ABSTRACT
              This research was conducted to identify factors
contributing to the enrollment of male high school students in Ohio
in program areas nontraditional for their sex. Using the 1980
Executive Student Follow-up Report, 28 vocational education programs
not traditional for males in Ohio (less than 20 percent male
enrollment) were identified, and the top 20 programs according to
number of males enrolled were found in 14 different schools. In 13 of
these schools, interviews were conducted; through 17 interviews, 90
male students, 29 teachers, and 16 counselors were contacted. The
males interviewed were enrolled in medical laboratory assistant,
dental assisting, diversified health, cosmetology, bank teller, child
care, home furnishings, and community and home programs. Most
students indicated that they were happy with their program choices,
suffered little discrimination, and had chosen the programs primarily
for their quality or because nothing else was available. Teachers,
counselors, and administrators interviewed were overwhelming
proponents of sex equity, and most had attended training to learn to
promote sex equity in their institutions. Role models and sex-fair
instructional and orientation materials were found to be significant
factors in the recruitment, retention, and placement of male students
in nontraditional programs. Based on the data gathered in this study,
16 recommendations were made for recruiting and retaining male
students in traditionally female vocational education programs. These
recommendations include providing all students with information about
all vocational programs, talking to students about job opportunities
in traditionally female occupations, inviting parents of students to
orientations to inform them about programs, developing   tional
and instructional materials, showing males in nontradi   roles,
taking students to job sites, and making sure the whole student
recruitment process is sex fair. (KC)

FACTORS CONTRIBUTING TO THE ENROLLMENT OF MALES
IN PROGRAM AREAS NOT TRADITIONAL FOR THEIR
SEX AT THE SECONDARY VOCATIONAL EDUCATION LEVEL IN OHIO

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INTRODUCTION

Education is the process through which people learn facts, skills, and
develop their abilities and attitudes. Black (1954) defined education as
the "conscious, deliberate cultivation of life at its higher levels on
the part of immature members of the society under the direction of mature
and expert teachers" (pp. 115-116). Today's society is changing and tomor-
row's work force needs to be prepared for these changes. As advocated by
Toffler (1970), the prime objective of education is to increase the cope-
ability of individuals: the speed and economy with which they can adapt
to continual change. People need to be provided with an education which
approaches learning from the standpoint of this and that, black and white,
rather than this or that, black or white. Such education can ease the
process of self-identification, goal clarification, and goal attainment.
A majority of people utilize their jobs to reach individual goals; thus,
teachers and educational institutions should prepare them for socially and
individually appropriate jobs; this is a duty educators dare not repudiate.

An optimal environment for learning experiences is needed if teachers
are to provide their students with a forward-looking education. There are
a variety of ways to improve and expand learning opportunities; one of
which -- but only one -- is bringing sex equity into the classroom. As
defined by VOICE (1981), "Sex equity means that men and women, girls and
boys have the right to be who they are, not who they are supposed to be"
(p. 1).

Title IX of the Education Amendment of 1972 was passed to eliminate sex discrimination in education and to ensure equal opportunities for both sexes in educational programs. Teachers have been encouraged to treat men and women equally and expected to provide their students with a suitable learning environment in which learners can expand and develop according to their needs and abilities. Title II of the Education Amendments of 1976 directed vocational educators to eliminate sex bias and sex stereotyping from their programs. Title IX and Title II, along with the effort and activities of educators, parents, and community groups, offer a fertile ground on which sex equity can grow and expand. Successful recruitment of nontraditional students (a nontraditional student is defined as one enrolled in a program in which 80 percent or more of the students are of the other sex) and consequent placement of them in occupations related to their training appear to be reasonable indicators of the efficacy of programs and activities aimed at contributing to the growth and prosperity of sex-fair vocational programs.

