.

TABLE XIX

PEARSON PRODUCT-MOMENT CORRELATION OF JOB SATISFACTION SCORES AND SUMMED SCORES OF ITEMS RELATING TO EMPLOYEES' FEELINGS ABOUT THE ECONOMIC CONDITIONS

Variable With Which Job Satisfaction Was Compared	Correlation Coefficient	Probability*
Employees' Feelings About Economic Conditions	.5221	.0001

*Probability must be 0.05 or less to be significant at the 0.05 level of significance.

Analysis of variance was used to determine whether there was a significant difference in the mean job satisfaction scores of the employees grouped according to their responses to the items related to training for the job and job expectations. The results of the analysis of variance are summarized in Table XX. There was a significant difference between the mean job satisfaction scores at the .05 level of significance. Null hypothesis 6 was rejected.

Duncan's multiple range test was used to determine which groups of mean job satisfaction scores differed from each other. The findings are summarized in Table XXI. The means connected by a common vertical line are not significantly different.

The mean job satisfaction scores of employees who had a summed score of:

1. Nine on items 14 and 16 differed significantly from the mean job satisfaction scores of those employees who had summed scores of 6, 5, 4, 3, and 2 on items 14 and 16.

2. Ten on items 14 and 16 differed significantly from the mean job satisfaction scores of those employees who had summed scores of 6, 5, 4, 3, and 2 on items 14 and 16.

3. Eight on items 14 and 16 differed significantly from the mean job satisfaction scores of those employees who had summed scores of 5, 4, 3, and 2 on items 14 and 16.

4. Seven on items 14 and 16 differed significantly from the mean job satisfaction scores of those employees who had summed scores of 5, 4, 3, and 2 on items 14 and 16.

TABLE XX

ANALYSIS OF VARIANCE OF JOB SATISFACTION ACCORDING TO EMPLOYEES' VIEW OF TRAINING FOR THE JOB AND THEIR EXPECTATION OF THE JOB

Source	Sum of Sq.	D.F.	Mean Sq.	F	Probability*
Between	5345.641	8	668.2	18.65	0.0001
Within	12179.30	340	35.82		
Total	17524.95				

*Probability must be 0.05 or less to be significant at the .05 level of significance.

TABLE XXI

MEAN JOB SATISFACTION SCORES OF EMPLOYEES BASED ON THEIR FEELING ABOUT THEIR TRAINING FOR THE JOB AND THEIR EXPECTATIONS OF THE JOB

Employees Grouped by Summed Score on Items 14 and 16	N	Mean*
1: Score of 9	27	46.593
2: Score of 10	10	45.600
3: Score of 8	100	42.660
4: Score of 7	59	41.000
5: Score of 6	79	39.051
6: Score of 5	39	35.359
7: Score of 4	24	34.042
8: Score of 3	9	30.444
9: Score of 2	2	24.000

*Means marked with a common vertical line do not differ significantly.

5. Six on items 14 and 16 differed significantly from the mean job satisfaction scores of those employees who had summed scores of 3 and 2 on items 14 and 16.

6. Five on items 14 and 16 differed significantly from the mean job satisfaction scores of those employees who had a summed score of 2 on items 14 and 16.

7. Four on items 14 and 16 differed significantly from the mean job satisfaction scores of those employees who had a summed score of 2 on items 14 and 16.

8. Three on items 14 and 16 differed significantly from the mean job satisfaction score of those employees who had a summed score of 2 on items 14 and 16.

To condense the findings, the mean job satisfaction scores were grouped based on the findings reported in Table XXII. The summed scores of items 14 and 16 were grouped as follows: group 1, the summed scores 9 and 10; group 2, the grouped scores of 6, 7, and 8; group 3, the summed scores of 3, 4, and 5; group 4, the summed score of 2.

Duncan's multiple range test was used to determine which of these groups differed significantly. The mean job satisfaction scores connected by a common vertical line in Table XXII are not significantly different.

