

A STUDY OF THE EFFECT OF SELECTED FACTORS ON
JOB SATISFACTION OF GRADUATES OF THE
TULSA COUNTY AREA VOCATIONAL
TECHNICAL SCHOOL

By

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PREFACE

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CHAPTER I

INTRODUCTION

Studies conducted at the University of Minnesota have related the adjustment of an individual to his job with the work personality and the work environment. The work adjustment outcomes are satisfactoriness, satisfaction and tenure. It has also been shown by Weiss and others (1967) that:

Vocational needs are measurable and can be measured separately from measured satisfaction. In addition, it has been demonstrated that satisfaction in a variety of work environments can be predicted from the correspondence of measured vocational needs and either estimated or inferred job reinforcer systems. It has also been demonstrated that satisfaction and satisfactoriness are measurable indicators of work adjustment, and that they can be measured independently of each other (p. 5).

Vocational educators use follow-up systems to check on graduates to see if they are employed and making effective use of the knowledge gained in vocational courses. These follow-ups in Oklahoma show whether or not graduates are employed. This emphasizes placement of graduates of the vocational courses without considering the graduate's satisfaction with the job once he has been placed.

If employers are satisfied with graduates of vocational courses, recognizing that they have the knowledge, ability and willingness to perform the duties of their jobs, then this may be measured as job satisfactoriness. Satisfactoriness partially depends on productivity and productivity has also been related to job satisfaction of workers.

Weiss and others (1967) have identified three main areas of job satisfaction. The areas are intrinsic, extrinsic and general job satisfaction.

Studies of on-the-job behavior have shown a direct relation of that behavior to job satisfaction. However, little has been done to develop methods to evaluate the quality of programs in relation to the on-the-job behavior of former students (Smith, 1971).

The primary emphasis on job satisfaction comes from the guidance programs which attempt to help students decide on a career in which they have the ability and desire to succeed. One of the current tools used in guiding students into desirable careers is a career exploration course which is designed along the lines recommended in Career Education: A Model for Oklahoma. Such a course is the "career orientation" course taught each summer in the Tulsa County Area Vocational Technical School.

The career orientation course helps the students to develop personal values. This permits the student to examine a tentative career choice along with three alternate choices so that he or she may choose the career that best suits him or her.

Statement of the Problem

Satisfaction on the job is associated with many factors including life experiences, general and specific educational experiences as well as many economic, sociological and philosophical conditions related to the individual and to his or her job. The problem of this study is to determine if the selected variables (1) a course in career orientation, (2) training in different types of vocational courses, and

(3) working in the area of one's vocational training, result in a significant difference in the level of job satisfaction for graduates of high school vocational courses.

Purpose

The purpose of this study was to investigate whether or not there was a significant difference in job satisfaction of graduates of vocational courses at the Tulsa County Area Vocational Technical School if they had completed the career orientation course, if they had taken different vocational courses during their senior year or if they were working in jobs related to the vocational courses they had taken as a senior.

Research Questions

The following research questions were developed.

1. Is there a significant difference in the job satisfaction of graduates of vocational courses at the Tulsa County Area Vocational Technical School who had the career orientation course and graduates who did not have the career orientation course?
2. Is there a significant difference in job satisfaction among graduates of different vocational courses at the Tulsa County Area Vocational Technical School?
3. Is there a significant difference in the job satisfaction of graduates of vocational courses at the Tulsa County Area Vocational Technical School who are employed in jobs related to their vocational courses and those who are employed in jobs unrelated to their vocational courses?

Assumptions

This study was based on the following assumptions:

1. That the Minnesota Satisfaction Questionnaire would be a reliable instrument to indicate job satisfaction of the Tulsa County Area Vocational Technical School graduates.

Limitations

This study was limited to the resources, time, school records and questionnaire responses available to the researcher.

Limitations as to Study Subjects

The subjects for this study were graduates of the Tulsa County Area Vocational Technical School for the 1977-78 school year.

Limitations of Time

The time for the return of questionnaires used in this study was limited to 24 days. No follow-up action was taken.

Definitions

1. Graduate - an individual, classified as a senior during the 1977-78 school year, who completed a vocational course at the Tulsa County Area Vocational Technical School.
2. Job Satisfaction - the individual worker's appraisal of the extent to which the work environment fulfills his or her requirements as determined by the Minnesota Satisfaction Questionnaire (Dawis, 1968).

3. Minnesota Satisfaction Questionnaire (MSQ, short form) - a questionnaire used to ascertain job satisfaction.
4. Vocational course - training in knowledge and skills in preparation for a career in a specific job field.
5. Career orientation course - the summer vocational exploration course for high school students in the Tulsa County Area Vocational Technical School District. The course was held for three hours a day, five days a week for four weeks between ninth and tenth grades. Four vocational job fields were explored for one week each by students in the courses. The career orientation course was a tool for counseling and was not vocational education.

CHAPTER II

REVIEW OF LITERATURE

Need for the Study

Job satisfaction is associated with former students who have been employed in some type of job. The question then arises as to the logical reasons for school administrators to be interested in information on job satisfaction. Enderlin (1974) stated:

Why seek in-school information about job satisfaction? As a first consideration, knowledge of these in-school factors is directly related to the offering of vocational guidance, employment agencies and society as a whole. In addition, for the approximately 60 to 70 percent of the high school students who do not continue on to some form of higher education, high school is their last experience with a formal education situation before entering into a lifetime of work. It is for this larger group that the maximum utilization of potential must be realized for a fuller life (p. 13).

Studies have shown that job satisfaction is related to on-the-job behavior. Smith (1971) indicates that administrators have relied primarily upon information and data related to program quality and educational process, while little has been done to develop methods to evaluate the quality of programs in relation to the on-the-job behavior of former students.

Enderlin (1974, p. 14) related identification of in-school factors which have an effect upon job satisfaction to the "total growth potential of the individual and to the well-being of society."

Grasso (1977) questions whether any curriculums are more than merely training or whether career education will accomplish the training. He refers to the education amendments of 1976 which he believes require closer scrutiny of vocational education than has ever been required of any other education program. He believes that the foremost issues in the education of youth are:

. . . the role and effectiveness of guidance in tracking; the proper staging of fundamental, general, and vocational studies; the role and impact of educational specialization at the secondary level; and the progress toward designing comprehensive educational programs (p. 16).

The belief that high school or college is a passport to success is a myth according to Haldane (1974). Increasing evidence supports the belief that some education may hurt the careers of some people.

Berg (1971) believes that education may be a significant factor in job dissatisfaction. This would indicate that educators have not provided the necessary elements for job satisfaction when students leave the educational setting for the work force.

The role of education in the preparation for work must change as student needs change. Hoyt (1977) related family and home to education by stating:

The changing nature of the home and family structure in America makes it imperative that educators accept new kinds of responsibilities in imparting the concept of work in the home and family structure to youth (p. 4).

Hoyt (1977) also alludes to the student's understanding of the career implications of subject matter and how this may be a significant force in the motivation of the student.

Haldane (1974) supports Hoyt's beliefs as follows:

The individual who is not afraid to try can get to know himself as a growing, progressing person. He can identify

the pattern of his inner motivation. This makes it possible for him to take charge of his own life and career development and, with cooperation of others, influence the course these will follow (p. 2).

Recent congressional studies indicating large numbers of unskilled youth entering the labor market, as cited by Bottoms (1979), are a major factor in the reduction of growth of productivity. He also states:

Today we see that unemployed people are unable to fill vacant jobs because they lack the necessary skills and inflation is being fed as employers bid with each other for the competent workers already in the labor market (p. 8).

Financial requirements and the role of accountability are indicated by Smith (1971):

In this day and age, when funds are limited and financial commitments are dependent upon the ability of educational programs to demonstrate their effectiveness and efficiency, accountability assumes an even more important role than it has in the past (p. 1).

A special emphasis in manpower development, according to the Employment and Training Report of the President (1978) is the School to Work Transition Program. Dropouts are of primary concern and one way of helping them is with "intensive vocational counseling and a job." Better work experience integrated with classroom instruction should better prepare youth for jobs.