PROBLEMS AND OBJECTIVES

The focus of legislators' and educators on the equity needs of women has been successful in changing the enrollment pattern of females in vocational education programs. For example, Hartley (1981) cited that enrollment of women in agricultural courses at high school and college levels in California has been increased at least three times faster than enrollment of men. She also reported that the number of female students in agricultural economics has been increasing at an annual rate of 72 percent since 1975.

In a parallel fashion, men are taking jobs in women-dominated occupations. American Telephone and Telegraph reported that by mid-1972, over

12 percent of its secretaries, or 13,200 employees, were men; this change increased the percentage of male secretaries by more than 100 percent in seven years (Kohles, 1981). U. S. News and World Report (1981) revealed that the number of nurses who are male jumped by 140 percent, from 19,000 in 1972 to 46,000 in 1980. The same source also reported that the share of male airline attendants has quadrupled, from 3 to 12 percent during the same period.

In spite of these findings, one should recognize that although the social-emotional development of both sexes is hindered by sex-role stereo-typing, research has indicated that it is more difficult for males than females to unlearn stereotyped behaviors (Smith and Farris, 1980).

> The early identification process for the boy is therefore
> paradoxical and tragic. Pressures are put on him to be "all
> boy", yet he has to achieve a masculine identification virtually
> by proxy, via a father who is either uninvolved, often absent,
> passive when present, or assuming a punitive role. (Goldberg, 1976)

Johnny may not do all he really likes to do because some of those activities may project him as a "sissy". Mom and Dad will probably discourage his interest in ballet dancing, dolls, and sewing. Other boys in the school may not play with him unless he can prove his masculinity to them. Our society not only demands that people live up to their full potential, but also fit themselves into predetermined roles; a situation which, for many people, in fraught with unresolvable contradictions. Thus, Johnny lives in the duality in which "to be" is "to be like" and "to be like" is "to be like those who appear successful".[1] Johnny has to be tough, has to do his best to conform to expectations of society for men, and has to practice his masculinity at all times no matter what the cost might be (PEER, 1981).

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[1] The terms "to be" and "to be like" were borrowed from Paulo Freire, Pedagogy of the Oppressed (New York: The Seaburg Press, 1970), p. 33.

Pogrebin (1980) claimed that exercising masculinity may push a boy into academic problems in elementary school. Vroegh (1976) reported the following findings which may support Pogrebin's claim:

1. For every girl with academic problems in elementary school, there are four boys.

2. Two-thirds of grade repeaters are boys.

3. In elementary remedial reading, boys outnumber girls two to one.

Encouraging Johnny to enroll in a traditionally female vocational education program, although it can be the best for him, is not an easy task to accomplish. The literature is not rich enough to provide guidelines for schools and teachers to assist people like Johnny to get rid of the "male mystique", the old notion that a man must be unemotional, should never ask for help, and must be a successful earner first and a person second (PEER, 1981). Social pressures for traditional occupational choices are not the only factors that keep Johnny welding rather than child caring. Many of the traditionally female occupations are low paying, and real economic pressures may discourage men from pursuing them.

Therefore, expansion and improvement of sex equity programs and activities is needed in order to overcome sex discrimination, sex bias, and sex stereotyping in vocational education. Until now, such activities have been far from being universal. Benson and Hoachlander (1981) reported that 22 percent of secondary and 40 percent of postsecondary institutions have had expenditures of funds to promote sex equity. They also indicated that at the secondary level, five percent of the local educational agencies reported hiring or reassigning staff in order to promote sex equity; at the post-secondary level, the comparable figure was 20 percent. Thus, local as well as federal leadership is needed; collaborative and strategic resources should

be provided for educational institutions to design and implement sex equity activities; and additional research needs to be conducted to identify and document new strategies which will be of use for aiding in the resolution of problems.

The purpose of this research was to identify factors contributing to the enrollment of males in program areas not traditional for their sex. Specifically, the study was designed and implemented to accomplish the following:

1. To identify the programs at the secondary vocational education level that are not traditional for males in Ohio.

2. To identify specific secondary vocational education programs not traditional for males that have been successful in attracting males in Ohio.

