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AUTHOR Donelan, Brenda
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ABSTRACT

An in-class survey of a sample of 345 (266 male and 79 female) college students enrolled in agriculture classes at a midwestern university was taken to determine whether different socialization patterns played a role in their decision to enroll in agricultural education. The survey included questions on attitudes toward men and women in society, demographic characteristics, characteristics of the family farm on which students grew up, mothers' and fathers' occupations, perceived support, and intended occupations. Some of the findings were as follows: (1) 95 percent of the males and 76 percent of the females reported aspirations for traditionally male occupations; (2) only 9 percent of the females, compared to 43 percent of the males, expected to be working as a farmer or rancher; and (3) more than half of the females were found to be nontraditional, whereas only 12 percent of the males were. The study concluded that some of the findings were supportive of part of the theory of gender role socialization. Perceived attitudes of mothers and fathers had significantly different influences for male and female students on students' own attitudes. However, mothers of students were all found to be predominantly traditional, not nontraditional, as theory would indicate. The findings suggest that counselors should be sensitive to the problems of young women who have nontraditional attitudes, perhaps different from their parents, and they should encourage such young women to pursue their agricultural ambitions. (26 references) (KC)

GENDER ROLE SOCIALIZATION AND THE CHOICE OF AN AGRICULTURE CURRICULUM

BY
BRENDA DONELAN

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INTRODUCTION

Traditionally women have been perceived as the weaker sex. Not only were they seen to be physically inferior, but also intellectually sub-standard (Hoyenga & Hoyenga, 1979). Because of the predominance of this perception, women often accepted it and believed it too. As time went on, some women broke out of this stereotypical mold and proceeded in directions thought to be inappropriate for females. These women were few in numbers and usually only assumed male roles in times of need such as the death or departure of the male (Milkman, 1987).

During World War II the traditional sexual division of labor was swept aside and women entered "men's jobs" in industry on a massive scale (Milkman, 1987). Women demonstrated that they were capable of performing these tasks. After the war, however, many women were dismissed from these jobs and forced back into traditionally female occupations or completely out of the labor market (Milkman, 1987).

Today women have many more choices than did their mothers or grandmothers. They are entering into non-traditional areas because of choice, not necessity. No longer are marriage and childbirth the only alternatives for women. Instead, they are seeking an education and pursuing careers for their own personal satisfaction and fulfillment. By the year 2000, approximately 47 percent of the workforce will be women, and 61 percent of women will be out working (Johnston et al., 1987).

However, in higher education and in many occupations there is still a noticeable amount of gender segregation. For

instance, math and science classes are dominated by males (Fox & Hesse-Biber, 1984). Even so, women are a rapidly increasing share of many traditionally male occupations, particularly those requiring advanced education (Johnston et al., 1987). Johnston et al. (1987), also report that even more women are likely to enter into traditionally male occupations by the year 2000.

During the fall semester of 1990 at South Dakota State University, females composed 20 percent of the students enrolled in majors in the College of Agriculture and Biological Sciences (Arnold, 1990). Overall, these figures illustrate that there is an increasing trend for female entry into non-traditional areas of study such as agriculture. The trend for males entering non-traditional areas is not as well established and, in fact at SDSU, showed relatively little change over a twenty year period.

PURPOSE OF THE STUDY

Little is actually known about this trend of women entering into gender atypical areas of study because it is so recent. Thus, the main purpose of this study is to examine the trend of women moving into one non-traditional area of study, agriculture, and to examine the social and demographic characteristics of women who choose to study agriculture.

REVIEW OF THE LITERATURE

Relatively little has been written on women in agricultural careers with the exception of farming. Females have traditionally been involved in many aspects of farming, ranging

from independent producers to agricultural partners to farm helpers to homemakers (Jones & Rosenfeld, 1981). Although women have been active participants in agriculture, they have received little notice. This lack of recognition may be due to the definition of economic activity by national statistics (Cloud, 1985). For example, due to the way data are collected and published by the U.S. Census, women are often categorized by their off-farm occupations and not recognized as working on the farm. Also, the U.S. Census of Agriculture enumerates only one farm operator per farm (Sachs, 1987). The male typically is identified as the farm operator while the female is not included in the statistics. Even when farm women are studied, only certain aspects of their involvement with agriculture are highlighted (Jones & Rosenfeld, 1981).

