This study was conducted to determine whether high school vocational students who participate in different patterns of occupational experience exhibit differences in job satisfaction, school attendance, school achievement, and attitude toward preparation for work. Data were collected from school records and by administering Hoppock's Job Satisfaction Blank, an attitudinal inventory, and questionnaire to a stratified random sample of 250 students representing five vocational fields. Students who had received different occupational experiences did not differ significantly in relation to school achievement and attendance, job satisfaction, and attitude toward preparation for work. Differences did exist with attitudinal statements that dealt primarily with relevancy of courses toward preparing for employment and occupational choices. Students who resided in large metropolitan areas had a more unfavorable attitude toward preparation for work than those who lived in smaller communities, and students enrolled in their first year of vocational education did not have as favorable an attitude toward preparation for work as those who had been enrolled for two, three, or four years. (Author/SB)
RELATIONSHIPS AMONG
SELECTED OCCUPATIONAL EXPERIENCE PROGRAMS
IN SECONDARY SCHOOLS

BY

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Tennessee Research Coordinating Unit
RELATIONSHIPS AMONG SELECTED OCCUPATIONAL
EXPERIENCE PROGRAMS IN SECONDARY SCHOOLS

A Mini-Grant Research Project
Presented to
The Tennessee Research Coordinating Unit

by
John D. Todd

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The material in this publication was prepared pursuant to a contract with the Tennessee Research Coordinating Unit for Vocational Education, 909 Mountcastle Street, Knoxville, Tennessee, in cooperation with the University of Tennessee College of Education and the State Division of Vocational-Technical Education.

It has been prepared for distribution to selected agencies and individuals on a complimentary basis as permitted by funding under terms of the contract.
The primary purpose of the study was to determine differences and relationships among different patterns for occupational experience. Similar differences among other factors, such as enrollment of pupils by different vocational fields, number of years enrolled in vocational courses, size of community where the pupils resided, sex, and occupational objectives of the pupils were also studied.

The study included 250 pupils selected as a stratified random sample of 50 pupils from ten programs in each of the vocational fields.

Differences and relationships which existed were determined in relation to job satisfaction, school attendance, school achievement, and attitude toward preparation for the world of work. Data were collected by administering Hoppock's Job Satisfaction Blank, attitudinal inventory toward preparation for the world of work, a questionnaire, and from official school records. The vocational teachers administered the inventories.

Pupils who had received different occupational experiences did not differ significantly in relation to school achievement and attendance, job satisfaction, and attitude toward preparation for the world of work. Difference did exist with attitudinal statements that dealt primarily with relevancy of courses toward preparing for employment and occupational choices. Pupils who had obtained cooperative experiences gave the most unfavorable responses and differed significantly from most of the other patterns.

There was a significant correlation between job satisfaction and attitude toward preparation for the world of work. These two variables
were also correlated for pupils who had cooperative and school laboratory occupational experiences. The correlation was higher for the pupils who had obtained school laboratory experiences.

There were significant differences in job satisfaction, school attendance and attitude toward preparation for the world of work among the pupils according to their enrollment in different vocational fields. These differences did not follow a consistent pattern but those in occupational home economics showed the greatest improvement in school attendance and had the most favorable attitude toward preparation for the world of work. Pupils in vocational office education had the best job satisfaction with their occupational experiences.

Pupils who resided in large metropolitan areas had a more unfavorable attitude toward preparation for the world of work than those who lived in smaller communities. Their difference in attitude was significant.

Pupils grouped according to their occupational objectives did not differ significantly in relation to any of the variables tested.

The female pupils differed significantly from the males in their improvement in attendance and attitude toward preparation for the world of work.

Pupils enrolled in their first year in vocational education did not have as favorable an attitude toward preparing for the world of work as those who had been enrolled for two, three, or four years. This difference was significant.
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STATEMENT OF THE PROBLEM

In an effort to determine whether high school vocational pupils who participate in different patterns of occupational experience exhibit differences in relation to selected variables which influence programs in vocational education, the following variables were studied:

a) Job satisfaction
b) School attendance
c) School achievement
d) Attitude toward preparation for the world of work

OBJECTIVES

The objectives of this project were:

1. To determine the differences among pupils who had obtained experiences according to various patterns of occupational experience in relation to job satisfaction, school attendance, school achievement, and attitude toward preparation for the world of work.