The National Institute of Education states that students may not find jobs with both high job satisfaction and high pay. However, workers with lower pay may enjoy their jobs more.

Enderlin (1974) alludes to the notion that a satisfied worker is a more productive worker. This would then place more employer emphasis on the satisfaction of the workers with their jobs. He also states:

The ability of an individual to work consistently, and to receive satisfaction from this work, is necessary if society is to meet the needs of its individual members and maximize its human resources. Work satisfaction must, therefore, become a concern of all educators (p. 8).

Previous Methodology

Wallace (1966) identified two approaches to the study of job satisfaction - the personality approach and the environmental approach. The approaches are not mutually exclusive and there is interaction between them.

In researching previous studies of education and work, Quinn and Mandilovitch (1977) found that most of the studies dealt with level of education rather than quality or type of education. They also found that research is usually limited to workers in specific occupations or specific employers of workers.

Haldane (1974) supported Herzberg's ideas of job satisfiers and dissatisfiers. According to Herzberg (1959) satisfiers tend to motivate and dissatisfiers tend to de-motivate employees.

Locke and others (1963) identified five factors which affect job satisfaction - present pay, opportunity for promotion, the work itself, the supervision and the people with whom one works.

The five factors presented by Locke (1963) were examined in a study by Perone (1970). Perone divided the five factors into satisfiers and dissatisfiers and devised a rating scale to determine degree of satisfaction or dissatisfaction in each area.

Dunham, Smith and Blackburn (1977) identified eight factors similar to Locke's which affect job satisfaction. These factors were

supervision, kind of work, amount of work, financial, career future, company identification, co-workers and physical conditions.

Julian (1976) compared responses from graduates of the Oklahoma State University School of Technology and employer responses to evaluate satisfactoriness of employees. Many of the variables in satisfactoriness are the same as the variables for job satisfaction. He grouped the variables into five major categories for study - housing and marital status, job satisfaction reports of graduates, influence of training and job opportunities and additional education and technical training. His main questions dealt with socio-economic status, age, performance, conformance and personal adjustment.

Enderlin (1974) reported on one phase of the vocational development study series, which is a longitudinal study. This phase dealt with the casual relationships affecting job satisfaction. The variables involved were sex, intelligence, manual dexterity, value-interest and satisfaction, value-salary, socio-economic status, curriculum and grade point average.

Previous Findings

Herzberg and others (1959) classified work factors into satisfiers and dissatisfiers. Intrinsic factors generally point to job satisfaction while extrinsic factors more generally point to job dissatisfaction. Challenges, more responsibility and more authority relate to intrinsic satisfaction while money, environment and tight supervision relate to extrinsic satisfaction.

Enderlin (1974) found that:

Work is only one of the environments to which an individual must relate, and all of these environments are interrelated. The individual relates to an environment with these skills. In turn, the environment regards the individual. In work, the individual seeks to achieve correspondence between his skills and rewards of the work environment (p. 31).

Enderlin (1974, p. 43) also found that individual occupational values are related to a person's job satisfaction. This value system "determines the nature and environment of the work situation suitable for the individual."

Studies by Paine and others (1967) indicated a relationship between work values and family background. There is little mobility in job levels or pay of workers when compared to job levels and pay of parents.

In a study of job satisfaction of navy enlisted men by Prichard and others (1973) it was found that job satisfaction could be predicted by actual job duties. The more accurate predictions related to intrinsic satisfaction.

Haldane (1974) concluded that men and women do not need to change employers to achieve job satisfaction. The things they need are:

. . . secure employment, reasonable assurance of continued income as a result of their efforts, and opportunity to move within their organization so that both self-actualizing opportunities and growth may be a part of their lives (p. 11).

Wise (1977, p. 31) studies sex and background relations to career choices and found that "the effects of childhood poverty on career values are approximately the same for the two sexes." For both sexes the main reason for choosing a particular career was that the work was interesting, important, within their abilities and in general

satisfying. About a fifth of the students stayed in a field once they had started work because they liked the work or had little opportunity to change. A very few workers chose a field because it was their father's or mother's work.

Wise (1977) also found that in choosing a career, six percent of the persons followed parents' advice, six percent chose the field because of an acquaintance in the field but only two percent were influenced by teachers and counselors. The effects of socio-economic status were reported as follows:

Finally, although we cannot identify cause-effect relationships, there is tentative evidence to suggest that lack of career information and delay in making career choices may be mechanisms that perpetuate low socio-economic status from one generation to the next (p. 32).

Summary

The need for this study was shown by relating vocational training to job satisfaction. Curriculum was also related to job satisfaction, but level of education was shown to be a tool to be employed by students to achieve better jobs and was not necessarily related to satisfaction on the job.

Guidance was shown to be of value in tracking and selection of vocational courses. However, few employees attributed their career choices to guidance counselors or teachers.

Dissatisfaction as well as satisfaction was reported in some studies. Factors relating to the job, once a person was employed were classified as satisfiers or dissatisfiers; i.e., the work itself may be a satisfier while the pay may be a dissatisfier.

Satisfaction was classified as intrinsic, extrinsic or general in nature. Intrinsic satisfaction may indicate job satisfaction and is a motivator; and extrinsic satisfaction may indicate job dissatisfaction due to factors that the individual cannot control.

Some of the factors identified by various studies as affecting job satisfaction were pay, opportunity for promotion, the work itself, the supervision, the people with whom one works, company identification, physical conditions and sex.

Findings of various studies indicated a number of variables which affect job satisfaction. Among the variables were sex, intelligence, manual dexterity, interest, salary, socio-economic status, curriculum, the grade point and personal adjustment.

The most complete study of job satisfaction was by Enderlin (1974), and his study used the Minnesota Satisfaction Questionnaire to evaluate job satisfaction.

CHAPTER III

METHODOLOGY

This was a study of the graduates of vocational courses at the Tulsa County Area Vocational Technical School for the 1977-78 school year. Graduates who had the career orientation course during the summer of 1975 were compared to graduates who did not have the course to ascertain if there was a significant difference in job satisfaction as determined by the Minnesota Satisfaction Questionnaire.

School records were searched to identify students who had the career orientation course and who later enrolled in vocational courses at the Tulsa County Area Vocational Technical School. Further, present jobs of graduates were compared to school records to determine if graduates were employed in jobs related to their training. Graduates who had the career orientation course and were employed were compared to graduates who did not have the career orientation course and were employed to see if there was a significant difference in their job satisfaction.

A preliminary investigation of records was necessary to determine the number of graduates involved and whether or not an adequate number of questionnaires for this research study would be returned. The records of the Tulsa County Area Vocational Technical School were made available by the administration on the condition that all materials be handled in such a way as not to violate the privacy of individuals.

A search of records found that only 4.8 percent of the students enrolled in the first career orientation course in 1971 subsequently graduated from vocational courses at the completion of the 1974-75 school year. By 1977-78 nearly 10 percent of the graduates had completed the career orientation course.

The literature revealed that a number of factors which affect job satisfaction had been identified. According to Buros (1978) a respected instrument available to measure job satisfaction is the Minnesota Satisfaction Questionnaire (MSQ). Additional demographic information was needed to supplement the MSQ in order to further explore the association of various factors on job satisfaction.

The Tulsa County Area Vocational Technical School

The Tulsa County Area Vocational Technical School provides vocational training for students of Tulsa County. Adult and high school courses are offered, with adult courses offered mainly at night. Courses for high school students are offered either mornings or afternoons for three hours with the other half of the day spent in one of the 27 high schools which are in the Tulsa County Area Vocational Technical School District. The high schools in the Tulsa County Area Vocational Technical School District are shown in Appendix E.

Students from high schools within the Tulsa County Area Vocational Technical School District who are interested in a vocational course may make application for admission to the Tulsa County Area Vocational Technical School. Students are admitted based on quotas for each of the 27 high schools. Quotas which are not used are reassigned to other

high schools. Students could choose from 33 vocational courses which were offered at the high school level during the 1977-78 school year.