The farm woman has been said to make an "invisible" contribution to farm production (Elbert, 1985). This is partially due to the fact that farm women are considered farmers' wives , while farm men are considered farmers (Sachs, 1987). Farm women have long been viewed as the "helper" to the male (Rosenfeld, 1985). Consequently, these women are thought to be less capable and productive than their male counterparts.

Typically there is little or no formal training or education for the work that women do on the farm (Rosenfeld, 1985). Instead, the 1980 Farm Woman Survey (Jones & Rosenfeld, 1981) revealed that the more educated the females were, the more likely they were to be employed off the farm. This was primarily so because their higher level of education made a greater

selection of jobs open to them. An increased level of education may have two opposing effects on farm women. The first is that due to their continued education, farm women with advanced degrees or special training may be employed off the farm operation. The second effect of higher educational attainment may be increased productivity on the farm (Rosenfeld, 1985). For example, a woman may take her advanced training and apply it to some type of work on the farm, such as bookkeeping.

Existing research has consistently shown that women are underrepresented in the study of agriculture and related fields (Chatterjee & McCarrey, 1989; Lyson, 1980; Blackman, 1986; Cauley, 1981; Parelius, 1991). Parelius (1991) stated that women are typically discouraged from developing interests, abilities, and aspirations that require courses involving science and mathematics. The family, school, and peers may steer females away from non-traditional areas of study and work. In recent years, however, there has been a surge in female enrollment in agricultural programs (Pearson, 1979). Many courses have shown increased enrollment by women as a result of this. Thus, today there is a growing trend for female entry into formal agricultural education with aspirations for careers in agriculture.

Parental background and social origin factors are closely related to college aspirations (Rosen & Aneshensel, 1978). Education, occupation, and personal experiences of the parents all tend to have an influence on their daughter's choice of major in college. Once a woman decides to enter college, however,

factors independent of family background seem to sort women into different curricula (Lyson, 1980). The influence of peers (Chatterjee & McCarrey, 1989) and prior work and school experiences separate females into different areas of study. Women in an agriculturally related major reported prior agricultural experiences and prior agriculturally related high school courses as important factors in their choice of a major (Lyson, 1980).

Lyson (1980) stated that parents have been given the most credit for influencing a daughter's non-traditional academic aspirations. He also found that mothers who have non-traditional careers serve as role models for their daughters who also wish to enter into non-traditional careers. Fathers, however, seemed somewhat more influential in their daughter's choice of a major in agriculture. Overall, it appears that a variety of social factors affect a woman's choice of college curriculum.

THEORETICAL FRAMEWORK

Previous research suggests that a woman's choice of a college curriculum is directly influenced by her attitudes and opinions about appropriate and inappropriate female roles. Thus, theoretical orientations focusing on gender role socialization in the development of those views are used in studying the trend of female entry into the field of agriculture. In this framework, research has revealed that the family is the unit most closely associated with influencing gender role attitude formation in the individual (Lyson, 1980; Gruca et al., 1988; Hoyenga & Hoyenga,

1979; Gecas, 1981).

One of the most important aspects of family socialization is the learning of appropriate role behavior associated with gender. Gecas (1981: 172) states that "through processes of reinforcement from parents and others, through identification with various role models, through countless parental admonitions and instructions, the child is socialized into the specific behavioral expectations associated with these roles." Since the family is the primary social zing agent of individuals, it seems to follow that parents are mainly responsible for the differential treatment of males and females.

Although the parents are considered to be the primary socializers of children, various situations, such as dual income families, single parent families, and child care facilities, have contributed to a decrease in the amount of time the parents spend with their children and ultimately the degree to which the children are influenced by parents. Teachers, counselors, peers, and the media all become potential, additional, or even alternative agents of socialization for children. Teachers and counselors in the school system are seen as instrumental in shaping and reinforcing a child's belief about gender roles.

Counselors are often times responsible for the gender typing of children. High school counselors try to determine what an individual's interests and aptitudes are. Often both males and females are encouraged into gender typical areas of study and work and are discouraged from entering into non-traditional fields.

The model in Figure 1 summarizes the impact of gender role socialization on gender differentiated occupational aspirations.

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Figure 1 about here

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The theoretical orientation presented here leads to the hypothesis that the gender role socialization experienced by these females is different from what it had been traditionally and possibly different from that of males who continue to enter into the traditionally male dominated field of agriculture. This study tests the latter general hypotheses of differential socialization of females and males entering gender atypical and gender typical fields of study. Several specific hypotheses were derived and tested.