The mean job satisfaction scores of group 1 (summed scores of 9 and 10) and group 2 (summed scores of 6, 7, and 8) did not differ significantly.

TABLE XXII

MEAN JOB SATISFACTION SCORES OF EMPLOYEES GROUPED BY THE GROUPED SCORES OF THEIR VIEW OF THEIR TRAINING FOR THE JOB AND THEIR EXPECTATIONS OF THE JOB

Employees Grouped by Summed Score on Items 14 and 16	N	Mean Job Satisfaction Score*
1: Scores of 9 and 10	37	46.324
2: Scores of 6, 7, and 8	338	41.050
3: Scores of 3,4, and 5	72	34.306
4: Scores of 2	2	24.000

*Means marked with a common vertical line do not differ significantly.

The mean job satisfaction scores of those employees who had summed scores of:

1. Nine and 10 on items 14 and 16 differed significantly from the mean job satisfaction scores of those employees who had summed scores of 5, 4, 3, and 2 on items 14 and 16.

2. Six, 7, and 8 on items 14 and 16 differed significantly from the mean job satisfaction scores of those employees who had summed scores of 2, 3, 4, and 5 on items 14 and 16.

3. Three, 4, and 5 on items 14 and 16 differed significantly from the mean job satisfaction score of those employees who had a summed score of 2 on items 14 and 16.

Pearson Product-Moment Correlation was used to determine the relationship between employees' view of their training and job expectations and their job satisfaction. The correlation coefficient of .5409 was significant at the .0001 level of significance (see Table XXIII).

Level of Education

Ho 7: There is no significant difference in the job satisfaction of employees grouped according to the highest level of education completed.

Employees were asked to indicate the highest level of education completed. The categories were less than high school, high school, less than two years of post-secondary school, two years of community college or college work, four years of college, and some graduate work.

TABLE XXIII

PRODUCT-MOMENT CORRELATION OF JOB SATISFACTION SCORES AND SUMMED SCORES OF ITEMS 14 AND 16 RELATING TO EMPLOYEES' VIEW OF THEIR TRAINING FOR THE JOB AND THEIR EXPECTATIONS OF THE JOB

Variable With Which Job Satisfaction Was Compared	Correlation Coefficient	Probability*
Employees' View of their Training for the Job and Their Expectations of the Job	.5409	.0001

*Probability must be 0.05 or less to be significant at the 0.05 level of significance.

Analysis of variance was used to determine whether there was a significant difference among the mean job satisfaction scores of the employees grouped according to the highest level of education completed. The results are summarized in Table XXIV. There was no significant difference, at the .05 level of significance, among the mean job satisfaction scores of employees grouped according to the highest level of education completed. Null hypothesis 7 was not rejected.

Type of Training and Level of Education Completed

Ho 8: There is no significant difference in the job satisfaction of vocational graduates and job satisfaction of non-vocational graduates according to the highest level of education completed.

A two-way analysis of variance was used to determine whether the job satisfaction scores of vocational graduates were significantly different from the job satisfaction scores of non-vocational graduates depending on the highest level of education completed. A 2 x 5 factorial design was used. The first variable consisted of two levels, vocational graduates and non-vocational graduates. The second variable, highest level of education completed, consisted of five levels: high school, less than two years of post-secondary education, two years of community college or college work, four years of college, and some graduate work.

TABLE XXIV

ANALYSIS OF VARIANCE OF JOB SATISFACTION OF EMPLOYEES GROUPED ACCORDING TO THE HIGHEST LEVEL OF EDUCATION COMPLETED

Source	Sum of Sq.	D.F.	Mean Sq.	F	Probability*
Between	375.6797	5	75.14	1.503	0.1883
Within	17149.27	343	50.00		
Total	17524.95	348			

*Probability must be 0.05 or less to be significant at the .05 level of significance.

No significant difference was found among the job satisfaction scores as a result of the main effect, type of training, at the .05 level of significance. There was no significant difference in the job satisfaction score, at the .05 level of significance, as a result of the main effect, highest level of education completed (see Table XXV).