Career Orientation

In order to make potential students more aware of vocational courses available at the Tulsa County Area Vocational Technical School, a career orientation course was implemented in 1971. This course is offered to students during the summer between their ninth and tenth grades. Although quotas are allotted to high schools within Tulsa County Area Vocational Technical School District, few students are refused admission to the career orientation course.

The career orientation course is conducted for one-half day, five days a week for four weeks. Students may select four vocational areas of interest for study during the course spending one week in each of the areas. A general orientation of duties of a person in the vocation, employment opportunities and training needed is provided in classes which are combined with hands-on activity with actual tools, equipment and materials used in the vocation. One-half unit of high school credit is earned for completion of the course.

Selection of Subjects

All graduates of the Tulsa County Area Vocational Technical School vocational courses for the 1977-78 school year were included in this study. There were 544 graduates of the 33 vocational courses offered. The career orientation course had been completed by 52 of the 544 graduates.

Selection of Instrument

The Minnesota Satisfaction Questionnaire was selected for measuring job satisfaction in this study. Many previous studies have been done using this questionnaire. The review of the test presented in Buros (1978) indicated that the MSQ was probably the best instrument available for the measuring of job satisfaction.

The MSQ contains 20 items and measurements are made on three scales. Six of the items form a scale for extrinsic satisfaction, 12 items form a scale for intrinsic satisfaction and all 20 of the items form a scale for general satisfaction. A breakdown of the Minnesota Satisfaction Questionnaire is as shown in Table I.

TABLE I
SCALES FOR THE MINNESOTA SATIS-
FACTION QUESTIONNAIRE

Scale	Item
Intrinsic	1, 2, 3, 4, 7, 8, 9, 10, 11, 15, 16 and 20
Extrinsic	5, 6, 12, 13, 14 and 19
General Satisfaction	17, 18 and all items for intrinsic and extrinsic satisfaction

The items on the MSQ are evaluated on a five point Likert-type scale from the MSQ manual as shown in Table II.

TABLE II
POINT VALUE OF MINNESOTA SATISFACTION
QUESTIONNAIRE RESPONSES

Point Value	Response
1	Very Dissatisfied (VDS)
2	Dissatisfied (DS)
3	Neither (N)
4	Satisfied (S)
5	Very Satisfied (VS)

A short supplement to the Minnesota Satisfaction Questionnaire was prepared to collect additional information. The information collected was marital status, parents' income, employment status and the graduate's self-evaluation of job satisfaction. Four additional items were included in the questionnaire; these items were to determine who influenced students to attend the Tulsa County Area Vocational Technical School; whether or not the vocational course studies was the same as an area studied while in the career orientation course; whether or not the career orientation course influenced the choice of vocational courses; and if no career orientation course was taken, why?

Collection of the Data

This study was endorsed by the Tulsa County Area Vocational Technical School administration. Data collected cannot be identified

with particular students nor can the students be identified.

Permission was obtained from the University of Minnesota to use the Minnesota Satisfaction Questionnaire to collect data on job satisfaction of graduates.

The Minnesota Satisfaction Questionnaire and the supplement for demographics were mailed February 23, 1979, with a cover letter by the Superintendent of the Tulsa County Area Vocational Technical School District. The letter requested that graduates complete and return the questionnaire and supplement. Metered return postage was placed on a self-addressed envelope for return of the questionnaire and the envelope was enclosed with the cover letter and the questionnaire. All returns were sent to the Tulsa County Area Vocational Technical School and held for the researcher. Returns used in the study were those received by March 19, 1979.

Analysis of the Data

Each graduate who had the career orientation course was individually matched with another graduate, on as many characteristics as possible, thus utilizing the research method of the matched pair concept. Factors used in the matching phase of the study were vocational course, graduate's estimate of their parents' income, whether or not employment was related to vocational courses studied and marital status. Graduates who were unemployed, self-employed or in the military service were excluded from this portion of the study.

The returned questionnaires made it possible to utilize the matched pair concept for graduates from 12 vocational courses (aero mechanics, auto body repair, auto mechanics, cosmetology, dental office

assistant, drafting and design, graphic communications, health careers, horticulture, machine shop, medical office assistant and photography). After graduates were matched, analysis of variance, on the Minnesota Satisfaction Questionnaire (MSQ), was calculated for intrinsic, extrinsic and general satisfaction.

The mean and standard deviation were calculated for intrinsic, extrinsic and general satisfaction of all graduates who responded to the MSQ. The T test was used to compare all responses to the norms for the MSQ.

All graduates were evaluated to determine if there was a significant difference in job satisfaction based on their grade point average in a vocational course, income level of parents as estimated by graduates, sex, marital status, whether or not graduates were employed in a job related to their vocational course and the high school attended during the graduate's senior year.

The returned questionnaires were separated by vocational courses to determine if there was a significant difference in job satisfaction for graduates of different vocational courses. Analysis of variance was used for the determination. Vocational courses with four or fewer graduates were excluded from this portion of the study.

The returned questionnaires were divided according to whether or not the graduates were employed in jobs related to vocational courses when they were high school seniors in the Tulsa County Area Vocational Technical School. The T test was used to determine if there was a significant difference in intrinsic, extrinsic or general job satisfaction between these groups.

CHAPTER IV

RESULTS

The purpose of this study was to investigate whether or not there was a significant difference in job satisfaction of graduates of the Tulsa County Area Vocational Technical School if they had completed the career orientation course, if they had taken different vocational courses during their senior year or if they were working in jobs related to the vocational courses they had taken as a senior. Job satisfaction of graduates was calculated for intrinsic, extrinsic and general satisfaction based on the Minnesota Satisfaction Questionnaire (MSQ). The results of all data collected will be presented in this chapter.

Questionnaires Returned

There were 544 students who completed a vocational course at the Tulsa County Area Vocational Technical School during their senior year in 1977-78, and 52 of those had completed the career orientation course during the summer of 1975. Questionnaires were mailed to all 544 graduates. Of the 544 questionnaires mailed, 29 were returned marked as undeliverable, 515 questionnaires were apparently delivered, and 152 were returned within 24 days and were used in this study. Out of the 152 returned, 18 returned questionnaires were from graduates who completed the career orientation course in 1975.

Analysis of Questionnaires

The questionnaires received from graduates were analyzed on the basis of sex, marital status, high schools attended, grade point average for vocational courses while a senior, parents' estimated income, job satisfaction for matched groups, job satisfaction of unmatched groups, job satisfaction by vocational courses and job satisfaction in relation to employment status. The results of analysis, based on the above factors, are presented on the following pages.

Sex of Graduates

When responses were tabulated according to sex of graduates it was found that 70 of the graduates were males, 79 were females and three did not respond to the item. Since the questionnaires were not coded, sex of the three graduates who did not respond could not be determined by school records. The data was treated to determine if there was a significant difference in job satisfaction between males and females.

For the variable intrinsic job satisfaction the mean response for 59 males was 47.91, the standard deviation was 7.32, the standard error was 0.95 and the range was 29 to 60. The mean response for the 65 females was 48.09, the standard deviation was 6.85, the standard error was 0.85 and the range was 30 to 60. The T for the two groups was 0.1391. No response was received from 28 of the graduates for this item. The variation in number of responses was due to some graduates continuing their education. There was no significant difference in intrinsic job satisfaction for males and females at the 0.05 alpha level (see Table III).

TABLE III
JOB SATISFACTION OF GRADUATES BY SEX

Variable	Sex	N	Mean	Standard Deviation	T Value
Intrinsic	Male	59	47.92	7.32	0.1391
	Female	65	48.09	6.85	
Extrinsic	Male	58	21.07	4.87	0.0930
	Female	65	21.15	5.21	
General	Male	58	77.00	12.22	0.0625
	Female	65	77.14	12.22	

For the variable extrinsic job satisfaction, the mean response for 58 males was 21.07, the standard deviation was 4.87, the standard error was 0.64 and the range was 10 to 30. The mean response for 65 females was 21.15, the standard deviation was 5.21, the standard error was 0.65 and the range was 7 to 30. The T value for the two groups was 0.0930. No response was received from 29 of the graduates for this item. The variation in number was due to some graduates continuing their education. There was no significant difference in extrinsic job satisfaction for males and females at the 0.05 alpha level (see Table III).

