

Female Students' Perceptions of Vocational Agriculture Programs in Texas

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During recent years, changing attitudes by society toward females in the work force have influenced additional females to seek gainful employment. Economic factors have also made it necessary for many females to work outside of the home to supplement family income. In addition, a need for employment has been created with the increasing number of females who have become heads of households by choice, by divorce, or by death of a spouse. An increasing number of these females have moved into careers that have been traditionally dominated by males, including agriculturally oriented careers which require certain job related skills necessary to obtain and maintain employment. Increasing female enrollments in traditionally male-dominated vocational agriculture classes and increasing female employment in agricultural occupations have necessitated changes in administrative practices, curricula, teaching methods, and attitudes of teachers, students, and employers in agricultural environments.

To insure that educational, occupational, social, and economic opportunities are equitable for women and men, federal legislation has been passed to provide for the legal requirement of such opportunities. Passage of the Education Amendments of 1972 was used to establish guidelines by which equal education is to be provided regardless of sex (Smith & Farris, 1980). More specifically, Title IX of the 1972 amendments was used to guarantee that any educational program would permit equal access, participation in, and absence of discrimination by any person on the basis of sex. Specific provisions in the Vocational Education Amendments of 1976 were used to overcome sex discrimination and sex stereotyping in vocational programs and to furnish equal educational opportunities to persons of both sexes (Smith & Farris, 1980). Both the 1972 and 1976 amendments have served as cornerstones on which developing trends regarding the status of women in vocational education programs and in occupational work forces are based. For vocational agriculture programs to be most effective in preparing female students for careers in agriculture, agricultural educators need to determine how female students perceive the program.

Objectives

The primary purpose of this study was to determine female vocational agriculture students' perceptions of the vocational agriculture program in Texas. In order to accomplish this purpose, the following objectives were accomplished:

1. To determine female students' perceptions of the problems in vocational agriculture programs.
2. To identify problems perceived to be curriculum oriented.
3. To identify problems perceived to be student oriented.
4. To identify problems perceived to be school oriented.
5. To identify problems perceived to be employment oriented.

Methods and Procedures

Population and Sample

The sample examined in this study (Cepica & Quarles, 1982 and Dillingham, Cepica, Quarles, & Eggenberger, 1982) included all schools within the 10 geographical areas of Texas in which female students were enrolled in regular vocational agriculture programs. The area consultants of each of the 10 areas submitted a list of 25 schools in which female vocational agriculture students were enrolled. A letter, requesting participation in the study, was mailed to teachers in each of the 250 vocational agriculture departments. Of the vocational agriculture teachers contacted, 165 responded, yielding a 73.3% return and a potential sample of 2,516 female students. All data were collected in 1981.

The 165 schools were then stratified by area and 70 schools were randomly selected. Of the 70 schools selected, students from 64 departments completed questionnaires, yielding a 91.4% return. All 735 female vocational agriculture students in the 64 schools were included in the data analysis. Procedures suggested by Oliver and Hinkle (1981) were used to verify the appropriateness of the sample size for use in statistical analyses.

Data Gathering Instrument

After development of an initial questionnaire, an advisory committee consisting of 10 vocational agriculture teachers, three teacher educators, and two Texas Education Agency personnel was selected to review it. Following review and revisions, the questionnaire was field tested utilizing five students from each of 10 vocational agriculture programs. The field tests by female students were assessed and revisions were made to further enhance the quality of the instrument. The questionnaire was submitted to the Research Coordinating Unit of the Texas Education Agency for final approval.

Descriptive Analysis of the Data

Students indicated their perceptions of the vocational agriculture program by responding to selected statements that were divided into four groups or areas. These groups represented statements that were curriculum oriented, school oriented, student oriented, and employment oriented. The students responded to each of the selected statements by indicating the degree to which they agreed or disagreed with each statement. The responses were arranged in a Likert-scale format, in which the student could respond to five degrees of influence which were: strongly agree = 1, slightly agree = 2, neutral = 3, slightly disagree = 4, and strongly disagree = 5. Real limits were determined for use in analyzing the values obtained.