METHODOLOGY

To test this hypothesis, a sample (N = 345 male and female students) was drawn from those enrolled in introductory agriculture classes at a midwestern university. A survey was completed in class or lab by these subjects.

The survey included questions on: attitudes toward men and women in society; demographic characteristics; characteristics of the family's farm or ranch for those students who grew up in such a setting; experiences with programs and activities offered by the Extension Service; mother's and father's occupation; student's major; student's probable occupation; perceived support for entering into an agricultural major; 4-H participation and

project areas; how many miles their home was from the nearest town of 2,000+ people; and students' experiences with offensive language used by the instructors and disrespectful treatment of females by males.

The Likelihood Ratio Chi Square test of significance of difference was employed to test the hypotheses. It is a modification of the Chi Square test that corrects for small cell sizes. The hypotheses were tested at the .05 level of statistical significance.

ANALYSIS OF DATA

Sample Characteristics

The following is a description of the study sample in terms of selected characteristics.

Of the 345 survey respondents, 266 (77 percent) were male and 79 (23 percent) were female. Three hundred twenty-eight (95.08 percent) were between the ages of 18 and 24. The majority of the students, 65.94 percent grew up on a farm, and 8.44 percent grew up on a ranch. Eighteen percent of the individuals grew up in a rural community, and 7.5 percent grew up somewhere else, such as a city.

Students reported 26 different current college majors, including all 21 majors in the College of Agriculture. The males were enrolled in all but two of these areas, Agricultural Journalism and Zoology. Agricultural Business (18.6 percent of the males), General Agriculture (16.3 percent of the males), and Animal Science (16.3 percent of the males) were the three majors

in which the most male respondents were enrolled.

Females in this study were enrolled in 21 of the 26 areas of study. No females reported majors in Mechanized Agriculture, Zoology, Microbiology, Wildlife and Fisheries Science, and Associate Agriculture. Animal Science (16.5 percent of the females) and Landscape Design (11.4 percent of the females) were the two majors in which the largest proportions of the female respondents were enrolled. These two areas only accounted for 27.85 percent of the females sampled. However, no other major accounted for even 10% of the female students.

Hypotheses Tested

The following presents data analysis in testing the study hypotheses.

Since children are taught what is appropriate and inappropriate for their sex, it was hypothesized that:

H_1 The socialization experiences of male and female students enrolled in introductory agriculture courses are different from one another.

In testing this hypothesis, the perceived gender role attitudes and orientations of the parents as primary agents of socialization were compared.

Table 1 about here

The majority of both the males' and the females' fathers

were perceived to be somewhat non-traditional in their attitudes and orientations. However, only 5.7 percent of the males' fathers compared to 12.5 percent of the females' fathers were seen as very non-traditional in their gender role perspectives. Statistically significant differences in perceived fathers' attitudes and orientations on gender roles were reported by the male and female students in this study.

Similarly significant differences were found in the males' and females' perceptions of how their mothers would respond to the same statements.

Females reported their mothers as being very non-traditional much more often than males (32.8 percent for females and 12.3 percent for males). In comparing the findings in Table 1 with those in Table 2, it is noted that more mothers of the respondents are perceived to be non-traditional in their views than are the fathers of the students.

Table 2 about here

Since parents as agents of socialization serve as role models, non-traditional careers of mothers are likely to influence a daughter to also pursue non-traditional interests. Thus, the following null hypothesis was tested:

HO_2 There is no difference in mothers' occupations of male and female students enrolled in introductory agricultural courses.

No statistically significant differences were found. The

majority of males (68.7 percent) and females (66.7 percent) reported their mothers to be in traditional occupations.

Table 3 about here

As a variation on this theme, attention was also given to the kinds of tasks that subjects' mothers performed on the farm of ranch for those students whose home residence was a farm or ranch. Following the same line of reasoning, it was hypothesized that females entering into agricultural study would be most likely to have mothers who performed gender atypical farm or ranch tasks.

Table 4 about here

Table 4 presents the data on non-traditional role modeling by farm and ranch mothers. Of the 345 students surveyed, 256 responded to five questions concerning certain tasks on the farm and ranch and who usually performs those tasks. A significant difference was found, with more mothers of female studnts reported to be involved in gender atypical farm or ranch tasks.

Parents, other family members, peers, teachers, and counselors have the potential for providing support and encouragement. This may be especially important for females who

choose agriculture as a field of study. For purposes of statistical analysis, the following null hypothesis was considered:

HO_3 There is no difference in the encouragement into agriculturally-related educational programs received from significant others by males and females enrolled in introductory agriculture courses.