For the variable general job satisfaction the mean response for 58 males was 77.0, the standard deviation was 12.22, the standard error was 1.59 and the range was 48 to 100. The mean response for 65 females was 77.14, the standard deviation was 12.22, the standard error was 1.52 and the range was 46 to 100. The T value for the two groups was 0.0625. No response was received from 28 of the graduates for this

item. The variation in numbers was due to some graduates continuing their education. There was no significant difference in general job satisfaction for males and females at the 0.05 alpha level (see Table III).

Marital Status of Graduates

When responses were tabulated for marital status it was found that 22 of the graduates indicated that they were married, 100 indicated that they were not married and 30 did not respond to the item. The T test was used to see if there was a significant difference in job satisfaction due to marital status. There was no significant difference at the 0.05 alpha level due to marital status for either intrinsic, extrinsic or general job satisfaction of the graduates as shown by Table IV.

TABLE IV
JOB SATISFACTION OF GRADUATES BY MARITAL STATUS

Variable	Marital Status	N	Mean	Standard Deviation	T Value
Intrinsic	Married	22	47.68	7.53	0.2331
	Single	100	48.07	6.97	
Extrinsic	Married	22	20.41	5.40	0.7580
	Single	99	21.31	4.98	
General	Married	22	76.14	13.71	0.4083
	Single	99	77.31	11.86	

High Schools Attended by Graduates

Graduates' intrinsic, extrinsic and general job satisfaction were examined based on the high schools within the Tulsa County Area Vocational Technical School District the graduates attended when not in vocational courses. Schools with four or fewer students attending vocational courses were excluded from this study, which left 14 schools with graduates that could be studied. Results of an analysis of variance indicated that there was no significant difference at the 0.05 alpha level due to schools attended by the graduates for either intrinsic, extrinsic or general job satisfaction as shown by Table V.

TABLE V
JOB SATISFACTION OF GRADUATES
BY HIGH SCHOOLS ATTENDED

Variable	Source	Sums of Squares	Degrees Freedom	Mean Square	F Value
Intrinsic	Model	422.67	13	32.51	0.65
	Error	4479.79	90	49.78	
	Total	4902.46	103		
Extrinsic	Model	195.53	13	15.04	0.59
	Error	2255.91	89	25.35	
	Total	2451.44	102		
General	Model	1117.59	13	85.97	0.60
	Error	12855.09	89	144.44	
	Total	13972.68	102		

Grade Point Average of Graduates

Letter grades were assigned to students in the Tulsa County Area Vocational Technical School for each semester of work. Averaging of grades was accomplished by assigning numerical values for each of the letter grades so that A = 4, B = 3, C = 2, D = 1 and F = 0.

The intrinsic job satisfaction of 121 graduates who responded to the questionnaire was calculated to determine if there was a significant difference in results for graduates who had different grade point averages for the vocational course they took while a high school senior. No response was received from 31 graduates for this item. The mean response was 48.01, the standard deviation was 7.07 and results of the analysis of variance were not significant at the 0.05 alpha level (see Table VI).

TABLE VI

JOB SATISFACTION OF GRADUATES
BY GRADE POINT AVERAGE

Variable	Source	Sums of Squares	Degrees Freedom	Mean Square	F Value
Intrinsic	Model	123.88	3	41.295	0.83
	Error	5991.10	120	49.925	
	Total	6114.99	123		
Extrinsic	Model	3.157	3	1.053	0.04
	Error	3085.25	119	25.926	
	Total	3088.41	122		
General	Model	247.33	3	82.44	0.55
	Error	17975.01	119	151.05	
	Total	18222.34	122		

The extrinsic job satisfaction of 120 graduates who responded to the questionnaire was calculated to determine if there was a significant difference in results for graduates who had different grade point averages for the vocational course they took while a high school senior. No response was received from 32 graduates for this item. The mean response was 21.11, the standard deviation was 5.09 and results of the analysis of variance were not significant at the 0.05 alpha level (see Table VI).

The general job satisfaction of 120 graduates who responded to the questionnaire was calculated to determine if there was a significant difference in results for graduates who had different grade point averages for the vocational course they took while a high school senior. No response was received from 32 graduates for this item. The mean response was 77.07, the standard deviation was 12.29 and results of the analysis of variance were not significant at the 0.05 alpha level (see Table VI).

Graduates' Estimate of Parents' Income

Job satisfaction of graduates was studied based on variations in estimated parents' income. The income groups and number of responses for each group is shown in Table VII. A total of 119 of the 152 graduates who returned the questionnaire indicated their parents' estimated income, with 93 of the 119 graduates also responding to the Minnesota Satisfaction Questionnaire. There were 26 of the 119 graduates who did not respond to this item on the questionnaire.

The intrinsic job satisfaction of 93 graduates who responded to the questionnaire was calculated to determine if there was a significant

difference in results for graduates who had indicated different income levels for their parents. The mean response was 47.82, the standard deviation was 7.08 and the results of the analysis of variance were not significant at the 0.05 alpha level (see Table VIII).

TABLE VII
GRADUATES' ESTIMATE OF PARENTS' INCOME

Number of Graduates	Estimate of Parents' Income
9	\$5,000 to \$10,000
20	\$10,000 to \$15,000
26	\$15,000 to \$20,000
28	\$20,000 to \$25,000
36	Over \$25,000
33	No Response

The extrinsic job satisfaction of 92 graduates who responded to the questionnaire was calculated to determine if there was a significant difference in results for graduates who had indicated different income levels for their parents. The mean response was 20.92, the standard deviation was 4.75 and the results of the analysis of variance were not significant at the 0.05 alpha level (see Table VIII).

The general job satisfaction of 92 graduates who responded to the questionnaire was calculated to determine if there was a significant

difference in results for graduates who had indicated different income levels for their parents. The mean response was 76.63, the standard deviation was 11.98 and the results of the analysis of variance were not significant at the 0.05 alpha level (see Table VIII).

TABLE VIII
JOB SATISFACTION OF GRADUATES BY
PARENTS' ESTIMATED INCOME

Variable	Source	Sums of Squares	Degrees Freedom	Mean Square	F Value
Intrinsic	Model	135.99	4	34.00	0.68
	Error	4618.03	92	50.20	
	Total	4754.02	96		
Extrinsic	Model	195.89	4	48.97	2.17
	Error	2051.44	91	22.54	
	Total	2247.33	95		
General	Model	621.66	4	155.42	1.08
	Error	13066.84	91	143.59	
	Total	13688.50	95		

Job Satisfaction of Matched Groups of Graduates

This portion of the study was to determine if there was a significant difference in job satisfaction of graduates of the Tulsa County Area Vocational Technical School who completed the career orientation course during the summer of 1975 as compared to graduates who did not complete the career orientation course. The study of job satisfaction was divided into intrinsic, extrinsic and general satisfaction to agree

with the scales of the Minnesota Satisfaction Questionnaire.

The plan for comparing satisfaction of graduates who had the career orientation course and those who did not have the course called for matching of the graduates for the study. The primary matching factor was the vocational course that they attended during their senior year in the Tulsa County Area Vocational Technical School. Only one response was received from a graduate of the aero mechanics course and he was matched to an auto mechanics graduate who was the closest match. All other graduates who completed the career orientation course were matched with graduates of the same vocational course. After matching for vocational course, graduates were matched on a basis of sex, grade point average for the vocational course, parents' income, whether or not employment was related to the vocational course they had taken and marital status. Graduates with the most matches were used for this study. The results of the matching were shown in Table IX.

There were 18 graduates in this study who had completed the career orientation course. Three of the 18 were continuing their education and one was unemployed leaving 14 that could be matched for this phase of the study.