2. To determine the correlation between the pupils' job satisfaction and attitude toward preparation for the world of work.

3. To determine the differences among pupils who are enrolled in different vocational fields in relation to job satisfaction, school attendance, school achievement, and attitude toward preparation for the world of work.

4. To determine the differences among pupils who live in different size communities relative to job satisfaction, school attendance, school achievement, and attitude toward preparation for the world of work.
5. To determine among pupils with different occupational objectives relative to job satisfaction, school attendance, school achievement, and attitude toward preparation for the world of work.

6. To determine the differences among pupils according to sex relative to job satisfaction, school attendance, school achievement, and attitude toward preparation for the world of work.

7. To determine the differences among pupils according to the number of years enrolled in vocational education relative to job satisfaction, school attendance, school achievement, and attitude toward preparation for the world of work.

METHODOLOGY

The procedure for conducting the study consisted of developing and field testing the instruments, selecting a sample of pupils for the study, and collecting and testing the data. Values used to indicate school attendance and achievement were determined by the difference in days present or absent and grade point averages of the pupils between two comparable semesters. Pupils' attendance and achievement records from the first semester of the senior year during a time in which they received occupational experiences were compared to a similar semester before receiving such experience.

Several survey instruments were developed by the investigator. These instruments were: (1) Attitudinal Inventory Relative to Preparation for the World of Work, (2) Survey of Types of Occupational Experience Programs of Pupils, (3) Student Data, and (4) General Questionnaire forms.
The Hoppock Job Satisfaction Blank was used in the study, but was not developed by the investigator.

Selected vocational educators in Tennessee helped develop the attitudinal inventory. These educators were asked to respond to a 43-item attitudinal inventory by indicating the items to which they thought a pupil with satisfactory occupational experience would "agree" and to which items they would "disagree." Only those items were selected that had at least a 75 percent consensus of the vocational educators responding to the instrument relative to the pupils agreeing or disagreeing with the statements. A 28-item, Likert-type attitudinal instrument was developed from these suggestions. Fourteen statements were selected with consensus that the pupils would "agree" and 14 were selected with consensus that the pupils would "disagree."

All of the instruments were field tested before being used in the study. The attitudinal inventory developed by the investigator was tested for reliability. It was tested according to the split-half method with a reliability coefficient derived by the Spearman Brown formula. It was also tested according to the test-retest method. The reliability coefficient by the split-half method was .85 and was .80 by the test-retest method.

The study was limited to 1,036 vocational programs being conducted in secondary schools in Tennessee. These programs consisted of 119 in distributive education, 40 in occupational home economics, 446 in trade and industrial education, 262 in vocational agriculture, and 169 in vocational office education.

Ten programs were randomly selected from each of the five vocational fields (Appendix A). The population for the study was limited to senior
pupils enrolled in these 50 vocational programs. There were 224 seniors enrolled in the 10 programs selected in distributive education, 188 in occupational home economics, 117 in trade and industrial education, 133 in vocational agriculture, and 248 in vocational office education. This made a total of 910 seniors comprising the population. A stratified random sample of 50 pupils was selected from each of the five vocational fields. This was accomplished by randomly selecting five pupils from each of the 10 programs in the five vocational fields. The sample for the study comprised 250 pupils from a population of 910 high school seniors enrolled in 50 vocational programs.

After the programs were randomly selected for the study, each vocational teacher from the selected programs was mailed a letter requesting his or her cooperation. If they agreed to cooperate, the teachers were asked to complete the form relative to the occupational experiences of the seniors in their programs. Five pupils were randomly selected from each of the programs where teachers indicated they would cooperate. The vocational teachers in these programs were again mailed the necessary forms and a letter requesting that they supervise the pupils in completing the inventories. At the end of the fall semester (January, 1972) the teachers and guidance counselors of the respective schools were contacted for additional data relative to the attendance and achievement records of the pupils completing the attitudinal inventories. The same data were also requested for these pupils during a similar semester before they had obtained any occupational experience.