The data did not permit rejection of this hypothesis. There was no significant difference in support males and females received from significant others for a major in agriculture.

Table 5 about here

Prior experiences were also proposed to be influential in the choice of an agricultural major. One relevant experience considered was participation in 4-H. For purposes of statistical analysis, the following null hypothesis was considered:

HO_4 There is no difference in males and females participation in 4-H prior to entering college.

The males were almost evenly divided with 51.7 percent having participated in 4-H prior to college and 48.3 percent not having participated. Females were more likely to have participated in 4-H prior to college than not (67.1 percent participated compared with 32.9 percent who did not). The data suggest that while 4-H was an important part of youth for many of these students, it was particularly so among the females.

Table 6 about here

In addition, the data in Table 7 show that more females are currently involved in 4-H. Of the males, only 12.5 percent reported being enrolled in 4-H in college. The females, however, were more than three times as likely to be enrolled in 4-H (39.2 percent) in college. Comparison of these data indicated that 4-H was more important to the females than the males prior to college, and the females continued to be more inclined to participate in 4-H while in college.

Table 7 about here

Project areas in 4-H were examined to determine the kind of participation experienced by males and females. For purposes of statistical analysis, the following null hypothesis was considered:

HO_5 There is no difference in project areas of males and females who participated in 4-H prior to entering college.

Significant gender differences in 4-H project areas by gender were observed. Most of the males (52.1 percent) but few of the females (12.7 percent) reported projects in the " traditionally male" category, such as Automotive. Males comprised only 16.5 percent of the gender "neutral" project

areas, such as Horticulture, while 58.2 percent of the females reported that they had been involved in these prior to college. Only 0.8 percent of the males had entered 4-H projects in the traditionally "female" project areas, such as Child Development, while 16.4 percent of the of the females had done so.

The Likelihood Ratio Chi Square value for Table 8 was 58.76, with a probability of .0000. Thus these differences were statistically significant.

Table 8 about here

Since males and females are said to be recipients of different of socialization practices, it was hypothesized that male and female gender role attitudes and orientations will differ. The following null hypothesis was tested:

HO_6 There is no difference in gender role attitudes and orientations among males and females enrolled in introductory agriculture courses.

Significant differences in gender role attitudes and orientations were found. Over half (56.3 percent) of the females were found to be very non-traditional, while only 12.3 percent of the males were. The majority of the males were found to be somewhat non-traditional, while the majority of the females were found to be very non-traditional.

The Likelihood Ratio Chi Square value for Table 5 is 43.55 with a probability of .0000. Thus, the differences were statistically significant.

Table 9 about here

If the female's gender role socialization is non-traditional then she may develop interests in non-traditional areas for work and study. If, at the same time, her male counterparts experience traditional gender role socialization, the male and female aspirations may be very similar. For statistical purposes, the following hypothesis was considered:

H7 There is no difference in college majors among males and females enrolled in introductory agricultural courses.

For purposes of testing this hypothesis, the majors were recoded as traditionally male-dominated, (such as Agricultural Business), traditionally female-dominated, (there were no female dominated majors) and neutral, (such as Horticulture). Since none of the reported majors turned out to be traditionally female-dominated, that category was dropped from analysis.

Of the males, 81.1 percent fell into the category for traditionally male majors, while 55.1 percent of the females did so. 18.9 percent of the males and 44.9 percent of the females were in majors which were neutral, neither male or female dominated.

The Chi Square value for Table 10 was 19.9 with a probability of .0005. Thus, the differences were statistically significant.

Table 10 about here

Lastly, students' occupational aspirations were examined. Like parents' occupations, students' intended occupations were coded as traditionally male, (such as farm/ranch owner and operator), traditionally female, (such as homemaker), or neutral, (such as horticulturist). As in the previous analysis on majors, the question here was how traditional are males and how non-traditional are females in choosing future occupations. For statistical purposes, the following hypothesis was tested.

H_8 There is no difference in career aspirations of males and females enrolled in introductory agricultural courses.

95.2 percent of the males and 76.4 percent of the females reported aspirations for traditionally male occupations. A

significantly larger proportion of the males than females aspired to traditionally male-dominated occupations.

Table 11 about here

Of the 354 students surveyed, 332 responded to this question. Of the males, 43.3 percent indicated that they would be working as a farmer or a rancher and 56.7% said that they would be working in other occupations after college. The majority of females (91.0%) indicated that they would be working in other occupations, while only 9.0 percent said that they would be employed as a farmer or rancher.