The 14 graduates who had completed the career orientation course had a mean intrinsic job satisfaction of 46.64 and a standard deviation of 4.71. The 14 graduates who had not completed the career orientation course had a mean intrinsic job satisfaction of 47.64 and a standard deviation of 6.14. The results of the analysis of variance indicate there is no significant difference in the intrinsic job satisfaction of

TABLE IX
FACTORS USED FOR MATCHING OF GRADUATES

* Vocational Course	Questionnaires		Sex	GPA	Income (Kilo)	Work Related To Training	Marital Status	Satisfaction **		
	Sent	Returns						INT	EXT	GEN
A Aero Mechanics	1	1	M	3.0	5 to 10	No	S	41	16	63
B# Auto Mechanics	26	12	M	3.5	5 to 10	No	S	37	17	61
A Auto Body Repair	2	1	M	3.0	No ans.	Yes	M	48	24	80
B Auto Body Repair	14	2	M	4.0	Over 25	Yes	S	42	13	64
A Auto Mechanics	7	2	M	3.0	20 to 25	Yes	S	39	15	62
B Auto Mechanics	26	12	M	2.5	No ans.	Yes	S	45	23	77
A Auto Mechanics	7	2	M	4.0	15 to 20	Yes	S	50	22	81
B Auto Mechanics	26	12	M	4.0	Over 25	Yes	S	57	27	94
A Cosmetology	1	1	F	3.0	15 to 20	No	S	44	19	70
B Cosmetology	11	2	F	4.0	No ans.	Yes	M	48	14	70
A Dental Off. Asst.	2	1	F	4.0	No ans.	Yes	S	48	19	74
B Dental Off. Asst.	18	7	F	4.0	20 to 25	Yes	S	53	21	83
A Draft. & Design	4	1	M	4.0	20 to 25	Yes	S	56	26	92
B Draft. & Design	23	7	M	4.0	10 to 15	Yes	S	53	24	85
A Graphic Comm.	3	1	M	4.0	10 to 15	Yes	S	52	15	76
B Graphic Comm.	18	3	M	3.0	20 to 25	Yes	S	49	23	82
A Health Careers	4	1	F	4.0	Over 25	Yes	S	49	22	77
B Health Careers	31	13	F	4.0	Over 25	Yes	S	49	19	78
A Horticulture	3	1	F	4.0	15 to 20	No	S	45	26	76
B Horticulture	9	2	M	3.5	20 to 25	No	S	48	24	82
A Machine Shop	2	1	M	3.5	20 to 25	Yes	S	46	12	66
B Machine Shop	14	6	M	3.5	Over 25	Yes	S	45	23	74
A Medical Off. Asst.	1	1	F	3.5	10 to 15	No	S	51	27	88
B Medical Off. Asst.	24	9	F	3.5	No ans.	Yes	S	54	23	87
A Photography	2	2	F	2.5	5 to 10	No	S	45	19	69
B Photography	13	2	F	1.5	Over 25	No	S	35	17	59
A Photography	2	2	F	3.5	Over 25	Yes	S	41	13	63
B Photography	13	2	M	3.5	No ans.	Yes	S	52	21	80

*A - completed career orientation; B - did not complete career orientation

**INT - intrinsic; EXT - extrinsic; GEN - general

#An auto mechanics graduate was the closest match for the only response from aero mechanics.

graduates of vocational courses who had the career orientation course and graduates of vocational courses who did not have the career orientation course at the 0.05 alpha level (see Table X).

TABLE X
JOB SATISFACTION OF GRADUATES
BY MATCHED GROUPS

Variable	Source	Sums of Squares	Degrees Freedom	Mean Square	F Value
Intrinsic	Model	5.14	1	5.14	0.163
	Error	817.58	26	31.44	
	Total	822.72	27		
Extrinsic	Model	7.0	1	7.0	0.336
	Error	542.08	26	20.85	
	Total	549.44	27		
General	Model	38.37	1	38.37	0.451
	Error	2210.25	26	85.01	
	Total	2248.62	27		

The 14 graduates who had completed the career orientation course had a mean extrinsic job satisfaction of 19.64 and a standard deviation of 5.00. The 14 graduates who did not complete the career orientation course had a mean extrinsic job satisfaction of 20.64 and a standard deviation of 3.94. The analysis of variance yielded an F value of 0.3357. There was no significant difference in extrinsic job satisfaction of graduates of vocational courses who had the career orientation course and those graduates who did not have the career orientation course at the 0.05 alpha level (see Table X).

The 14 graduates who had completed the career orientation course had a mean general job satisfaction of 74.14 and a standard deviation of 9.21. The 14 graduates who had not completed the career orientation course had a mean general job satisfaction of 76.14 and a standard deviation of 8.88. The analysis of variance yielded an F value of 0.4514. There was no significant difference in general job satisfaction of graduates of vocational courses who had career orientation and graduates who did not have the career orientation course at the 0.05 alpha level (see Table X).

Job Satisfaction of Unmatched Groups of Graduates

After the study of matched groups, a study of all graduates who responded to the questionnaire was undertaken. The study was planned to determine if there was a significant difference in the job satisfaction of the 14 graduates of the Tulsa County Area Vocational Technical School who had completed the career orientation course when compared with 110 students who had not completed the career orientation course. A total of 28 graduates did not respond to these items. There was no significant difference at the 0.05 alpha level due to graduates' completion of the career orientation course for either intrinsic, extrinsic or general job satisfaction as shown by Table XI.

Job Satisfaction of Graduates Compared to MSQ Norms

A study of the job satisfaction of all graduates who responded to the questionnaire was planned to determine if the job satisfaction of graduates of the Tulsa County Area Vocational Technical School was different from the norms established for the MSQ. The T test was used

to determine if there was significant difference in job satisfaction compared to the norms used in the MSQ manual (see Appendix D).

TABLE XI
EFFECTS OF CAREER ORIENTATION COURSE
ON JOB SATISFACTION

Variable	Completed Career Orientation Course	N	Mean	Standard Deviation	T Value
Intrinsic	Yes	14	46.64	4.72	0.77
	No	110	48.18	7.29	
Extrinsic	Yes	14	19.64	5.00	1.16
	No	109	21.30	5.03	
General	Yes	14	74.14	9.21	0.96
	No	109	77.45	12.54	

The mean intrinsic job satisfaction of 124 graduates was 48.85 with standard deviation of 7.20. There were 28 graduates who did not respond to these items. The mean intrinsic job satisfaction of the total group (N = 1723) set for the MSQ was 47.14 with standard deviation of 7.42. The T test was used to evaluate the difference in the study group as compared to the norm group. It was found to be 3.616 with infinite degrees of freedom. There was a significant difference in intrinsic job satisfaction of graduates of the Tulsa County Area Vocational Technical School who responded to the questionnaire as compared to the MSQ norms at the 0.05 alpha level as indicated in Table XII.

TABLE XII
 JOB SATISFACTION OF TULSA COUNTY AREA VOCA-
 TIONAL TECHNICAL SCHOOL GRADUATES
 COMPARED TO MSQ NORMS

Variable	Source	N	Mean	Standard Deviation	T Value
Intrinsic	graduates	124	48.85	7.20	3.616
	MSQ norms	1723	47.14	7.42	
Extrinsic	graduates	123	21.56	4.77	2.51
	MSQ norms	1723	21.11	5.03	
General	graduates	123	77.07	12.17	1.99
	MSQ norms	1723	74.85	11.92	

The mean extrinsic job satisfaction of 123 graduates was 21.56 with standard deviation of 4.77. There were 29 graduates who did not respond to these items. The mean extrinsic job satisfaction of the total group (N = 1723) set for the MSQ was 21.11 with standard deviation of 5.03. The T test was used to evaluate the difference in the study group as compared to the norm group. It was found to be 2.51 with infinite degrees of freedom. There was a significant difference in the extrinsic job satisfaction of graduates of the Tulsa County Area Vocational Technical School who responded to the questionnaire as compared to the MSQ norms at the 0.05 alpha level as indicated in Table XII.

The mean general job satisfaction of 123 graduates was 77.07 with standard deviation of 12.17. There were 28 graduates who did not respond to these items. The mean general job satisfaction of the total

group (N = 1723) set for the MSQ was 74.85 with standard deviation of 11.92. The T test was used to evaluate the difference in the study group as compared to the norm group. It was found to be 1.99 with infinite degrees of freedom. There was a significant difference in the general job satisfaction of graduates of the Tulsa County Area Vocational Technical School who responded to the questionnaire as compared to MSQ norms at the 0.05 alpha level as indicated in Table XII.