3. To develop and disseminate specific recommendations for the improvement of male enrollment and retention in vocational programs not traditional for males at the secondary level in Ohio.

PROCEDURES

This was descriptive survey research; as such, the study was aimed to search for accurate information about beliefs and thoughts of particular subjects regarding the topic under study (Van Dalen, 1979). The 1980 Executive Student Follow-Up Report was utilized to identify 28 vocational education programs not traditional for males in Ohio; less than 20% male enrollment was the criterion for the selection. The 1981-82 LEAP data were investigated to identify the top 20 programs according to the number of males enrolled. These programs were found to be located in 14 different educational institutions and served as the purposefully selected sample of the study. The principals of the selected schools were contacted and permission was

.granted to conduct face-to-face interviews in 13 of them (total of 18 programs). The 18 programs were as follows:

Program	f	%
Medical Lab Assistant	5	27.8
Dental Assisting	2	11.1
Diversified Health	1	5.6
Cosmetology	2	11.1
Bank Teller	2	11.1
Child Care	2	11.1
Home Furnishings	1	5.6
Community and Home	3	16.6
Total	18	100.0

The instrument of this study was comprised of different interview schedules for students, teachers, counselors, and administrators. The interview schedules were tested for their face validity, reliability, and utility. The members of the advisory committee of the project validated the instrument. The interview schedules were field tested (Test-Retest) at The Ohio State University and the data obtained from the field testing were analyzed to determine the reliability of the instrument.

" The male students present on the day of interviews, teachers of the programs, and counselors and administrators of the school (as made available by the schools) were interviewed. All the interviews were conducted by two graduate research associates. No generalizations were made because the sample was selected purposefully. The findings were analyzed to make recommendations regarding the area of interest.

FINDINGS, CONCLUSIONS, RECOMMENDATIONS, NEED FOR FURTHER STUDY

The following were found to be the vocational education programs at the secondary level not traditional for males in Ohio:

TABLE 1
Vocational Programs With Less Than 20% Male Enrollment

Program	Males	Females	Total	% of Males
Dental Assisting.	12	463	475	2.5
Dental Hygiene	2	209	211	.95
Medical Lab Assistant	22	151	173	12.7
Nurse	104	1550	1654	6.3
Practical Nurse	85	3031	3116	2.7
Nurse Assistant	18	270	288	6.25
Psychiatric Aide	3	21	24	12.5
Occupational Therapists	1	47	48	2.1
Mental Health Worker	12	110	122	9.8
Medical Assistant	6	242	248	2.4
Medical Records Technician	4	73	77	5.2
Diversified Health	12	139	151	7.9
Diversified	55	928	983	5.6
Child Care	41	1511	1552	2.64
Home Furnishings	2	13	15	13.3
Community and Home	105	649	754	13.9
Bank Teller	15	96	111	13.5
General Office	5	84	89	5.6
Clerical Services	32	445	477	6.7
Office Clerk	130	4915	5045	2.6
Office Machine Operator	8	397	495	1.6
Correspondence Clerk	2	128	130	1.54
Medical Records Clerk	1	91	92	1.1
Stenographer and Secretary	3	739	742	.4
Steno Ct-Co	2	47	49	4.1
Typing and Recep.	76	1749	1825	4.2
Miscellaneous Office	6	155	161	3.7
Cosmetology	72	2301	2373	3.0

Data were collected from male students (n=90), teachers (n=29), coun-
selors (n=16), and administrators (n=17) through the use of face-to-face
interviews. Data were then coded and keypunched onto cards and analyzed by
means of the Statistical Package for the Social Sciences (SPSS) computer
package available at the Instruction and Research Computer Center at The
Ohio State University.