Mean values, frequencies of response categories, and standard deviations of the sample were obtained for each of the selected statements. These descriptive statistics were used to rank order the selected statements indicating factors affecting female students enrolled. Because positive statements were used to identify a problem, the higher the ranking - the more serious the problem.

Findings

Open Response Analysis

The questionnaire contained two open response questions for which students indicated perceived problems regarding their enrollment in vocational agriculture and problems they observed other female students experience in vocational agriculture. These responses were ranked by the student in descending order from one to three. A numerical value was placed on the responses in order to mathematically weigh the factors in reporting cumulative responses.

The results of the rank orders for both open response questions were found to be essentially the same. The factor found to rank first among the students surveyed was that female vocational agriculture students were not accepted by male students in vocational agriculture. The factor ranking second indicated that male students perceived female students less capable of performing agricultural skills. The fourth, fifth, and sixth ranked problems (in order) were inadequate restroom facilities for female students, non-acceptance by vocational agriculture teachers, and low expectations of female students. The female students perceived inadequate opportunities to develop shop skills as the seventh ranked problem.

Curriculum Factors

The student responded to selected statements regarding curriculum aspects of the program. These aspects included curriculum materials, curriculum content, and curriculum activities.

The number one ranked statement was "illustration of female student performing agriculture tasks in curriculum materials," with a mean value of 2.11. Ranked second was "curriculum materials contain word phrases pertaining to female students." The statement "curriculum materials contain information on career opportunities for female students" was ranked third by the student sample.

Although the mean values for the aforementioned statements were within the real limits for slightly agree (1.50-2.49) it should be noted that the number of students indicating a slightly disagree or strongly disagree response was somewhat large. For example, an examination of the response statement "curriculum materials illustrate female students performing agricultural tasks" revealed a mean value of 2.13 which indicated that the students slightly agreed with the statement. However, 90 students (12.24%) slightly disagreed or strongly disagreed with the statement indicating some students perceived this factor might adversely affect female students enrolled in vocational agriculture.

The fourth and fifth ranked statements affecting female students were "adequate opportunities exist for females to obtain shop skills and livestock handling skills." The mean values indicated the students slightly agreed with the factor that adequate opportunities existed to develop shop skills. It was also noted that 12.24% of the sample slightly or strongly disagreed with this statement.

School Factors

Several statements within the questionnaire were developed to identify factors affecting females enrolled in vocational agriculture that might be classified as being school related. The statement receiving the highest mean value (2.22) was "administration encourages enrollment of males and females in vocational agriculture programs." It was noted that 68 students slightly disagreed with the statement and 68 students strongly disagreed with the statement.

The second ranked factor was identified as "non-vocational agriculture teachers feel vocational agriculture is an acceptable program for females," with a calculated mean value of 2.15. Seventy-two of the students indicated that they strongly disagreed with the statement.

Adequate discipline by the teacher, female acknowledgements by the teacher, equal expectations by the teacher, and career opportunity counseling were the third, fourth, fifth, and sixth ranked factors affecting the female students with mean values of 1.95, 1.58, 1.58, and 1.44 respectively.

Student Factors

The third area of group of factors affecting female students enrolled in vocational agriculture was identified as those that were

student oriented. The statement, "non-vocational agriculture students perceive vocational agriculture as a program for females," ranked first with a mean value of 2.50. One hundred seventy-one students slightly disagreed or strongly disagreed with this statement, indicating the factor affected the respondents more adversely than other student factors did.

"Vocational agriculture teachers encourage enrollment of female students in vocational agriculture" was the second ranked statement with a mean value of 1.60. Fifty-two students slightly or strongly disagreed with the statement. The third and fourth ranked factors were "families support females enrolling in vocational agriculture," and "female students are accepted by male vocational agriculture students." Both factors had mean values of 1.50. The fifth ranked mean value indicated students strongly agreed that female students enrolled in vocational agriculture perceived vocational agriculture as a program designed for females.