The effect of the interaction of type of training and highest level of education completed was not significant. Null hypothesis 8 was not rejected.

Summary

The job satisfaction of vocational graduates did not differ significantly from the job satisfaction of non-vocational graduates. There was no significant difference in the job satisfaction of employees based on the type of school from which they received vocational training. However, the job satisfaction of vocational graduates who were employed in the vocational area in which they received training did differ significantly from the vocational graduates who were not employed in the vocational area in which they received vocational training.

There was no significant difference in the job satisfaction of employees based on the highest level of education completed. There was no interaction effect of the type of training and the highest level of education completed on job satisfaction.

The job satisfaction of employees differed significantly depending on the length of service with the company. The job

TABLE XXV

ANALYSIS OF VARIANCE OF JOB SATISFACTION OF VOCATIONAL GRADUATES AND NON-VOCATIONAL GRADUATES GROUPED ACCORDING TO THE HIGHEST LEVEL OF EDUCATION COMPLETED

Source	Sum of Sq.	D.F.	Mean Sq.	F	Probability*
Cells	593.37	9	65.93		
Training	57.41	1	57.41	1.13	.2882
Education Level	203.51	4	50.88	1.00	.4061
Training by Education Level	169.48	4	42.37	0.84	.5035
Within	13891.77	274	50.70		
Total	14485.14	283			

*Probability must be 0.05 or less to be significant at the .05 level of significance.

satisfaction of employees who had been employed for less than one year differed significantly from the job satisfaction of employees who had been employed from 11 to 15 years.

The job satisfaction of employees differed significantly depending on their view of the economy. Also, there was a significant difference in the job satisfaction of employees depending on their feelings about their training for the job and their job expectations as a result of their training.

CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

This chapter includes a summary of the study and procedures for collecting and analyzing the data. The remainder of this chapter presents the findings, conclusions, and recommendations.

Summary

The major purpose of this study was to determine whether there was a significant difference between the job satisfaction of employees who had graduated from vocational programs and the job satisfaction of employees who had graduated from non-vocational programs. The Job Satisfaction Index, developed by Brayfield and Rothe (1951), was used to collect job satisfaction data. A questionnaire was developed by the researcher to collect demographic data.

The population for the study was the employees of a manufacturer of industrial equipment. The geographic location of the company enabled it to recruit employees who attended and/or graduated from comprehensive high schools, area vocational schools, private business schools, two-year post-secondary schools, four-year colleges and universities, and adult education programs.

The survey was administered to all employees during a one-day period. Three hundred sixty-three employees were surveyed. The forms which contained blanks were not included in this study. The study used the responses of 349 employees.

The data were analyzed using the analysis of variance test to determine whether there was a significant difference among job satisfaction scores of employees grouped by period of employment, type of training, work assignment as related to training, type of school in which trained, highest level of education completed, attitude about the economy, and expectations about their job. If a significant difference existed among three or more groups, Duncan's Multiple Range test was used to determine which groups differed significantly.

Major Findings

1. Is there a significant difference between the job satisfaction of employees who graduated from vocational programs and the job satisfaction of employees who graduated from non-vocational programs?

No significant difference was found between the job satisfaction of employees who graduated from vocational programs and the job satisfaction of employees who graduated from non-vocational programs.

2. Is there a significant difference between the job satisfaction of vocational graduates who are working in the vocational area in which they received training and the job satisfaction of vocational graduates who are not working in the vocational area in which they received training?

The mean job satisfaction score for vocational graduates who were employed in the vocational area in which they received training

was significantly different from the mean job satisfaction score of vocational graduates who were not employed in the vocational area in which they received training.

3. Is there a significant difference in the job satisfaction of employees according to the length of time employed?

There was a significant difference in the mean job satisfaction scores of employees according to the time employed. Those employees who had been employed less than one year had a significantly higher mean job satisfaction score than those employees who had been employed for periods of 1 to 5 years, 6 to 10 years, 11 to 15 years, and over 15 years. The mean job satisfaction score of employees who had been employed more than 15 years differed significantly from the mean job satisfaction scores of those employees who had been employed for periods of less than 1 year, 1 to 5 years, and 6 to 10 years.

