

## Perceptions by Nontraditional and Traditional Agricultural Students Toward Their High School Preparation and Work Barriers

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Eliminating sex stereotyping, providing sex equity and allowing people to enter nontraditional occupations have been issues that have received much attention from the news media and Congress. Many vocational education programs have historically attracted students of only one sex, such as males in agriculture or females in home economics. However, in recent years, students have been encouraged to enroll in vocational education programs that are nontraditional for their sex. This has resulted because of legislative action. Therefore, women can enroll in traditionally male programs and men can enroll in traditionally female programs--or can they?

Several researchers have investigated ways to encourage students to enter nontraditional programs (Lawson, 1977; Lerner, Bergstrom, & Champagne, 1976). Some problems encountered by nontraditional students while enrolled in sex-typed secondary education programs were identified by Evans (1979) and Green (1979). Other researchers found that problems and attitudinal barriers existed for students who wanted to enter courses thought to be nontraditional for their sex (Green, 1979; Rieder, 1977; Vetter, Sechler, Lowry, & Canova, 1979; Weitz, 1977). F. M. Asche (personal communication, December, 1980) noted that follow-up studies of nontraditional completers had not been conducted. In addition, Vetter et al. (1979) recommended that "much more information needs to be made available on the concerns and needs of boys and men as they relate to nontraditional enrollments." Thus, a study of the vocational nontraditional completers with respect to their school preparation and encountered work barriers appeared as a needed area of research in vocational education.

### Purpose

This study analyzed the attitudes of nontraditional and traditional program completers toward their school preparation, work and work barriers encountered in obtaining employment after completing their vocational agriculture program. Such information should be helpful in determining program strengths and weaknesses, identifying what motivates students to select a program and reducing problems that may limit future enrollments. Knowledge of these factors is especially important when offering nontraditional, innovative programs of an elective nature. Such a situation exists in the area of nontraditional enrollments of males and females in vocational programs. In the study, nontraditional completers were defined as females who had completed a typically male program.

The objectives of the study were to:

1. Identify factors perceived as influencing nontraditional and traditional students to enroll in vocational programs.
2. Describe the attitudes toward: (a) satisfaction with their program; (b) supportiveness of influential individuals; and (c) problems in seeking and obtaining employment and with job advancement.

3. Compare nontraditional and traditional agricultural completers on attitudes toward school and school preparation and encountered work barriers.

### Methodology

The population was the 1980 secondary vocational education program completers in West Virginia from comprehensive high schools and vocational schools having both nontraditional and traditional enrollments. A nontraditional vocational education program was defined as one with 20% or less enrollment by one sex (Ott, Carmichael, Gallup, Lewis, Russ, & Veres, 1980). Two separate samples were drawn: a random sample of 100 of the 208 nontraditional program completers (48%); and, for comparison, a random sample of 100 of the traditional completers from the same school and program as the nontraditional completers (N = 1336, 7%). Fifty-seven nontraditional and 57 traditional subjects were enrolled in vocational agriculture.

The researcher developed the questionnaire for the purpose of the study. A five-member panel of researchers in vocational education reviewed the questionnaire to establish content validity. The questionnaire was field tested in a vocational horticulture program in which both males and females were enrolled (N = 25). Cronbach's alpha reliability coefficients were determined for perception of school preparation (alpha for pilot test = .49; data sample = .65) and attitudes toward school (alpha for pilot test = .48; data sample = .73). The questionnaire was found to be reliable (Nunnally, 1967). Also, for the responding sample, perception of work barriers was found to be reliable by Cronbach's alpha.

The questionnaire was mailed 10 months after the subjects completed their program. A follow-up questionnaire was mailed to all nonrespondents. Efforts were made to locate the subjects whose questionnaire was returned undelivered by the postal service. Telephone calls were made to a 10% sample of the traditional and nontraditional nonrespondents (15 subjects contacted). Chi-square analysis showed no statistical difference between respondents and nonrespondents. Thus, it would appear that there was no difference between respondents and nonrespondents, and the results reported could be generalized to both groups.