Job Satisfaction of Graduates by Vocational Courses

A study of job satisfaction of graduates of each vocational course was undertaken to determine which of the graduates were best satisfied with their jobs. When less than four responses were received from graduates of a given course, that course was dropped from comparison. Adequate responses for study were received from graduates of 12 different vocational courses. The courses were auto mechanics, dental office assistant, diesel mechanics, drafting and design, fashion design, graphic communications, health careers, data entry and keypunch, machine shop, medical office assistant, technical drafting and vocational electronics.

Table XIII shows the number of responses received for vocational courses along with the intrinsic, extrinsic and general satisfaction means for each course. The highest job satisfaction was for graduates of vocational courses in medical office assistant, fashion design, drafting and design and diesel mechanics. The lowest job satisfaction was for graduates of vocational courses in graphic communications, vocational electronics, data entry and keypunch and technical drafting.

TABLE XIII

MEAN JOB SATISFACTION OF GRADUATES
BY VOCATIONAL COURSES

Vocational Course	Number of Graduates	Number of Responses	Mean Satisfaction		
			Intrinsic	Extrinsic	General
Auto Mechanics	33	11	49.00	22.18	80.00
Dental Office Assistant	20	11	48.25	21.13	78.00
Diesel Mechanics	27	5	50.20	23.20	82.60
Drafting and Design	27	8	53.00	25.20	87.60
Fashion Design	25	5	52.75	26.25	88.25
Graphic Communications	21	5	44.20	16.00	67.60
Health Careers	35	14	48.33	21.25	77.50
Data Entry and Key punch	30	8	45.87	19.38	72.00
Machine Shop	16	7	48.43	19.14	74.71
Medical Office Assistant	25	10	55.57	25.14	89.71
Technical Drafting	27	6	43.00	22.00	72.75
Vocational Electronics	20	5	46.33	18.33	71.66

The analysis of variance procedure by vocational course for all graduates who responded to the questionnaires indicated an intrinsic job satisfaction mean of 48.84, standard deviation of 7.20 and F value of 1.43. There was no significant difference in the intrinsic job satisfaction of graduates of different vocational courses at the 0.05 alpha level (see Table XIV).

TABLE XIV
JOB SATISFACTION OF GRADUATES
BY VOCATIONAL COURSES

Variable	Source	Sums of Squares	Degrees Freedom	Mean Square	F Value
Intrinsic	Model	814.69	11	74.06	1.43
	Error	3473.48	67	51.84	
	Total	4288.18	78		
Extrinsic	Model	530.13	11	48.19	2.12
	Error	1525.37	67	22.77	
	Total	2055.49	78		
General	Model	3101.41	11	281.95	1.96
	Error	9617.62	67	143.55	
	Total	12719.04	78		

The analysis of variance procedure by vocational course for all graduates who responded to the questionnaires indicated an extrinsic job satisfaction mean of 21.56, standard deviation of 4.77 and an F value of 2.12. There was a significant difference in extrinsic job satisfaction of graduates of different vocational courses at the 0.05 alpha level (see Table XIV).

The analysis of variance procedure by vocational courses for all graduates who responded to the questionnaires indicated a general job satisfaction mean of 78.59, a standard deviation of 11.98 and an F value of 1.96. There was a significant difference in general job satisfaction of graduates of different vocational courses at the 0.05 alpha level (see Table XIV).

Work Related to Training of Graduates

All responses of graduates of the Tulsa County Area Vocational Technical School for the school year 1977-78 were checked to determine which graduates were employed in jobs related to their vocational training. There were 122 graduates who were employed and 30 who were not employed. There were 81 of those employed who listed their jobs by titles which identified with their vocational training. The 41 graduates who were employed in jobs not related to their vocational training are listed in Table XV.

The mean for intrinsic job satisfaction of graduates working in a job related to their training was 49.17, the standard deviation was 6.44, the standard error was 0.716 and the range was 33 to 60. The mean for graduates who were working in a job which was not related to their training was 46.0, the standard deviation was 7.81, the standard error was 1.22 and the range was 29 to 60. The T test was used to determine the difference in the two groups with a resulting T value of 2.3882. There was significant difference in intrinsic job satisfaction of graduates working in a job related to their training as compared to graduates working in jobs not related to their training at the 0.05 alpha level (see Table XVI).

TABLE XV

PRESENT JOBS OF GRADUATES IN WORK NOT
RELATED TO VOCATIONAL COURSES

Vocational Course	Present Job Listed
Aero Mechanics	Janitor
Air Cond. & Refrigeration	Radio advertising
Auto Mechanics	Sales and stock clerk
Auto Mechanics	Stationery clerk
Auto Mechanics	Tractor driver
Carpentry	Grocery clerk
Chemical Lab Technician	Bookkeeper
Clerical & Office	Child care
Computer Programming	Auto parts delivery
Computer Programming	Secretary
Computer Programming	Freight clerk
Cosmetology	Sales clerk
Diesel Mechanic	Weatherstripper
Drafting and Design	Door-to-door sales
Electronics Technican	Lawn and garden sales
Electronics Technician	Grocery stocker
Electronics Technician	Telephone solicitor
Fashion Design	Law clerk
Fashion Design	Secretary
Fashion Design	Chauffeur
Graphic Communications	Office manager
Graphic Communications	Shipping clerk
Graphic Communications	Receives credit payments
Health Careers	Painter
Health Careers	Inspector/cutter
Health Careers	Bookkeeper
Health Careers	Clerk Typist
Health Careers	Receptionist
Health Careers	Bakery sales
Horticulture	Transportation billing clerk
Horticulture	Convenience store clerk
Horticulture	Child care
Horticulture	Machinist
Machine Shop	Crane operator
Medical Office Assistant	Army intelligence
Medical Office Assistant	Cashier
Medical Office Assistant	Credit bureau clerk
Photography	Receptionist
Photography	Waitress
Technical Drafting	Laborer

TABLE XVI
 JOB SATISFACTION OF GRADUATES
 BY EMPLOYMENT STATUS

Variable	Employment Related to Vocational Course	N	Mean	Standard Deviation	T Value
Intrinsic	Yes	81	49.17	6.45	2.3882
	No	41	46.00	7.81	
Extrinsic	Yes	81	21.15	5.09	0.0787
	No	41	21.07	5.08	
General	Yes	81	78.40	11.86	1.5117
	No	41	74.85	12.88	

The mean for extrinsic job satisfaction of graduates working in a job related to their training was 21.15, the standard deviation was 5.09, the standard error was 0.57 and the range was 10 to 30. The mean for graduates who were working in a job which was not related to their training was 21.07, the standard deviation was 5.07, the standard error was 0.79 and the range was 7 to 29. The T test was used to determine the difference in the two groups with a resulting T value of 0.0787. There was no significant difference in extrinsic job satisfaction of graduates working in a job related to their training as compared to graduates working in jobs not related to their training at the 0.05 alpha level (see Table XVI).

The mean for general job satisfaction of graduates working in a job related to their training was 78.40, the standard deviation was 11.86, the standard error was 1.33 and the range was 48 to 100. The mean for graduates who were working in a job which was not related to

their training was 74.85, the standard deviation was 12.87, the standard error was 2.01 and the range was 46 to 98. The T test was used to determine the difference in the two groups with a resulting T of 1.51. There was no significant difference in general job satisfaction of graduates working in a job related to their training as compared to graduates working in jobs not related to their training at the 0.05 alpha level (see Table XVI).

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The purpose of this study was to investigate whether or not there was a significant difference in job satisfaction of graduates of vocational courses at the Tulsa Area Vocational Technical School if they had completed the career orientation course, if they had taken different vocational courses during their senior year or if they were working in jobs related to the vocational courses they had taken as seniors.

Students who had completed the career orientation course offered by the Tulsa County Area Vocational Technical School during the summer between their ninth and tenth grades and later completed a vocational course at the Tulsa County Area Vocational Technical School as seniors were identified. The Minnesota Satisfaction Questionnaire (MSQ) was selected to measure job satisfaction. Questionnaires were mailed to the 544 persons who graduated from vocational courses at the Tulsa County Area Vocational Technical School during the 1977-78 school year. Responses were received from 152 graduates, of which 18 had completed the career orientation course.