4. Is there a significant difference in the job satisfaction of employees who received vocational training from (a) comprehensive high schools, (b) area vocational schools, (c) private business schools, (d) two-year post-secondary schools, (e) four-year colleges or universities, and (f) adult education classes?

There was no significant difference among the job satisfaction scores of employees grouped according to the type of school from which they received vocational training.

5. Is there a significant difference in the job satisfaction of employees grouped according to their feelings about economic conditions?

There was a significant difference in the mean job satisfaction scores of employees grouped according to their feelings about economic conditions. The mean job satisfaction scores of employees with economic condition scores of 10 and 9, economic condition scores of 9 and 8, economic condition scores of 8, 6, and 7, economic condition scores of 6, 7, 5, and 4, economic condition scores of 5, 4, and 2, and economic condition scores of 2 and 3 did not differ significantly.

The correlation coefficient of .5221, significant at the .0001 level, between job satisfaction and employees' feelings about the economic conditions implies that the economic recovery of the area probably contributed to satisfaction on the job. A large share of the employees had worked for the company for less than one year. Many were probably grateful to have a job.

6. Is there a significant difference in the job satisfaction of employees grouped according to their expectations of the job as a result of their training?

There was a significant difference in the job satisfaction of employees grouped according to their expectations of the job as a result of their training. The mean job satisfaction scores of employees with expectation scores of 7, 8, 9, and 10, expectation scores of 6, 7, and 8, expectation scores of 4, 5, and 6, and expectation scores of 3, 4, and 5 did not differ significantly. However, the mean job satisfaction scores of employees with a job expectation score of 2 differed significantly from the mean job satisfaction scores of all other groups.

Similar to the results on question 5, the significant correlation between job satisfaction and employees' expectations about their jobs indicated that employees were realistic about their work. What they anticipated on the job seemed to match what they found on the job. Therefore, their job satisfaction scores correlated with their expectation of the job.

7. Is there a significant difference in the mean job satisfaction scores of employees grouped according to the highest level of education completed?

There was no significant difference in the mean job satisfaction scores of the employees based on the highest level of education completed.

8. Is there a significant difference in the mean job satisfaction scores of vocational graduates and non-vocational graduates according to the highest level of education completed?

There was no significant difference in the mean job satisfaction scores of vocational graduates and non-vocational graduates grouped as: high school graduates, less than two years of post-secondary education, two years of community college or college work, four years of college, some graduate work, and less than high school.

Conclusions

Based on the statistical analysis of the data the following conclusions were drawn:

1. Employees who graduated from vocational programs were no more satisfied with their job than employees who graduated from non-vocational programs. In addition, the level of education completed by employees had no effect on the job satisfaction of vocational graduates and non-vocational graduates. This conclusion is in contrast to that of Creech et al. (1972). Creech and others surveyed 18,000 high school seniors prior to graduation and followed up 18 months with another survey. The study used data collected from both surveys and information from school records. Creech reported graduates of vocational curriculum were more satisfied with their jobs.

2. The type of school from which employees received vocational training did not have an effect on their job satisfaction. However, employees who were employed in the vocational area in which they were trained were more satisfied with their job than employees who were not employed in the vocational area in which they were trained.

Recommendations

The following suggestions for further study are based on the findings and conclusions of this study:

1. Employers should hire vocational graduates to work in the vocational area in which they were trained.

2. Follow-up studies which include vocational graduates and non-vocational graduates should compare job satisfaction of the two groups.

3. Vocational educators should give a realistic view of the job to ensure that students' expectations are realistic.

4. Further studies are needed to determine whether there is a significant difference in the job satisfaction of vocational graduates of different vocational areas who are employed in the vocational area in which they were trained.

5. A study should be conducted to determine whether length of service and the attitude of employees toward management have an effect on job satisfaction.