Each item on the attitudinal inventory relative to preparation for the world of work was scored on a 1 to 5 scale. For the positive items, a score of 5 was assigned to the strongly agree response, 4 to the agree response, 3 to the undecided response, 2 to the disagree response, and
1 to the strongly disagree response. The scoring was reversed for the negative items. This method of scoring made it possible to get scores for each item and also a composite score with a range from 28 to 140.

The Hoppock Job Satisfaction Blank had a composite score with a range from 4 to 28. This inventory consisted of four items with seven choices for each given response. The most favorable response was given a score of 7 and the least favorable a score of 1.

Data relative to grade point average and attendance were recorded for two similar school semesters. These two semesters were compared for changes, if any, that occurred in grade point average or attendance during the period that the data were recorded. The grade point scale was 4.0 -- A, 3.0 -- B, 2.0 -- C, 1.0 -- D.

The pupils were assigned to categories according to their pattern of occupational experience, enrollment in a vocational field, sex, size of community in which they resided, years enrolled in vocational education, and occupational objective. These factors were tested for differences according to job satisfaction, attitude toward preparation for the world of work, attendance, and achievement.

One-way analysis of variance was used to test differences that existed with each variable when testing more than two categories of a factor. A t-test value was calculated to ascertain whether or not significant differences existed with each variable when only testing two categories of a factor. Significant differences were indicated with both tests at the .05 level of significance. When there was a significant difference among levels of a factor with the analysis of variance, Duncan's new multiple range test was used to determine the level where the difference existed.
Pearson product-moment coefficients were calculated to determine the correlations that existed between job satisfaction and attitude toward preparation for the world of work according to different groupings of the pupils. This coefficient was calculated for the two variables according to scores of the pupils comprising the sample for the study and also according to the scores of pupils categorized relative to their pattern of occupational experience.

INTERPRETATION OF DATA

There were no significant differences among the pupils according to different patterns for occupational experience relative to school attendance, school achievement, job satisfaction, and attitude toward preparation for the world of work.

There were significant differences according to occupational patterns for six of the 28 statements of the attitudinal inventory. Even though there was not a consistent mode of significant differences, the pupils who had received cooperative occupational experiences tended to indicate the least desirable responses to five of the attitudinal statements dealing with the relevancy of vocational courses toward preparing persons for employment based upon the needs of pupils and with making choices of occupations. Their attitudes were significantly different from pupils who had other patterns of occupational experiences. There was little consistency as to which patterns elicited the most favorable responses to these five statements.

Job satisfaction and attitude toward preparation for the world of work were significantly correlated according to pupils who had received occupational experiences in cooperative and school laboratory programs.
There were significant differences among pupils enrolled in different vocational fields relative to job satisfaction, school attendance, and attitude toward preparation for the world of work.

Distributive education pupils had the lowest mean score for job satisfaction. Occupational home economics pupils had the highest mean score for job satisfaction and the best response in attendance. Pupils in vocational agriculture had the most unfavorable response in attendance.

Pupils in vocational education had the most favorable attitude toward preparation for the world of work and those in trade and industrial the most unfavorable. There were also other significant differences among pupils in different vocational fields relative to their attitudes toward preparation for the world of work, but these differences did not follow a consistent pattern.

There was a significant difference according to the size of community where pupils resided relative to their attitude toward preparation for the world of work. Pupils who resided in metropolitan areas had the least desirable attitudes which were significantly different from pupils who resided in rural communities and smaller cities.

There were no significant differences among pupils according to their occupational objectives relative to the variables tested in the study.

There were significant differences between pupils according to sex. The female pupils showed more improvement in attendance than the males after obtaining occupational experience in a vocational program.

There was a significant difference among pupils according to their attitude toward preparation for the world of work relative to the number of years enrolled in vocational courses. Those enrolled for four years had the most desirable attitude and their attitude toward preparation for the
world of work regressed proportionately as the number of years enrolled in vocational courses decreased. Those enrolled for two, three, and four years differed significantly in attitude from those enrolled for only one year.

CONCLUSIONS AND RECOMMENDATIONS

Based upon the findings of the study, the following recommendations were proposed:

1. Additional effort should be expended to integrate course work of pupils obtaining cooperative occupational experiences more closely with their on-jobs needs and to relate their experiences to future occupational objectives. Since there was a significant difference among attitudes dealing with this phase of vocational preparation between pupils who had obtained cooperative experience and most of the other patterns compared in the study, more effort should be directed to improve the situation.