Final response rates were 36% for the nontraditional sample and 42% for the traditional sample. For those that responded, 36% were nontraditional vocational agriculture completers and 31% were traditional vocational agriculture completers. Chi-square statistics were used for group comparisons, and the comparison-wise error rate should be considered when interpreting the results.

### Results

#### Personal Characteristics

Sixty-two percent of the nontraditional and 46% of the traditional agricultural respondents were employed, and 23% and 54% respectively were seeking employment. Because the respondents could indicate more than one category, some of the respondents who were employed were also looking for a job. Approximately one-fourth (23%) of the nontraditional and 46% of the traditional respondents were continuing their education either as full-time or part-time students. Twenty-seven percent of the nontraditional agricultural completers and 33% of the traditional completers had received a formal advancement in their jobs, excluding salary increases.

### Enrollment Factors

The most frequently chosen responses by the traditional respondents for enrolling in an agricultural program were program sounded interesting (77%), good at this kind of work (77%), wanted to learn a skill to prepare for a job (77%), wanted to try out this field (62%), thought I would like the work (62%), good job with a good income (62%) and jobs available (62%). The respondents could indicate more than one reason as to why they enrolled. The most frequent responses of the nontraditional agricultural completers were program sounded interesting (100%), thought I would like the work (85%), wanted to learn a new skill to prepare for a job (69%), wanted to try out this field (69%) and program recommended by people (62%).

### Satisfaction With Vocational Program

More traditional (100%) than nontraditional (85%) completers liked their experience in vocational agriculture. The majority indicated they had good instructors (92% and 77% respectively) and would recommend their vocational education program to a friend (92% and 77% respectively). Eighty-five percent of both respondent groups indicated they had teachers who were interested in their progress. However, more nontraditional completers (85%) indicated they would choose the program again than traditional completers (69%). In regard to whether males and females should be encouraged to take courses considered to be nontraditional for their sex, 77% of the traditional and 100% of the nontraditional agricultural completers expressed that it was appropriate for females to enroll in traditionally male courses. However, the completers were less agreeable that males should be encouraged to take courses considered to be nontraditional for their sex. Significantly more nontraditional agricultural completers (92%) than traditional completers (46%) thought males should be encouraged to enroll in nontraditional classes.

### Impact of Influential Individuals

Influential individuals investigated included parents, peers, teachers and counselors. Consideration was given to: assistance with career choice, treatment from teachers and classmates, support of vocational choice, and assistance with education or job placement.

Assistance with career choice. The nontraditional and traditional agricultural respondents reported "myself," parents and vocational teacher were of most help (Table 1). A significantly larger percentage of traditional completers than nontraditional completers indicated that their vocational teacher assisted them with their career choice. The overall pattern was similar for most of the individuals with a larger percentage of traditional completers having perceived receiving assistance than did nontraditional completers.

Treatment from teachers and classmates. Very few of the nontraditional (15%) and traditional (15%) agricultural completers indicated that they had been treated differently from others in their classes by their vocational education teachers. However, almost half (46%) of the nontraditional completers and 15% of the traditional completers indicated they had been treated differently from others by their classmates.

Support of vocational choice. The majority of agricultural respondents indicated that their parents supported their vocational choice. However, as shown in Table 2, a larger percentage of traditional completers reported support from parents, friends and counselors. A significant difference between the two groups existed for male

Table 1

Helpfulness With Career Choice While Completers Were in High School

Influential Individuals	Percent					
	Much Help		Some Help		No Help	
	NT	T	NT	T	NT	T
Myself	77	84	23	8	0	8
Male parent or guardian	67	77	25	15	8	8
Female parent or guardian	61	62	31	23	8	15
Vocational teacher	46	85	39	0	15	15*
Nonvocational teacher	31	31	46	31	23	38
Guidance counselor	30	31	31	39	39	30
Male friend	23	31	39	31	38	38
Female friend	15	8	54	54	31	38

Note. NT = nontraditional; T = traditional.