Employment Opportunity Factors

The last group of factors identified as affecting female students enrolled in vocational agriculture was the area related to female employment opportunities in agricultural occupations. The first ranked factor in this area was "female students are informed of agriculturally related occupations in the community." This factor had a mean value of 1.90 with 52 of the students slightly disagreeing and 22 of the students strongly disagreeing with the statement. The students ranked the statement "agricultural employers accept female student" second with a mean value of 1.88. The third ranked factor "the community accepts female students in agricultural related occupations" had a mean value of 1.75. It was noted that mean values for all three factors were within the real limits for the slightly agree category.

Conclusions

Many factors may affect female students enrolled in vocational agriculture programs in Texas. The analysis of the data indicated some positive factors or strengths of the program. Conversely, female vocational agriculture students assessed some factors as having slightly adverse effects on them.

Likert-scale responses from students did not indicate factors having prominent adverse effects on them. All mean values ranged in the strongly agree to slightly agree category, except for one factor having a mean value of 2.50 (neutral), indicating overall positive attitudes toward the program. The factors identified as adversely affecting female students were determined from a combination of the mean values, the frequencies of the statements receiving slightly or strongly disagree responses, and an evaluation of the open response portion of the instrument.

Through completed research, the following positive attitudes were found to be prevalent among female students surveyed.

1. Females enrolled in the regular vocational agriculture programs in Texas had positive attitudes toward the programs. Their overall views were wholesome, their experiences rewarding, and the program is perceived as being beneficial.
2. Female vocational agriculture students indicated they were given adequate opportunities to participate in FFA programs and activities such as leadership and judging teams, chapter offices, and the supervised occupational experience program.

Any program, regardless of its vitality should undergo routine evaluation to insure continued success. Several areas requiring attention by each vocational agriculture teacher include the following:

1. Female vocational agriculture students may not be readily accepted by male students in vocational agriculture.
2. Some female students may not be adequately informed concerning agricultural related occupations.
3. Students who are not enrolled in vocational agriculture may not perceive vocational agriculture as a program for females.
4. Some female students indicated that male students believe females are less capable of performing agricultural skills. Likewise, some female students also share this belief.
5. Some school administrators do not encourage enrollment of females in vocational agriculture programs.
6. Some vocational agriculture teachers have a negative attitude toward female students. Some vocational agriculture teachers do not believe vocational agriculture is an acceptable program for females and some teachers do not have the same expectations of male and female students.
7. In some instances, restroom facilities were inadequate for female students.
8. Some female students do not believe they were given the opportunity to develop certain mechanical or livestock handling skills.
9. Students indicated that some curriculum materials did not illustrate female students performing agricultural tasks, did not contain word phrases pertaining to female students, and did not provide information concerning agriculture career opportunities for females.

This research effort has shown that vocational agriculture teachers in Texas have made progress in eliminating sex bias, stereotyping, and discrimination even though vocational agriculture has

traditionally been a male-dominated program. Positive steps have been made to make the program fully accessible to members of both sexes. Continued success of vocational agriculture programs will be dependent upon the presentation of favorable environments in which students may learn basic agricultural competencies.

Recommendations

After analyzing the findings and conclusions of this research study, the following recommendations were formulated:

1. Teachers should instill the attitude among male students that female students are a very beneficial part of the program.
2. Vocational agriculture teachers should include appropriate career guidance teaching units during each year of instruction for all students.
3. Vocational agriculture teachers should use all available media to inform nonvocational agriculture students and others that an education in agriculture will benefit both female and male students.
4. Vocational Agriculture teachers should give female students the opportunity and encouragement to perform agricultural skills so they will gain confidence in their knowledge and ability and male students will realize that females can perform tasks equally.
5. It is important to communicate with administrators and faculty concerning the enrollment of male and female students according to other interests, employment desires, and future educational objectives.
6. The Texas Education Agency staff, teacher educators, and vocational agriculture teachers should continue to project a positive attitude toward providing vocational agriculture programs which meet the needs of all students. Programs developed around this premise should be conducted at district, area, and state inservice meetings.
7. School administrators and vocational agriculture teachers should analyze the problem of inadequate restroom facilities. The accessibility and/or adequacy of restroom facilities for female students should be determined.
8. Vocational agriculture teachers should have the same expectations of male and female students.
9. Commercially developed curriculum materials should include female students in illustrations, word phrases, and agricultural career opportunities.

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