A total of 90 male students in eight different vocational education
programs were interviewed. The enrollment in the programs was as follows:

TABLE 2

Program	f	%
Medical Lab Assistant	26	28.9
Dental Assisting	2	2.2
Diversified Health	2	2.2
Cosmetology	6	6.6
Bank Teller	10	11.1
Child Care	10	11.1
Home Furnishings	18	20.0
Community and Home	16	17.8
Totals	90	100.0

The students were asked several questions in regard to their areas of vocational education. Their responses were then summarized:

1. 47.8% of the students indicated that they decided to enroll in the programs because of being interested in them. 12.2% chose those programs because there was nothing else to take.

2. 71.1% of the students claimed that nobody influenced their decision regarding the selection of the programs.

3. 43.3% of the students indicated that they received information about vocational education programs from the school counselor.

4. 63.3% of the students identified their teachers as those giving them encouragement at school.

5. 70.0% of the students claimed that they had not faced any serious difficulties in their classes.

6. 77.8% of the students indicated they had reached the objectives they expected to achieve by enrolling in the programs. "Learned what wanted to learn" was found to be the major satisfaction the students had received from attending the programs.

7. 87.8% of the students pointed out that if they could start over, they would select the same program.

8. 86.7% of the students indicated that they would like to work in their areas of training upon completion of their studies.

9. The future plans of the students, immediately upon graduation from high school, were found to be as follows:

Plan	f	%
Four-year college	25	27.8
Technical college	2	2.2
Two-year community college	9	10.0
Military	16	17.8
Work	35	38.9
Not sure	2	2.2
Others	1	1.1
Totals	90	100.0

A total of 29 teachers (6 males, 23 females), 17 administrators (all males), and 16 counselors (6 females, 10 males) were also interviewed. They were asked to respond to the following questions: their responses were then tabulated:

A. Who do you believe has the major influence on the students' selection of a particular program?

	Teachers		Administrators		Counselors	
	f	%	f	%	f	%
Parents	2	6.9	4	5.9	10	62.5
Friends	3	10.3	2	11.8	2	12.5
Teachers	4	13.8	5	29.4	1	6.3
Counselors	13	44.8	3	17.6	1	6.3
Self	4	13.8	2	11.8	2	12.5
Others	3	10.3	1	5.9		
Totals	29	100.0	17	100.0	16	100.0

B. Who do you believe has had the major influence on your male students' selection of a traditionally female oriented program?

	Teachers		Administrators		Counselors	
	f	%	f	%	f	%
Parents	1	3.4	1	5.9	2	12.5
Friends	4	13.8	1	5.9	2	12.5
Teachers	7	24.1	7	41.2	4	25.0
Counselors	10	34.5	1	5.9	--	--
Self	2	6.9	3	17.6	6	37.5
Others	5	17.2	4	23.5	2	12.5
	29	100.0	17	100.0	16	100.0

C. For your school, who could have the greatest impact on reducing sex bias and sex stereotyping of males?

	Teachers		Administrators		Counselors	
	f	%	f	%	f	%
Teachers	12	41.4	7	41.2	8	50.0
Counselors	7	24.1	4	23.5	5	31.3
Administrators	1	3.4	4	23.5	1	6.3
Students	5	17.2	-	---	1	6.3
Parents	2	6.9	2	11.8	1	6.3
Not sure	2	6.9	-	---	-	---
Totals	29	100.0	17	100.0	16	100.0

D. Given that sex equity means that all students have a right and an opportunity to enroll in any vocational program for which they have interest and aptitude, is sex equity in education very important, somewhat important, slightly important, or not important to you?