Table 12 about here

Summary of Findings and Hypotheses Tested

Statistically significant differences were not found in support from significant others nor in mother's occupation for these male and female students. On the other hand, significant differences between male and female students were found in : attitudes toward women of mothers, fathers, and students themselves; 4-H participation prior to college; 4-H project areas prior to college; intended occupation; and current major.

CONCLUSION

Some of the findings of this study were supportive of some of the premises of theory on gender role socialization. The responses to statements on the Attitudes Toward Women Scale, which were made by students for their perceptions of their fathers', mothers', and their own attitudes were consistent with the theory of gender role socialization. Perceived attitudes of mothers and fathers were significantly different for male and female students on the students' own attitudes similarly showed significant difference by sex. Female students were significantly more likely than male students to report fathers' attitudes toward women as non-traditional and even more so to report very non-traditional attitudes toward women by mothers. It is not surprising, as a consequence, that female students were significantly more likely to give non-traditional responses to the AWS than were the male students. This supports the theoretical assertion gender attitudes are learned from parents as important agents of gender role socialization.

Some of the findings of this study were not supportive of hypotneses derived from particular aspects of gender role socialization theory. Role modeling by mothers in a non-traditional area of work was said to provide a great influence for their daughters. This study, however, did not find a significant difference between the occupations of the females' mothers and the males' mothers. The mothers of all students were reported to be predominantly traditional. Thus, a non-traditional occupational role model does not appear to be a

critical factor in females choice of agriculture as a field of study. However, it should be recalled that the female students in this study were more likely to report that their mothers performed gender atypical farm or ranch tasks than were the male students. This lends support to gender atypical role modeling.

Findings from this study were also consistent with the trend of women moving into agriculture. The majority of women indicated that they were currently enrolled in typically male dominated academic majors and that they were aspiring mainly to traditionally male dominated occupations.

Further, females' declared majors and occupational aspirations were consistent with their gender attitudes. These young women were found to be more non-traditional in the gender role attitudes than were the male students.

The findings on 4-H involvement and project areas prior to college provided evidence that female students had pre-college experiences that were supportive of their non-traditional attitudes and aspirations. Thus, it could be concluded that socialization experiences in activities such as those provided by 4-H are important to females selecting agriculture as an area of study and future occupation.

The following are some implications of the findings of this study. Since young women enrolled in introductory level agricultural courses were found to be more non-traditional in their gender role attitudes and orientations than were their male counterparts, this may provide a potential arena for conflict. Consequently, advisors and instructors should be aware of and

sensitive to these differing perspectives. If female students are to persist in their non-traditional fields of study in contexts where they might not find support from their male peers, it will be particularly important for instructors and advisors to provide such support and encouragement.

4-H programs also may prove to be useful since they were found to be important in students' prior college experiences. An emphasis on all project areas for both sexes instead of sex-typed project areas could encourage both males and females to pursue interests and develop talents without regard to gender. This could possibly lead to new areas of study and occupation for both male and female students.

Future research may be directed to these issues. A longitudinal study following female students who enroll in a non-traditional field of study through their college years would be most useful. Those who persist and those who either drop out or change to other majors could be compared to determine whether conflict, discouragement, lack of support, and other factors contribute to failure to persist in a non-traditional field of study.

APPENDIX

Fig.1

SOCIALIZATION→ (gender role)	ATTITUDES→ and ORIENTATIONS (gender role)	EDUCATIONAL→ ASPIRATIONS	OCCUPATIONAL ASPIRATIONS

Today increasing numbers of women are enrolling in college majors in agriculture, which have been dominated by men traditionally. "The assumption is sometimes made that females would be more likely to enter traditionally male dominated fields if they were more goal-oriented, independent, or ambitious - that is more "masculine", as that term has been traditionally understood in U.S. culture" (Parelius, 1991: 156). The theoretical orientation presented here leads one to hypothesize that the gender role socialization experienced by these females is different from what it had been traditionally and possibly different from that of males who continue to enter into the traditionally male dominated field of agriculture. Thus, the following models are proposed for females and males entering into agricultural curriculums:

