

Effect of Programmatic Instruction Related to Developing SOE Programs on the Self-Image of Students

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Feelings about oneself are important in career development. Havighurst (1953) emphasized that self is a force which helps determine the success of an individual through developmental tasks. Self-image or self-esteem is the evaluation that people make with regard to themselves. Purkey (1970) suggested that educational methods which encompass the following factors influence positive self-image development: (a) challenge, (b) freedom, (c) respect, (d) warmth, (e) control, and (f) success. Carefully planned and implemented SOE programs have the potential to include all six of these factors, thus producing a positive self-image in vocational agriculture students.

In an effort to provide instructional materials for teachers to use in providing programmatic SOE instruction for beginning vocational agriculture students, a SOE packet was developed at Iowa State University (Williams, 1977). Briers (1978) used a pretest-posttest control group experiment to test the effectiveness of the packet and found that students in experimental schools where teachers used the packet were more knowledgeable of SOE, felt more positive about SOE, and were better prepared to plan their SOE programs than students in control schools. Based on these findings and an awareness of self-image principles, it was theorized that as students put their plans for SOE programs into action and became involved in performing tasks in agricultural occupations, they would develop positive self-images. Therefore, it was hypothesized that students who were in the experimental group would have higher self-images than students in the control group. It was further hypothesized that a relationship existed between self-image and type of student SOE program participation.

Objectives

The primary objective of the study was to determine the effect upon self-image of students whose teachers used the programmatic SOE instruction (SOE packet) as compared to those who did not. The secondary objective was to determine if differences existed between self-esteem scores of students grouped according to type of SOE participation.

Methodology

This study (Morris, 1981) was designed to provide a delayed post-test measure for an experiment originally initiated by Briers (1978) to evaluate the effectiveness of a SOE instructional packet developed at Iowa State University. Briers' (1978) experiment included 32 Iowa schools randomly selected and assigned to an experimental group (n=16) and a control group (n=16). Included in these two groups were 388 first-year vocational agriculture students.

Two years after the Briers' (1978) experiment, 258 of the students were still enrolled in the same school and participating in vocational agriculture. For this study, a 50% random sample of these remaining students were selected. Therefore, the sample of this study included 129 third-year (junior) Iowa vocational agriculture students.

Two instruments were used in collecting data for the study. *The Barksdale Self-Esteem Evaluation No. 69* (Barksdale, 1975) was used to measure how students felt toward themselves (self-esteem or self-image). This instrument included 25 items and was designed to yield a composite self-esteem score. Students were instructed to rate each item on a five-point continuum, 0=not at all true for me, 1=somewhat true or true only part of the time, 2=fairly true or true about half the time, 3=mainly true or true most of the time, and 4=true all the time. Examples of items constituting this instrument were: (a) "I am at ease with strangers and make friends easily;" (b) "I feel good about others' good luck and winning;" and (c) "I do not blame others for my problems and mistakes." The data collected in this study were used to test reliability of the instrument. A reliability coefficient of .87 was observed.

A questionnaire was developed by the researchers to ascertain descriptive data regarding the respondents. The response framework consisted of multiple choice, dichotomous, and completion type items.

Students in schools where teachers utilized the SOE packet constituted the experimental group. Student whose teachers did not utilize the SOE instructional packet comprised the control group. For the purpose of this study, students and not schools were used as the experimental units.

The researchers visited the schools involved to administer the instruments to the selected students. Completed instruments were obtained for 121 students, a 94% response rate. Of these, 55 were from control schools and 66 were members of the experimental group.

Percentages were used to analyze personal and situational data. The t-test was used to test for differences between two groups focusing on the composite self-esteem score.

Findings

A brief description of the respondents will precede the findings, conclusions, and recommendations.

Table 1

Means, Standard Deviations, and T-values for Self-Esteem Scores by Treatment Group

Treatment group	<u>n</u>	\bar{X}	SD	t-value
Experimental	66	59.13	12.78	2.35*
Control	55	53.47	13.63	
Total	121	56.30	13.48	

* $p < .05$

The following partial profile is provided of the respondents:

1. Almost all respondents in both groups were male, in their third year of vocational agriculture, and had participated in FFA activities for three years.
2. A majority of the students aspired to enter an agricultural occupation, including 45% who planned to enter farming.
3. One-third of the respondents planned to attend a community college or area vocational-technical school, while another 18% planned to attend a four-year college or university upon graduation from high school.
4. Almost all (91%) of the respondents had conducted an agricultural production ownership type of SOE while enrolled in vocational agriculture. A little less (82%) indicated that agricultural production was their primary type of SOE. Thirteen percent identified farm employment as their primary SOE program.