Level of Importance	Teachers		Administrators		Counselors	
	f	%	f	%	f	%
Very important	21	72.4	14	82.4	15	93.8
Somewhat important	4	13.8	2	11.8	1	6.3
Slightly important	2	6.9	1	5.9	-	---
Not important	2	6.9	-	---	-	---
Totals	29	100.0	17	100.0	16	100.0

A qualitative as well as quantative evaluation of the data resulted in the following findings:

1. Nineteen (65.5%) of the teachers indicated that they had not attended a sex equity awareness program during 1980-82. Twenty-eight (96.6%) of them were found to be interested in attending an in-service meeting designed to help them enroll or assist male students in their programs. Fifteen (51.7%) of those willing to attend the meeting indicated that they would participate in the meeting in order to learn more about the promotion of non-traditional programs.

2. The teachers were generally enthusiastic about the enrollment of males.

3. The teachers indicated the importance of being objective, treating students equally, and setting same standards for males and females.

4. The teachers believed that they could play an important role in the recruitment, retention, and placement of males in their programs.

5. The teachers suggested that role models would be a significant factor in the recruitment as well as success of students.

6. Thirteen (76.5%) of the administrators indicated that they had attended a sex equity awareness program during 1980-82.

7. All of the administrators were found to be interested in attending an in-service meeting designed to help them enroll or assist male students in programs not traditional for their sex. A majority of them (53%) would attend the meeting in order to learn more about the promotion of non-traditional programs.

8. Thirteen (76.5%) of the administrators indicated that they would encourage their staff to attend additional in-service meetings on sex equity.

9. Eleven (64.7%) of the administrators indicated that there was an individual or a group responsible for coordinating sex equity activities in their schools.

10. Fifteen (88.2%) of the administrators knew their Title IX Coordinators.

11. Ten (58.8%) of the administrators were not aware of the specific activities of their Title IX Coordinators.

12. The administrators were in close contact with students, teachers, and counselors.

13. The administrators indicated that they were utilizing career days, role models, and sex fair materials to promote their programs.

14. The administrators believed that the success of recruitment activities was dependent upon the use of sex affirmative strategies.

15. The administrators indicated that they had been successful on attracting males into their traditionally female oriented programs because of the quality of the programs and staff.

16. Nearly a third of the administrators felt that objective, unbiased, and liberal atmosphere are necessary to create successful non-traditional programs for males.

17. All the administrators had strong feelings that sex equity policy should be carried out. While some of the administrators viewed this as a duty and an obligation, others looked at this commitment as a matter of morality and ethics to pursue.

18. Twelve (76%) of the counselors indicated that they had attended a sex equity awareness program during 1980-82.

19. Fourteen (87.5%) of the counselors were found to be interested in attending an in-service meeting designed to help them enroll or assist male students in programs not traditional for their sex. 43.8% of the counselors would attend the meeting in order to learn more about the promotion of nontraditional programs.

20. Thirteen (81.3%) of the counselors indicated that they had had specific training to recognize sex-biased information.

21. All the counselors said that they would be willing to use sex-fair information to widen men's career options. However, only 50% of them were found to have had specific training for this task.

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22. Fifteen (93%) of the counselors indicated that testing and counseling materials in their schools had been reviewed for sex bias.

23. Fifteen (93.8%) of the counselors indicated that they needed more materials which speak directly to changing roles for men.

24. Nearly half of the counselors indicated that "hands-on" programs were being used as a recruitment tool.

25. The counselors were found to be using complete and objective information to introduce the programs to students.

26. The counselors also indicated the importance and effectiveness of role models in the promotion of programs.

27. The counselors relied on promotional programs as a carrier for sex affirmative program selection.

28. The counselors pointed out that if sex equity for males is to be attained, awareness of sex inequality among the concerned individuals is a factor which should be present.

29. The counselors claimed that quality of programs and staff affects the enrollment of students greatly.

Conclusions

The reader is cautioned that giving socially acceptable answers by the interviewers to the questions could have been a threat to the internal validity of the data and thus affecting the conclusions and interpretations of these findings.

1. The students interviewed were generally found to be satisfied with what they were doing. A majority of them had well-defined plans for their future and being in vocational programs was just a stepping stone for them.