\*p<.05, Chi-square.

friends. More nontraditional agricultural respondents indicated opposition to their vocational choice from male parent or guardian, counselors and friends than did the traditional respondents.

Table 2

Support of and Opposition to Respondents' Vocational Choice

Influential Individual	Percent	
	Nontraditional	Traditional
Supported Choice		
Mother	77	85
Father	67	77
Female friend	54	69
Counselor	46	69
Male friend	38	85*
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Opposed Choice		
Father	17	0
Counselor	15	0
Female friend	15	0
Mother	8	8
Male friend	8	0

Note. The percentages do not add to 100% because the neutral category was deleted from the table.

\*p<.05, Chi-square.

Assistance with education or job placement. The nontraditional and traditional agricultural completers indicated that the most important person to assist them with securing their education or job placement was "myself" (Table 3). Others considered helpful were parents and the vocational teacher. More than three times as many traditional completers indicated their vocational teacher was helpful than did the nontraditional completers. In general, the traditional completers thought individuals were more helpful than did the nontraditional completers. Almost half of the nontraditional completers (46%) and 23% of the traditional completers indicated that their guidance counselor was of no help to them in securing their present education or job placement.

Table 3

Sources Considered of Much Help, Some Help or No Help in Securing Education or Job Placement

Influential Individuals	Percent					
	Much Help		Some Help		No Help	
	NT	T	NT	T	NT	T
Myself	73	92	27	0	0	8
Female parent or guardian	55	62	45	23	0	15
Male parent or guardian	55	69	36	23	9	8
Vocational teacher	18	69	46	16	36	15
Guidance counselor	18	8	36	69	46	23
Former vocational student	18	23	18	15	64	62
Female friend	15	18	27	39	55	46
Male friend	0	38	45	24	55	38
Nonvocational teacher	0	23	64	31	36	46

Note. NT = nontraditional; T = traditional.

Employment Constraints

Over half of the nontraditional (55%) and traditional (70%) agricultural completers perceived that they were required to do work which was not required by their coworkers. However, the majority of the respondents (89% nontraditional, 80% traditional) indicated that their present supervisor was interested in their progress. In addition, 45% of both respondent groups were unhappy with their salary. More nontraditional completers (55%) than traditional completers (36%) were unhappy with their advancement potential.

Conclusions and Implications

The study identified factors that nontraditional and traditional vocational agriculture program completers perceived to impede them in obtaining their vocational goals. The factors included: influences of vocational enrollment, satisfaction with school preparation, impact of influential individuals, assistance with education or job placement, and employment constraints. The findings identified potential problems

perceived both by nontraditional and traditional secondary vocational agriculture students.

Regarding the reasons for enrolling in vocational education programs in agriculture, the nontraditional completers were less likely than traditional completers to perceive their program as providing a good job with a good income or as a means for obtaining a good job. In general, the traditional respondents chose their vocational education program for more varied reasons than the nontraditional respondents. Both respondent groups reported that they enrolled because the program sounded interesting, wanted to learn a skill to prepare for a job and wanted to try out the field. In addition, both nontraditional and traditional completers had positive attitudes toward their vocational program.

Influential individuals were perceived as less helpful and non-supportive by the nontraditional completers. Friends of the respondents were more likely to support traditional choices than nontraditional choices. Regarding helpfulness with career choice, the vocational teacher was perceived as being more helpful than parents and friends by the traditional respondents. Parents were more helpful for the nontraditional respondents. Parents were identified as being influential in the finding by Penn and Gabriel (1976). However, the present study revealed that parents were not as helpful in securing education or job placement for the nontraditional respondents. Penn and Gabriel reported that the negative aspects of parental influence were reported mostly by females who wanted to pursue nontraditional careers.

