SEX BIAS AND TEACHER EVALUATION OF
STATE FFA DEGREE APPLICATIONS

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Sex role stereotyping has been a subtly accepted fact for years in American society (Guttentag, Bray, et. al., 1976), and sex bias attitudes are not necessarily changed by the passage of a federal act. Most persons are aware of the ideal of equity for men and women but are bound by stereotypes concerning the sexes. Title IX of the Education Amendments of 1972 and Title II of the 1976 Amendments have identified vocational education as a major change agent for eliminating sex stereotyped behaviors and attitudes in students.

Teachers play a tremendous socializing role in American culture, and they are a key to changing student concepts regarding sex role expectations (Kaplan, 1975, Matthews & McCune, 1975, Ricks & Pyke, 1973). Because teachers can be such a vital force in breaking the cycle of sex stereotyping in education, a real danger exists of teachers actually increasing and/or perpetuating the stereotypic attitudes of students. Ricks and Pyke (1973) reported that the perceptions and attitudes of teachers towards sex roles are traditional and presumably contribute to maintaining restrictive sex role expectations. The sex bias behavior of teachers could be a critical factor in the achievement and performance of female students when competing for awards in traditionally male youth organizations such as the FFA. Although several attitudinal studies have been conducted in recent years to determine the degree of sex bias among various groups of people (Broverman, Rosencrantz, et. al., 1970), little research has been conducted identifying the possibility of sex stereotyping and sex bias among production agriculture teachers, particularly in an unobtrusive manner.

Research Questions

The primary purpose of this research was to study an aspect of possible sex bias behavior among production agriculture teachers by analyzing their evaluation of student performance and achievement as measured by the State FFA degree application. The study was designed to answer the following questions:

1. Is there a relationship between the sex of the applicant and the score they receive on the State FFA degree application?

2. Is there a relationship between application scores and (a) teacher age, (b) number of years of teaching experience, (c) the number of female students currently
enrolled in the production agriculture class, and (d) geographic location in Ohio?

Methodology

The 340 production agriculture teachers in Ohio during the 1979-80 school year were the target population for the study. To develop a frame, production agriculture teachers were identified by using the 1979-80 Ohio Agricultural Education Directory. A random sample stratified across the state was used for subject selection. The 68 members of the sample represented 20 percent of the target population. The 1979-80 Production Agriculture State FFA degree application was the instrument used for the study. The investigator developed a set of three sample State degree applications to be scored and ranked by the teachers. The 68 teachers were divided into two groups of equal size. One group received a packet with one application with a female name and two applications with male names. The other group received the same three applications, except the name of the student on each application was changed to the opposite sex. All other sections of the applications other than the name of the applicant and some selected activities were identical. In other words, Application 1 for one group of teachers was a male student, while Application 1 was a female student for the other group of teachers. The instructors scored and ranked the applications during a three week period. Applications were collected during vocational agriculture district meetings and returned to the investigator by the state supervisors of vocational agriculture. To determine the relationship between the sex of the applicant and the score they received on the State FFA degree application, results were statistically analyzed using a t-test and Pearson Product Moment and point biserial correlations.

Results

Forty-four teachers returned their applications by the established cut-off date. The rate of return was 64.7 percent. Of the 141 applications returned, nine were discarded before analysis due to incomplete data. This produced a data sample of 132 applications. After comparing the descriptive data and information from the state supervisors of vocational agriculture, the investigator concluded that there was not an appreciable difference between non-respondents and respondents. The responding teachers ranged in age from 22 years to 60 years, with the mean age of the sample being 34 years. Eight years was the median number of years of teaching experience for the sample. Eighty percent of the production agriculture programs had one or more female students enrolled during the 1979-80 school year. Responding teachers represented all sections of Ohio.

Of the 132 usable applications, 67 had male student names and 65 had female student names. The mean score for the male applications was 72.6, and the mean score for the female
applications was 73.3. The maximum score for any application was 90. As illustrated in Table 1, the difference between the two means was not statistically significant at an alpha level of .05. In addition, the Pearson Product Moment and point biserial correlation coefficients designated a negligible correlation between the sex of the applicant and the score they received on the State FFA degree application.

Table 1
CORRELATION OF MALE AND FEMALE APPLICATION SCORES

<table>
<thead>
<tr>
<th>Applications</th>
<th>No. of Applications</th>
<th>$\bar{X}$</th>
<th>SD.</th>
<th>$r$</th>
<th>$r_{pb}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>67</td>
<td>72.6</td>
<td>7.6</td>
<td>.04</td>
<td>.05</td>
</tr>
<tr>
<td>Female</td>
<td>65</td>
<td>73.3</td>
<td>6.7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: $n = 132$, $t = .50$

Correlation of demographic data and application scores revealed that there was a negligible correlation between the variables of teacher age, teaching experience, the number of females enrolled in the production agriculture program, geographic location, and application scores. As shown in Table 2, the variables tended to be independent of application scores.

Table 2
CORRELATION OF DEMOGRAPHIC VARIABLES AND APPLICATION SCORES

<table>
<thead>
<tr>
<th>Variable</th>
<th>Correlation with Application Scores $r$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>.07</td>
</tr>
<tr>
<td>Years of Teaching Experience</td>
<td>.13</td>
</tr>
<tr>
<td>Females Enrolled</td>
<td>.01</td>
</tr>
<tr>
<td>Geographic Location</td>
<td>.08</td>
</tr>
</tbody>
</table>

Note: $n = 132$
Ninety percent of the teachers ranked one of the applications third. Whereas, two-thirds of the sample placed one of the other two applications first.

Conclusions and Implications

The negative aspects of sex bias and sex stereotyping can be over emphasized. Many times assumptions are made that persons will automatically exhibit sex bias behavior in given situations. The findings of the study indicate that Ohio production agriculture teachers do not demonstrate sex stereotyping when evaluating male and female State FFA degree applications. Apparently, the teachers are more concerned with the quality of the program of the applicant than with the particular sex of the student. Findings such as these illustrate that Ohio production agriculture teachers are not necessarily directed by restrictive sex role expectations and attitudes.

The results of the study revealed a high consistency among production agriculture teachers when ranking State FFA degree applications. This consistency is likely due to the detailed scoring guidelines that have been developed by the Ohio FFA Association for the State FFA degree applications. These guidelines appear to encourage and promote consistent ranking and objective evaluation of student performance and achievement, regardless of sex. Adoption of these guidelines has helped to insure equity for applicants of the Ohio State FFA degree.

To obtain additional information, the following studies are recommended:

1. Research involving teachers with male students in traditionally female vocational programs, such as home economics, should be conducted as a comparison study for this research.

2. Other methods of identifying sex bias among production agriculture teachers should be administered. Findings from such research could then be compared with data from the present study.

3. Replications conducted in other states would provide additional verification of the results of this study.

4. Research involving other programs in vocational education which have traditionally been for males should be conducted as a parallel study for the current research.

References

Broverman, I. K., Broverman, D. M. Clarkson, F. E., Rosenkrantz, P. S., and Vogel, S. R. Sex role-stereotyping and clinical


Ricks, F. and Pyke, S. Teacher perceptions and attitudes that foster or maintain sex role differences. Interchange. 1973, 4, 26-33.

(Goode and Stewart, continued from page 41)