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2. There were a few students who believed that they were misinformed about the content of certain programs. One student in a "Patient Care" program (Community and Home division) contended that he thought he would be trained to enter the field of medicine; however, his training was not aimed to make such a goal likely. Thus, it is important to provide the students with accurate and realistic information about different vocational programs.

3. Nearly half of the students interviewed believed that they would get appropriate jobs which would provide them with some form of self-satisfaction; that they would be doing what they wished to accomplish; and that they would receive ample rewards in the form of money and other benefits.

Although non-traditional occupations are of good quality, students should be made aware of the reality that many of these jobs tend to be low paying. However, emphasis should not be on the negative aspects (e.g., low pay) of these occupations, and their potential should be promoted.

4. The teachers, counselors, and administrators interviewed were found to have a positive attitude towards sex equity in education. The teachers, especially females, were very enthusiastic about having boys in their classes and would be willing to do their best to recruit more. However, most of the teachers indicated that they did not have much to do with the recruitment of students. A mutual relationship between teachers and counselors was found to be crucial.

Teachers should provide counselors with accurate and objective information about their programs and counselors should utilize the informational inputs while recruiting new students.

5. Role models and audio-visual, instructional and orientation materials that include representation of males were found as being useful and significant factors in the recruitment, retention, and placement of male students in non-traditional programs.

6. Low pay scales in these jobs and strong community occupational role stereotypes limit the effectiveness of equity actions taken by educators. The enrollment of pioneering males has slowly increased in the past years. It is reasonable to expect more men to enroll in these programs in the future.

Recommendations

1. Expose all students to all programs.

2. Provide all students with objective and realistic information about different vocational programs and let them make their own decisions.

3. Talk with 10th graders at high schools about job opportunities. Make them aware of opportunities for males in traditionally female oriented occupations.

4. Have role models in non-traditional positions visiting schools and giving speeches.

5. Invite parents of students, especially those with 8th graders, to attend orientation sessions where they can be informed about different vocational programs.

6. Keep school's staff up-to-date on sex equity issues and literature; utilize state staff to conduct workshops. School administrators could and should facilitate this to happen.

7. Keep channels of communication open among students, teachers, administrators and other staff members.

8. Support and encourage pioneering students.

9. Be sure that sex equity policies are being implemented, that staff are aware of their responsibilities regarding these poli-cies, and refine policies to eliminate biases and discriminating practices.

10. Develop and utilize audio-visual, instructional, and orientation materials to promote vocational programs; show males in non-traditional occupations.

11. Take students to job sites.

12. Go to classes such as English where there is a combination of both sexes to promote different programs.

13. Make sure the whole recruitment process is sex affirmative and objective.

14. Hold small group discussions with students and discuss sex equity issues with them.

15. Inform students about opportunities for cooperative group activi-ties (i.e., unions) which have the potential for improving wages, working conditions, and benefits in traditionally female jobs.

16. Recruitment, retention, and placement of male students in voca-tional education programs which have traditionally been for females is a team effort. Collaboration among the concerned indi-viduals is a must if these objectives are to be reached.

Need for Further Study

1. The basic elements of the study reported here could be replicated in other geographic areas or target populations. Knowledge of geographic variations in occupational choice influences would be useful for educators trying to encourage pioneering enrollments

in different locales. The tremendous growth in adult education programs might suggest that equity research at this level would produce fertile results. The career choice influences of men seeking jobs in traditionally female fields without formal educational preparation could be compared to the career choice influences of men with formal training for traditionally female jobs. This research might provide additional recruitment strategies for schools hoping to enroll pioneering males.

2. Replications or expansions of this study would benefit from increased opportunities for comparing schools which have high pioneering male enrollments to those whose pioneering male enrollments have been negligible or nonexistent.

3. Application of the recommendations of this project could be more easily undertaken if additional information about employer attitudes had been collected. Follow-up studies could include a more intensive and expansive look at employer attitudes and actions with regard to pioneering male applicants and employees.

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