

Attitudes of Vocational Agriculture Teachers Toward Supervised Occupational Experience Programs

Fred Reneau, Associate Professor
Rose Rolder, Graduate Student
Agricultural Education and Mechanization
Southern Illinois University

Accepted for Publication August 1985

Supervised Occupational Experience Programs (SOEP's) provide students with opportunities to "learn by doing." Many educators "throughout the United States have begun to question the quality, quantity and integral nature of the experiential component of vocational agriculture program" (Leising, Wolfom, & Zilbert, 1982). Tulloch (1979) stated, "Each agriculture educator must be convinced that supervised occupational experience programs are necessary for each student if we are to have outstanding vocational agriculture programs."

The quality and quantity of SOEP's in vocational agriculture must be of concern to agriculture educators. The attitude of the teacher is instrumental in how well any subject is presented and accepted by students (Giachino & Gallington, 1977).

Teachers have played an important role in students' acceptance and involvement with SOEP (Taylor & McMillion, 1983). Students who were encouraged to have SOEP's were more likely to have SOEP's. Therefore, students who were not encouraged probably do not have SOEP's.

Purposes and Objectives

The purposes of this study were to determine vocational agriculture teachers' attitudes toward SOEP's and to assess the quantity of SOEP's. The specific objectives were to:

1. Determine the relationship between attitudes of vocational agriculture teachers toward SOEP's and number of students with SOEP's in each vocational agriculture program.
2. Determine the difference in proportion of students with SOEP's taught by vocational agriculture teachers who had an SOEP in high school and those taught by vocational agriculture teachers who did not have an SOEP in high school.
3. Determine the difference in the attitudes toward SOEP's of vocational agriculture teachers who had an SOEP in high school and those who did not have an SOEP in high school.

Procedures

Sample

The study population was the 12,474 vocational agriculture teachers in the United States listed in the Agriculture Teachers Directory (Henry, 1983). The sample consisted of 373 randomly selected high school vocational agriculture teachers. All fifty states were included in the study.

Instrumentation

The opinionnaire consisted of half positive and half negative statements based on procedures explained by Best (1981). The opinionnaire was reviewed by a panel of five experts. The validity of the statements was evaluated by the panel following the criteria suggested (Edwards, 1957) to determine the clarity of the Likert-type opinionnaire. Reliability was tested by administering the opinionnaire to 11 vocational agriculture teachers in southern Illinois. The reliability coefficient using the Kuder-Richardson formula 20 to measure internal consistency (Ferguson, 1976) was $r=.70$.

A cover letter and SOEP Opinionnaire were mailed to a random sample of vocational agriculture teachers in the United States. The packet also included a self-addressed, return envelope.

Null Hypotheses

The research questions of this study were restated in the null hypothesis form.

H₀1. There is no relationship between the attitudes of vocational agriculture teachers toward SOEP's and the quantity of SOEP's in each vocational agriculture program.

H₀2. There is no difference in the proportion of students with SOEP's taught by vocational agriculture teachers who had SOEP's in high school and those taught by vocational agriculture teachers who did not have SOEP's in high school.

H₀3. There is no difference in the attitude toward SOEP's of vocational agriculture teachers who had SOEP's in high school and those who did not have SOEP's in high school.

Data Treatment

Quantity values were computed by determining the proportion of vocational agriculture students having SOEP's in each vocational agriculture program. A one-to-five attitudinal rating value was assigned to the vocational agriculture teacher's scoring of each SOEP statement. An overall mean and standard deviation was formulated for the attitudinal rating of each teacher. Null hypothesis one was tested using Pearson product-moment correlation. Hypotheses two and three were tested using analysis of variance. An alpha of .05 was established for tests of significance.

Results

Three hundred five (81.8%) of the 373 random sample of vocational agriculture teachers completed and returned the SOEP opinionnaire. A total of 223 (73.1%) vocational agriculture teachers had SOEP's as high school students while 82 (26.9%) vocational agriculture teachers did not have SOEP's as high school students.

H₀1. There is no relationship between the attitudes of vocational agriculture teachers toward SOEP's and the quantity of SOEP's.

A Pearson Product Moment Correlation coefficient of $r=.59$ indicated there was a relationship between the teacher attitudes toward SOEP's and

the number of students currently having SOEP's within the local vocational agriculture program (Figure 1). The overall attitudinal mean of vocational agriculture teachers was 4.03 with a standard deviation of .51. The overall quantity value mean was .82 with a standard deviation of .22. Teachers who had a more positive attitude toward SOEP's had a greater proportion of students with SOEP's. The null hypothesis was rejected.