Question 1: Is there a significant difference in the job satisfaction of graduates of vocational courses at the Tulsa County Area Vocational Technical School who had the career orientation course and graduates who did not have the career orientation course?

The 18 graduates who had completed the career orientation course included three persons who were continuing their education full-time and one who was unemployed. This left 14 employed graduates who had completed the career orientation course and could be used in this study. Those 14 graduates were matched with 14 graduates who had not completed the career orientation course, first on the basis of vocational courses taken in the Tulsa County Area Vocational Technical School and then based on the number of matching characteristics from the group of sex, grade point average for vocational courses, parents' income, whether or not work was related to their vocational course at the Tulsa County Area Vocational Technical School and their marital status. Scores on the MSQ were evaluated based on intrinsic, extrinsic and general satisfaction as established for the MSQ. An analysis of variance was used to determine differences in the two groups.

The graduates who had the career orientation course had a mean intrinsic job satisfaction of 46.64 and a standard deviation of 4.71. The graduates who did not have the career orientation course had a mean intrinsic job satisfaction of 47.64 and a standard deviation of 6.14. The analysis of variance revealed no significant difference in the intrinsic job satisfaction of graduates who had the career orientation course as compared to graduates who did not have the career orientation course at the 0.05 alpha level.

The graduates who had the career orientation course had a mean extrinsic job satisfaction of 19.64 and a standard deviation of 5.00. The graduates who did not have the career orientation course had a mean extrinsic job satisfaction of 20.64 and a standard deviation of 3.94. The analysis of variance revealed no significant difference in

extrinsic job satisfaction of graduates who had the career orientation course as compared to graduates who did not have the career orientation course at the 0.05 alpha level.

The graduates who had the career orientation course had a mean general job satisfaction of 74.14 and a standard deviation of 9.21. The graduates who did not have the career orientation course had a mean general job satisfaction of 76.14 and a standard deviation of 8.88. An analysis of variance revealed no significant difference in the general job satisfaction of graduates who had the career orientation course as compared to graduates who did not have the career orientation course at the 0.05 alpha level.

A study of all graduates who responded to the MSQ was planned to determine if there was a significant difference in job satisfaction of graduates of the Tulsa County Area Vocational Technical School compared to norms for the MSQ.

The mean of all the Tulsa County Area Vocational Technical School graduates for intrinsic job satisfaction was 48.85 with a standard deviation of 7.20. These values were compared to the norms for the MSQ. It was found that there was a significant difference in intrinsic job satisfaction of Tulsa County Area Vocational Technical School graduates when compared to norms at the 0.05 alpha level which could have been due to the vocational training.

The mean for all the Tulsa County Area Vocational Technical School graduates for extrinsic job satisfaction was 21.56 with a standard deviation of 4.77. These values were compared to the norms for the MSQ. It was found that there was a significant difference in extrinsic

job satisfaction of Tulsa County Area Vocational Technical School graduates when compared to norms at the 0.05 alpha level.

The mean for all the Tulsa County Area Vocational Technical School graduates for general job satisfaction was 77.07 with a standard deviation of 12.17. These values were compared to the norms for the MSQ. It was found that there was a significant difference in general job satisfaction of Tulsa County Area Vocational Technical School graduates when compared to norms at the 0.05 alpha level.

Question 2: Is there a significant difference in the job satisfaction among graduates of different vocational courses at the Tulsa County Area Vocational Technical School?

The frequency count of responses to questionnaires by vocational course completed by the respondents indicated that only 12 courses had more than four persons who responded. Difference in level of job satisfaction of graduates was determined by the analysis of variance for intrinsic, extrinsic and general job satisfaction.

The intrinsic job satisfaction for this group had a mean of 48.84, a standard deviation of 7.20 and an F value of 1.43. This indicated no significant difference in the level of intrinsic job satisfaction for graduates of different vocational courses at the 0.05 alpha level.

The extrinsic job satisfaction for this group had a mean of 21.56, a standard deviation of 4.77 and an F value of 2.12. This indicated a significant difference in the level of extrinsic job satisfaction for graduates of different vocational courses at the 0.05 alpha level.

The general job satisfaction for this group had a mean of 78.59, a standard deviation of 11.98 and an F value of 1.96. This indicated a significant difference in the level of general job satisfaction for graduates of different vocational courses at the 0.05 alpha level.

Question 3: Is there a significant difference in the job satisfaction of graduates of vocational courses at the Tulsa County Area Vocational Technical School who are employed in jobs related to their vocational courses and those who are employed in jobs unrelated to their vocational courses?

All employed graduates were identified by whether or not their current employment was related to vocational courses they had taken when high school seniors.

The intrinsic job satisfaction for graduates in work related to their vocational courses had a mean of 49.17 and a standard deviation of 6.44. The intrinsic job satisfaction of graduates working in jobs not related to their vocational courses had a mean of 46.0 and a standard deviation of 7.81. The T value was 2.3882 which was significant at the 0.05 alpha level.

The extrinsic job satisfaction for graduates in work related to their vocational courses had a mean of 21.15 and a standard deviation of 5.09. The extrinsic job satisfaction of graduates working in jobs not related to their vocational courses had a mean of 21.07 and a standard deviation of 5.07. The T value was 0.0787 which was not significant at the 0.05 alpha level.

The general job satisfaction for graduates in work related to their vocational courses had a mean of 78.40 and a standard deviation of 11.86. The general job satisfaction of graduates working in jobs not related to their vocational courses had a mean of 74.85 and a standard deviation of 12.87. The T value was 1.51 which was not significant at the 0.05 alpha level.

Conclusions and Recommendations

1. The career orientation course taken between the ninth and tenth grades did not cause a significant difference in job satisfaction of graduates of the Tulsa County Area Vocational Technical School vocational courses. It is recommended that the recruiting, public relations, guidance and educational values of the career orientation course be reviewed to justify the continuation of the course.

2. There was a significant difference in extrinsic and general job satisfaction of graduates who had different vocational courses. The highest job satisfaction was for graduates of vocational courses in medical office assistant, fashion design, drafting and design and diesel mechanics. The lowest job satisfaction was for graduates of vocational courses in graphic communications, vocational electronics, data entry and keypunch and technical drafting. It is recommended that the curriculum materials and teaching methods be reviewed for the vocational courses with the lowest job satisfaction to determine if changes may be implemented which will improve the job satisfaction of those graduates.

3. The significant difference in intrinsic, extrinsic and general job satisfaction of the Tulsa County Area Vocational Technical School graduates and the norms for all employed persons contained in the MSQ manual indicate better work adjustment of the Tulsa County Area Vocational Technical School graduates than for all employed persons. It is recommended that non-vocational educators consider placing greater emphasis on factors which affect job satisfaction.

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APPENDIX A

QUESTIONNAIRE

QUESTIONNAIRE

The main questionnaire used in this study was the Minnesota Satisfaction Questionnaire, which is a copyrighted instrument. The Manual for the Minnesota Satisfaction Questionnaire and information on purchase and use of the instrument are available from:

Vocational Psychology Research
Department of Psychology
University of Minnesota
Elliott Hall
75 East River Road
Minneapolis, Minnesota 55455

QUESTIONNAIRE

Please mark one box that best describes your current status:

- Employed full time
 - Employed 20 hours per week or less
 - Unemployed
 - Military
 - Continuing Education
 - Other (please explain):
-

Who influenced your decision to attend Tulsa County Area Vo-Tech?

- Teachers
 - Counselors
 - Parents
 - Friends
 - Other _____
-

Rate your overall satisfaction with your present job.

- Very Satisfied
- Satisfied
- Undecided
- Dissatisfied
- Very Dissatisfied

What is your parents' approximate total income level?

- \$5,000 to \$10,000
- \$10,000 to \$15,000
- \$15,000 to \$20,000
- \$20,000 to \$25,000
- Over \$25,000

If you attended the four-week Career Orientation Course between ninth and tenth grades: (1) Did you study an area which was the same as your vocational training course?