6. A study is needed to determine whether in-house training programs and vocational retraining programs have an effect on job satisfaction.

7. Follow-up studies should include comparisons of job satisfaction of graduates who are employed in the vocational area in which they were trained with the job satisfaction of graduates who are not employed in the vocational area in which they were trained.

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APPENDIX

Dear Employee:

This is a study on job satisfaction of vocational graduates and non-vocational graduates. The purpose of this study is to determine whether preparation for a career makes a difference in a worker's satisfaction with his/her job.

The names of participants will not be identified in the study. Only group data will be reported. Replies will be kept completely confidential, and no one in your company will have access to any information from the study except group data.

Your consent to participate in this study will be indicated by your completed form. The form is a one page questionnaire which will be collected by the researcher.

If you wish to contact me about the results of this study, do so at the following address:

Ralph D. Begley
2109 Terrace Avenue
Knoxville, TN 37916

Phone: (615) 974-8163

DEMOGRAPHIC QUESTIONNAIRE

1. How many years have you been employed by this organization? _____ Years

   If you have been employed for less than one year, for how many months have you been employed? _____ Months

2. Did you obtain training through a vocational program? Yes _____

   No _____

   If you answered "No" to this question, skip to question 5.

3. Are you working in the occupational area in which you received vocational training? Yes _____

   No _____

4. Which of the following best describes the school offering the vocational training you received?

   Comprehensive high school _____
   Area vocational school _____
   Private business school _____
   Two-year post secondary school _____
   Four-year college or university _____
   Adult education program _____

   Did you graduate from the program you attended? Yes _____

   No _____

5. What is the highest level of education you have completed?

   High School _____
   Less than two years of post-secondary education _____
   Two years of community college/college work _____
   Four years of college _____
   Some graduate work _____
   Less than high school _____

JOB SATISFACTION QUESTIONNAIRE

Some jobs are more interesting and satisfying than others. We want to know how people feel about their jobs. This questionnaire contains sixteen statements about jobs. Place a check mark on the line following each statement and below the phrase which best describes your feelings about your present job. There are no right and wrong answers. We would like your honest opinion on each of the statements. The item numbered 0 is given as a sample response.

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
Sample Item:					
0. There are some conditions of my job that could be improved.		✓			
1. My job is like a hobby to me.					
2. My job is usually interesting enough to keep me from being bored.					
3. I consider my job rather unpleasant.					
4. I enjoy my work more than my leisure time.					
5. I feel fairly well satisfied with my present job.					
6. Most of the time I have to force myself to go to work.					
7. I am satisfied with my job for the time being.					
8. I feel that my job is no more interesting than others I could get.					
9. I feel that I am happier in my work than most other people.					
10. Most days I am enthusiastic about my work.					
11. Each day of work seems as if it will never end.					
12. I find real enjoyment in my work.					
13. Due to economic conditions I am fortunate to have a job.					
14. My training was exactly what I needed for this job.					
15. When economic conditions improve, I will try to change jobs.					
16. This job is what I expected it to be.					

VITA

Ralph David Begley was born in Garrard County, Kentucky on August 2, 1945. He graduated from Paint Lick High School in 1964. He received a Bachelor of Science degree in May 1972 and in May 1974, he received a Master of Arts degree from Eastern Kentucky University.

He taught Business Administration and Office Education classes from July 1975 to March 1980 for a two-year post-secondary school in Lexington, Ketnucky. In September 1980, he accepted a graduate teaching assistantship from The University of Tennessee, Knoxville, while working on a Doctor of Education degree in Vocational-Technical Education in the area of Business Education with a cognate area in Management. In September 1981, he accepted a graduate assistantship in the Office of Instructional Support for the College of Business Administration at The University of Tennessee, Knoxville. He accepted a position as Placement Coordinator for a special program in the Department of Technological and Adult Education at The University of Tennessee, Knoxville, in August 1983.

Ralph is a member of Delta Pi Epsilon, Pi Lambda Theta, and Omicron Tau Theta.