   Teachers conducting cooperative occupational experience programs might consider using some of the following practices:

   a. Making job analyses of competencies needed for on-job performance in cooperative programs.

   b. Making job analyses of competencies needed for employment in jobs related to the occupational objectives of the pupils.

   c. Relating the classroom instructional program to on-job needs.
d. Becoming better informed regarding the career aspirations or occupational objectives of the pupils.

e. Placing pupils in jobs for cooperative experiences that are related to their occupational or career objectives.

2. Since many significant differences existed according to the pupils grouped by their enrollment in different vocational fields, additional research is needed to learn more about these differences. If certain attitudes or responses are characteristic of given vocational fields, an effort should be made to improve conditions to obtain the desired objectives of the programs.

3. Since there are many factors that influence pupils' attitudes, and responses toward facets of vocational education, additional research is needed to determine other factors and their differences among pupils.

4. Additional research is needed to study some of the other factors which showed significant differences among the pupils in the study. More research is needed to study differences between pupils living in metropolitan areas and those living in smaller communities. More research is also needed to study differences between male and female pupils.

It appears that pupils enrolled in vocational education for only one year did not have the most desired attitude toward their experiences. This is probably an inconclusive finding since pupils with poor attitudes often fail to enroll for
advanced courses. It also indicates that more effort
should be made to improve programs for first-year pupils
with the assumption that this will favorably influence their
attitudes and thus retain them for further study in vocational
programs to prepare for the world of work.

5. The study should be conducted at a later date using a dif-
ference population and sample. It should also be conducted
in other states and regions of the country. If findings are
consistent, then more generalizations can be made from the
studies.

6. A similar study should also be conducted by another investigator
with background and training in a different vocational field.
APPENDICES
VOCATIONAL EDUCATION PROGRAMS IN TENNESSEE
SELECTED FOR THE STUDY

Vocational Agriculture

1. Central High School (Shelbyville)
2. Lebanon High School
3. Kenton High School
4. Happy Valley High School
5. Meigs County High School
6. Rutledge High School
7. Boones Hill High School
8. McMinn County High School
9. Ripley High School
10. Huntingdon High School

Distributive Education

11. Bartlett High School
12. Friendsville High School
13. Central High School (Knoxville)
14. Central High School (Columbia)
15. Middleton High School
16. Chucky-Doak High School
17. Lester High School (Memphis)
18. Clinton High School
19. Frayser High School (Memphis)
20. Chattanooga City High School
Trade and Industrial Education

21. Westview High School (Martin)
22. Rule High School (Knoxville)
23. Franklin High School
24. Claiborne County High School
25. Haywood County High School
26. McMinn County High School
27. Hillsboro High School (Nashville)
28. Central High School (Savannah)
29. Memphis Technical High School
30. Southside High School (Memphis)

Vocational Office Education

31. Grundy County High School
32. Smyrna High School
33. White County High School
34. Clinton High School
35. Henry County High School
36. Hendersonville High School
37. DeKalb County High School
38. Gallatin High School
39. Northside High School (Memphis)
40. Cleveland High School

Occupational Home Economics

41. Dyersburg High School
42. Harriman Pre-Vocational High School
43. Science Hill High School (Johnson City)
44. McNairy Central High School (Bolivar)
45. Doyle High School (Knoxville)
46. Hilcrest Vocational-Technical High School (Fayetteville)
47. Central High School (Murfreesboro)
48. Halls High School (Knoxville)
49. Douglass High School (Memphis)
50. Rhea County High School
August 4, 1972

Mr. Robert U. Coker  
Regional Research and  
Development Coordinator  
Research Coordinating Unit  
2020 Terrace Avenue  
Knoxville, Tennessee  37916

Dear Mr. Coker:

The enclosed document constitutes an indepth study of the relationships among selected occupational experience programs in secondary schools. The study is based upon a selected population of Tennessee high school vocational education students. I hope the enclosed study meets your approval.

Expenses totaling $205 were incurred while researching this study.

If there are any questions regarding this matter, please let me know.

Sincerely,

John D. Todd

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