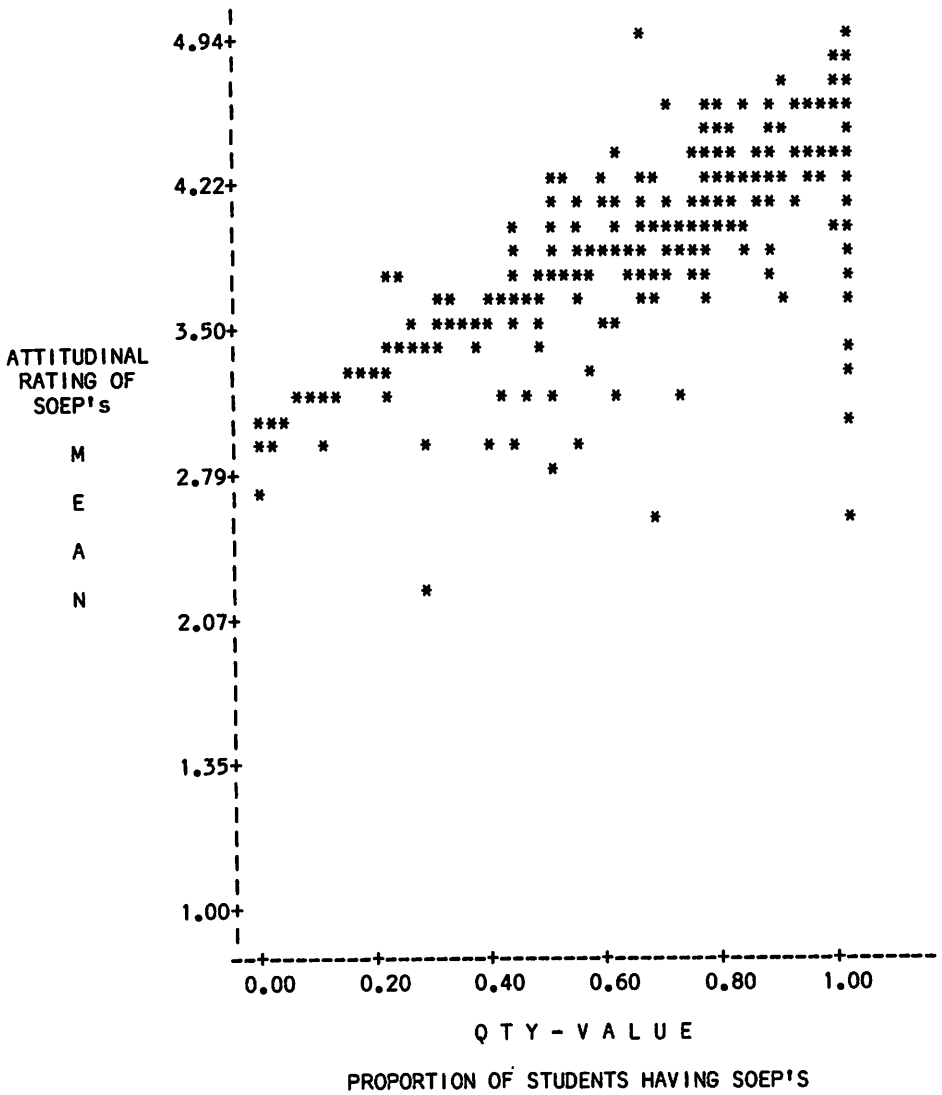


Figure 1. Linear Regression of Quantity Value by Attitudinal Mean Plot

H₀2. There is no differences in the proportion of students with SOEP's taught by vocational agriculture teachers who had SOEP's in high school and those taught by vocational agriculture teachers who did not have SOEP's in high school.

The F ratio of 96.29 was statistically significant at the .05 level of probability (Table 1). Teachers who had SOEP experience as high school students had a higher proportion (quantity value=.88) of vocational agriculture students currently with SOEP's. Vocational agriculture teachers who did not have an SOEP in high school had a quantity value of .64. The null hypothesis was rejected.

Table 1

Analysis of Variance for Quantity Values of Vocational Agriculture Teachers Having SOEP's in High School and Vocational Agriculture Teachers Not Having SOEP's in High School

Source	Sum of Squares	Degrees of Freedom	Mean Squares	F-Ratio*
Total	15.02	304	-	96.29
Between Groups	3.62	1	3.62	
Within Groups	11.40	303	.03	

Note. F_{critical}=3.88.

*p .05=level of probability used to ascertain significant differences.

H₀3. There is no difference in attitude toward SOEP's of vocational agriculture teachers who had SOEP's in high school and the attitudes of teachers who did not have SOEP's in high school.

The F ratio of 161.34 was statistically significant at the .05 level of probability (Table 2). Teachers (attitude mean=4.20) who had SOEP experiences as high school students had higher attitudinal scores than vocational agriculture teachers (attitude mean=3.58) who did not have SOEP's. The null hypothesis was rejected.

Conclusions

The following conclusions were based upon the findings in this study:

1. Vocational agriculture teachers who have a more positive attitude toward SOEP's have a higher proportion of students with SOEP's in their current vocational agriculture program.

2. Vocational agriculture teachers who had an SOEP in high school had a higher proportion of students with SOEP's.

Table 2

Analysis of Variance for Attitude Statements of Vocational Agriculture Teachers Having SOEP's In High School and Vocational Agriculture Teachers Not Having SOEP's In High School

Source	Sum of Squares	Degrees of Freedom	Mean Squares	F-Ratio*
Total	68.40	304	-	161.34
Between Groups	23.76	1	23.76	
Within Groups	44.63	303	.14	

Note. $F_{critical}=3.88$.

*p .05=level of probability used to ascertain significant differences.

3. Vocational agriculture teachers who had an SOEP in high school had a more positive attitude toward SOEP.

Recommendation

The following recommendations were made for teacher preparation programs:

1. Prospective teachers of vocational agriculture should be involved in an SOEP experience prior to teaching vocational agriculture (conduct an SOEP while in college).

2. The importance of SOEP's and hands-on applications of SOEP's should be included in methods courses taught by teacher educators in agriculture.

3. Student teachers in agriculture should be required to supervise SOEP's during their student teaching experiences.

4. Inservice training workshops should be conducted to increase the awareness and applications of SOEP's in vocational agriculture programs.

References

- Best, J. W. (1981). Research in education (4th ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Edwards, A. L. (1957). Techniques of attitude scale construction. Englewood Cliffs, NJ: Prentice-Hall.
- Ferguson, G. A. (1976). Statistical analysis in psychology and education (4th ed.). St. Louis, MO: McGraw Hill.

(Continued on page 18)