- Yes No

(2) Did the summer Career Orientation Course influence your choice of a vocation?

- Yes No

If you did not attend the four-week Career Orientation Course at Tulsa Area Vo-Tech, Why?

- Conflicting Plans
 - Refused Admission
 - Not Interested
 - Did Not Know About the Program
 - Other (please explain):
-
-

What is your marital status?

Married

Single

APPENDIX B

RAW DATA FOR MATCHED GROUPS

TABLE XVII

RAW DATA FOR MATCHED GROUPS OF GRADUATES
WHO HAD CAREER ORIENTATION

	Scores for Each Item on the MSQ																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Aero Mechanics	4	4	4	3	2	4	3	3	4	3	3	3	2	2	2	4	2	4	3	4
Auto Body Repair	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Auto Mechanics	4	3	2	4	3	3	4	4	4	3	2	2	2	2	3	3	4	4	3	3
Auto Mechanics	4	5	5	4	3	4	4	4	4	3	3	3	4	4	5	5	4	5	4	4
Cosmetology	4	3	5	5	1	3	5	4	5	3	2	3	5	5	2	3	4	3	2	3
Dental Office Assistant	4	4	5	3	2	4	4	4	5	2	4	3	4	3	4	3	4	5	3	4
Drafting and Design	4	4	5	5	4	4	5	5	5	4	5	4	5	5	4	5	5	5	4	5
Graphic Communications	5	5	5	4	4	5	5	2	4	5	5	3	1	1	4	3	4	5	1	5
Health Careers	4	4	5	3	4	4	4	4	5	4	4	4	3	3	4	4	3	3	4	4
Horticulture	4	4	5	3	5	5	4	3	3	3	4	3	5	5	5	4	3	2	3	3
Machine Shop	4	4	2	4	1	2	4	5	4	4	4	3	2	1	3	4	4	4	3	4
Medical Office Assistant	4	4	4	4	5	5	5	5	4	4	4	4	4	4	4	4	5	5	5	5
Photography	4	4	5	5	5	4	4	2	3	2	4	4	1	1	4	4	3	3	4	4
Photography	5	4	2	3	1	3	5	5	4	1	4	1	4	2	2	2	4	5	2	4

TABLE XVIII

RAW DATA FOR MATCHED GROUPS OF GRADUATES
WHO DID NOT HAVE CAREER ORIENTATION

	Scores for Each Item on the MSQ																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Aero Mechanics	4	4	1	3	3	2	5	5	4	2	1	4	3	4	3	4	4	3	1	1
Auto Body Repair	4	4	5	4	1	2	2	4	3	4	5	2	5	2	1	1	4	5	1	5
Auto Mechanics	4	4	4	3	4	4	4	4	3	4	3	4	5	3	4	4	4	5	3	4
Auto Mechanics	5	5	4	5	5	5	5	5	4	4	5	5	4	4	5	5	5	5	4	5
Cosmetology	4	4	4	4	3	2	4	4	4	4	4	2	2	1	4	4	4	4	4	4
Dental Office Assistant	5	3	5	3	4	4	5	5	5	3	5	4	2	3	5	5	5	4	4	4
Drafting and Design	4	5	4	4	4	4	4	4	4	4	5	3	4	4	5	4	4	5	5	5
Graphic Communications	5	5	5	3	4	4	4	1	3	3	5	4	3	5	5	5	5	5	3	5
Health Careers	4	4	4	5	4	4	3	4	5	4	5	3	2	4	3	4	5	5	2	4
Horticulture	5	4	5	2	5	4	4	4	5	3	4	4	3	4	4	4	5	5	4	4
Machine Shop	3	4	4	2	5	4	4	4	4	4	4	4	2	4	4	4	4	2	4	4
Medical Office Assistant	5	3	5	4	5	5	5	4	5	4	5	4	2	3	4	5	5	5	4	5
Photography	4	4	2	2	4	3	3	4	4	2	2	4	2	2	4	2	3	4	2	2
Photography	4	5	5	4	3	4	5	5	5	3	5	4	4	3	4	3	4	3	3	4

APPENDIX C

CORRESPONDENCE

(Letterhead)
Tulsa County Area Vocational Technical
School District No. 18

March 1, 1979

Dear Graduate:

We ask your cooperation in an effort to improve the educational opportunities available to the students in the Tulsa County Area Vocational Technical School.

Please indicate your responses to the questions in the enclosed questionnaire. When you have completed your responses, please return the questionnaire to us in the stamped, self-addressed envelope which is provided. Mr. C. R. Hendon of Oklahoma State University will be analyzing the results of this study. The information gathered from this study will be used in finalizing the report, but no personal information will be reported nor will it be released to any unauthorized persons.

Your cooperation and early reply will be appreciated.

Yours truly,

Joe W. Lemley, Ed.D.
Superintendent

JWL/jo

Enclosures

(Letterhead)
University of Minnesota
Vocational Psychology Research

February 12, 1979

Mr. Charles R. Hendon
School of Occupational and Adult Education
Classroom Building 406
Oklahoma State University
Stillwater, OK 74074

Dear Mr. Hendon:

You have permission to use the Minnesota Satisfaction Questionnaire, short form, in your dissertation research. We request that upon completion of your study that we receive a copy or summary of the study report or dissertation, journal citation, if the study is published, etc., so that we may have a record for our files.

Please do not hesitate to contact us if we may be of assistance to you in use of the MSQ. I send you our best wishes for success in your study.

Cordially,

George A. Henly,
Administrative Assistant

APPENDIX D

MINNESOTA SATISFACTION QUESTIONNAIRE NORMS

TABLE XVIV
MINNESOTA SATISFACTION QUESTIONNAIRE NORMS

Scale	N	Mean	Standard Deviation
Intrinsic satisfaction	1723	47.14	7.42
Extrinsic satisfaction	1723	19.98	4.78
General satisfaction	1723	74.85	11.92

APPENDIX E

HIGH SCHOOLS FROM WHICH STUDENTS OF THE TULSA
COUNTY AREA VOCATIONAL TECHNICAL
SCHOOL ARE RECEIVED

HIGH SCHOOLS FROM WHICH STUDENTS OF THE TULSA
COUNTY AREA VOCATIONAL TECHNICAL
SCHOOL ARE RECEIVED

1. Berryhill
2. Bishop Kelley
3. Bixby
4. Broken Arrow
5. Catoosa
6. Central
7. Charles Page
8. Collinsville
9. East Central
10. Edison
11. Glenpool
12. Hale
13. Jenks
14. Liberty
15. Mason
16. McLain
17. Memorial
18. Moody Christian Academy
19. Owasso
20. Rogers
21. Skiatook
22. Sperry
23. St. Vianney
24. Tulsa Christian Academy
25. Union
26. Washington
27. Webster

VITA

Charles Robert Hendon

Candidate for the Degree of

Doctor of Education

Thesis: A STUDY OF THE EFFECT OF SELECTED FACTORS ON JOB SATISFACTION
OF GRADUATES OF THE TULSA COUNTY AREA VOCATIONAL TECHNICAL
SCHOOL

Major Field: Vocational-Technical and Career Education

Biographical:

Personal Data: Born Blytheville, Arkansas, September 5, 1929, the
son of Mr. and Mrs. James Hendon.

Education: Graduated from Woodland High School, Woodland, Missis-
sippi in 1950; received the Bachelor of Science in Education
degree from the University of Central Arkansas with a major
in Industrial Education in July, 1972; received the Master of
Science in Education degree from the University of Central
Arkansas with a major in Industrial Education in July, 1976;
completed requirements for the Doctor of Education degree at
Oklahoma State University in July, 1979.

Professional Experience: Electronics and guided missiles tech-
nician and officer in the U. S. Navy from 1946 to 1970;
Industrial Arts teacher, Las Vegas, Nevada, 1972-73;
Vocational Electronics teacher, Conway, Arkansas, 1973-74;
Vocational Exploration teacher, Little Rock, Arkansas,
1974-75; Electricity and Electronics teacher, North Little
Rock, Arkansas, 1975-77.

Professional Organizations: American Vocational Association