H₀1: There is no significant difference between mean self-esteem scores of students whose teachers used the SOE packet as compared to those who did not.

The t-test was used to test for significant difference in self-esteem means. Results of the t-test are reported in Table 1. At the .05 level, the tabular t-value with which the calculated t was compared was 1.98 for 119 degrees of freedom. The t-value was larger than the tabular t-value indicating a significant difference between the two means. Thus, the null hypothesis was rejected. The students who were in schools where programmatic SOE instruction was provided had a higher self-esteem mean value (59.13) than students in the schools where the materials were not used (\bar{X} =53.47).

The appropriate question now is, what was there about the treatment (SOE packet) that made the difference? The SOE instructional packet provided teachers with a systematic method of teaching beginning vocational agriculture students to select and plan their SOE programs. SOE program development is a process that involves a number of steps. Some of these steps, e.g., "identifying opportunities" and "setting goals," are repeated annually or more frequently.

The following parallel between the content and methods emphasized in the SOE packet and factors that influence positive self-image development may help explain the effect observed:

<u>Content/Method of SOE Packet</u>	<u>Positive Self-Image Development Concept</u>
1. Setting SOE goals	1. Providing a challenge
2. Providing student-adult interaction through SOE	2. Receiving warmth and security
3. Identifying opportunities for SOE programs	3. Experiencing freedom to choose
4. Learning under supervision through SOE	4. Receiving respect from others
5. Selected SOE program	5. Feeling in control
6. Planning SOE activities	6. Identifying success indicators
7. Receiving recognition for SOE program achievement	7. Recognizing self-worth.
8. Setting and reaching SOE goals	8. Evaluating self-achievement
9. Evaluating SOE program by teacher (Williams, 1977).	9. Receiving constructive teacher criticism (Kash and Borich, 1978; Purkey, 1970)

Barksdale (1975) suggested that the total self-esteem score can be considered as an index on a scale from 0-100. The scores reported in Table 1 (59.13 and 53.47) were relatively low when compared to a possible score of 100. However, self-esteem scores of adolescents are expected to be considerably lower than those of adults. Horrocks and Jackson's (1972) theory of self-esteem development indicated that self-esteem is high during the early years, first ten years, then decreases in the adolescent stage, and increases again during adulthood.

Ho2: There is no significant difference between mean self-esteem scores of students grouped according to whether or not they had participated in various types of SOE programs.

The t-test was used to test for significant differences in mean self-esteem scores between students who had participated in selected types of SOE programs compared to those who had not. The means, standard deviations, and t-values for four separate t-tests are reported in Table 2. The tabular t-value with which the calculated t

Table 2

Means, Standard Deviations, and t-values for Self-Esteem Score of Students According to Whether or Not They Had Participated in Various Types of SOE Programs

SOE type	Group 1 ^a		Group 2 ^b		t-value
	Mean SD	n	Mean SD	n	
	Yes		No		
Animal crops ownership SOE programs	55.95 13.51	110	62.20 11.80	10	1.996*
Working on farm other than home	58.93 12.63	54	54.47 13.84	66	3.328*
Working on off-farm agribusiness	57.20 15.62	15	56.37 13.18	105	0.049
Working with school based SOE programs	55.83 12.62	23	56.63 13.69	97	0.066

^aGroup 1 = Students that participated in specific type of SOE programs.

^bGroup 2 = Students that did not participate in specific type of SOE programs.

* $p < .05$

scores were compared is 1.98 with 118 degrees of freedom. The t-values for the first two types of SOE were found to be significant at the .05 level. Therefore, the null hypothesis was rejected with regard to animal/crop type SOE and for working on the farm other than home farm.

Students who had participated in animal/crop ownership SOE programs scored significantly lower than those who had not had such experience. This finding may be partially explained by the amount of responsibility associated with ownership SOE programs, especially in the early stages. Rewards from animal/crop ownership may be more long-term in nature.

Students who had SOE programs that featured farm employment away from the home had higher self-esteem than students who had not had such experience. Employment can provide immediate rewards

that are highly observable to the student. Such rewards can make individuals feel good about what they are doing and about themselves.

Recommendations

1. Positive self-image development in students should be emphasized in teaching vocational agriculture.
2. The use of programmatic SOE instructions for beginning vocational agriculture students should be emphasized in preservice and inservice education for vocational agriculture teachers.
3. Additional research is needed to determine how different types of SOE programs effect students' self-esteem.

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