Vocational teachers were influential in the decision by the respondents to enroll in vocational education programs. However, once enrolled, the respondents indicated that their vocational teachers were not as helpful as the completers wanted, nor did the majority of the respondents think they could turn to their vocational teacher for support. In addition, vocational teachers need to work with both nontraditional and traditional students for support on career placement and advancement. Since parent bias (especially the male parent) existed particularly for nontraditional students entering an agricultural occupation, vocational teachers need to be aware of this bias in the home.

A large percentage of the completers indicated that guidance counselors were of little or no help to them in securing education or job placement. This finding concurred with the reported findings of others that students encountered problems with guidance counselors, particularly if the students wanted to enroll in a nontraditional course or program (Evans, 1979; Lehmann, 1977; Lewis and Kaltreider, 1976). Perhaps students need to be more aware of the services counselors can offer. In addition, counselors may need to explain to the students the services that are available, since there was a recurring and unsatisfied need for assistance from guidance counselors in securing both education and job placement. Schools must consider adding vocational counselors to their staff and to provide placement assistance for vocational program completers.

Students appear less receptive to nontraditional students in the educational programs than do teachers. Thus, some efforts need to be exerted to help students understand and break through sex stereotyping in their thinking.

A greater problem appears to exist in the area of employment for nontraditional program completers in agriculture than exists in the vocational education program. This is particularly true for perceived advancement opportunities for the nontraditional program completers.

Since there is evidence that problems exist in the school setting and on-the-job, educators and employers must assess carefully the attitudes of students toward nontraditional enrollments; the availability of support systems, such as teachers, parents, guidance counselors and co-workers; and the opinion of the job market toward students who want to pursue nontraditional careers. Special efforts will be needed if students are to succeed in educational programs and careers which are considered to be nontraditional.

#### References

- Evans, L. H. (1979). Problems encountered by non-traditional students enrolled in sex-typed secondary vocational programs. Unpublished doctoral dissertation, Virginia Polytechnic Institute and State University, Blacksburg.
- Green, G. (1979). The failure of women to succeed in predominantly male occupations. The Journal of Vocational Education Research, 4(2), 53-60.
- Lawson, R. J. (1977). Tiger amongst the roses: An historical review of home economics for secondary school boys in the United States. Illinois Teacher of Home Economics, 20, 215-223.
- Lehmann, P. (1977). First it was discrimination in vocational education. Now it's more subtle sex bias. Worklife, 2(2), 2-5.
- Lerner, J., Bergstrom, F., & Champagne, J. E. (1976). Equal vocational education (Final report). Houston, TX: Center for Human Resources, University of Houston. (ERIC Document Reproduction Service No. ED 133 464)
- Lewis, M. V., & Kaltreider, L. W. (1976). Attempts to overcome sex stereotyping in vocational education. University Park: The Pennsylvania State University, Institute for Research on Human Resources.
- Nunnally, J. D. (1967). Psychometric theory. New York: McGraw-Hill.
- Ott, M. D., Carmichael, M. M., Gallup, J. M., Lewis, G. L., Russ, A. J., & Veres, H. C. (1980). The identification of factors associated with sex-role stereotyping in occupational education. Ithaca, NY: Cornell University, Cornell Institute for Occupational Education.
- Penn, J. R., & Gabriel, M. E. (1976). Role constraints influencing the lives of women. School Counselor, 23, 252-256.
- Rieder, C. H. (1977). Women, work and vocational education (Occasional Paper No. 26). Columbus: The Ohio State University, The Center for Vocational Education.
- Vetter, L., Sechler, J., Lowry, C. M., & Canova, V. (1979). Factors influencing nontraditional vocational education enrollments: A literature review. Columbus: The Ohio State University, The National Center for Research in Vocational Education.
- Weitz, A. D. (1979). Eradicating sexism in vocational education (Final report). Williamsport, PA: Williamsport Area Community College. (ERIC Document Reproduction Service No. ED 147 564)