TABLE 1

Father's Attitudes Toward Women

Sex	Very Traditional	Somewhat Traditional	Somewhat Non-traditional	Very Non-traditional	All
MALE	2 (0.8)	69 (28.3)	159 (65.2)	14 (5.7)	244 (100)
FEMALE	5 (7.8)	11 (17.2)	40 (62.5)	8 (12.5)	64 (100)
ALL	7 (2.3)	80 (26.0)	199 (64.6)	22 (7.1)	308 (100)

X2=13.79 Probability=0.0032

Table 2

Mother's Attitudes Toward Women

Sex	Very Traditional	Somewhat Traditional	Somewhat Non-traditional	Very Non-traditional	All
MALE	1 (0.4)	27 (11.1)	186 (76.2)	30 (12.3)	244 (100)
FEMALE	0 (0)	5 (7.8)	38 (59.4)	21 (32.8)	64 (100)
ALL	1 (0.3)	32 (10.5)	224 (72.7)	51 (16.6)	308 (100)

X2=13.96 Probability=0.0030

Table 3

Mother's Occupation

Sex	Traditional	Neutral	Non-traditional	All
MALE	176 (68.7)	50 (19.5)	30 (11.7)	256 (100)
FEMALE	50 (66.7)	10 (13.3)	15 (20.0)	75 (100)
ALL	226 (68.3)	60 (18.1)	45 (13.6)	331 (100)

X2=4.03 Probability=0.1336

Table 4

Non-Traditional Role Modeling By Farm/Ranch Mothers

Performance of Non-Traditional Tasks

Sex	Low	Medium	High	Total
MALE	161 (81.3)	37 (18.7)	0 (0)	198 (100)
FEMALE	37 (63.8)	19 (32.8)	2 (3.4)	58 (100)
ALL	198 (77.3)	56 (21.9)	2 (0.8)	256 (100)

X2=14.532 Probability=0.0130

Table 5

Support and Encouragement for a Major in Agriculture

Sex	High	Moderate	Low	Total
MALE	206 (80.5)	50 (19.5)	0 (0.0)	256 (100)
FEMALE	60 (84.5)	10 (14.1)	1 (1.4)	71 (100)
ALL	266 (81.4)	60 (18.4)	1 (0.3)	327 (100)

X2=4.12 Probability=0.1274

Table 6

4-H Participation Prior to College

Sex	Yes	No	Total
MALE	137 (51.7)	128 (48.3)	265 (100)
FEMALE	53 (55.2)	26 (44.8)	79 (100)
ALL	190 (55.2)	154 (44.8)	344 (100)

X2=5.95 Probability=0.0147

Table 7

Current 4-H Participation

Sex	Yes	No	Total
MALE	33 (12.5)	231 (87.5)	264 (100)
FEMALE	31 (39.2)	48 (60.8)	79 (100)
ALL	64 (18.7)	279 (81.3)	343 (100)

Table 8

4-H Project Areas Prior to College

Sex	all male	mostly male	neutral	mostly female	all female	total
MALE	63 (52.1)	37 (30.6)	20 (16.5)	1 (0.8)	0 (0.0)	121 (100)
FEMALE	7 (12.7)	7 (12.7)	32 (58.2)	9 (16.5)	9 (0.0)	55 (100)
ALL	70 (39.8)	44 (25.0)	52 (29.6)	10 (5.68)	0 (0.0)	176 (100)

X2=58.76 Probability=0.0000

Table 9

Student's Attitudes Toward Women

Sex	Very Traditional	Somewhat Traditional	Somewhat Non-traditional	Very Non-traditional	All
MALE	1 (0.4)	41 (16.8)	172 (70.5)	30 (12.3)	244 (100)
FEMALE	1 (1.6)	1 (1.6)	26 (40.6)	36 (56.3)	64 (100)
ALL	2 (0.7)	42 (13.6)	198 (64.3)	66 (21.4)	308 (100)

X2=43.55 Probability=0.0000

Table 10

Student's Current College Major

Sex	Male Dominated	Neutral	Total
MALE	210 (81.1)	49 (18.9)	259 (100
FEMALE	43 (55.1)	35 (44.9)	78 (100)
ALL	253 (75.1)	84 (24.9)	337 (100)

Table 11

Student's Probable Future Occupation

Sex	Male Dominated	Neutral	Female Dominated	Total
MALE	220 (95.2)	11 (4.8)	0 (0.0)	231 (100)
FEMALE	55 (76.4)	13 (18.1)	4 (5.6)	72 (100)
ALL	275 (90.8)	24 (7.9)	4 (1.3)	303 (100)

X2=23.96 Probability=0.0000

Table 12

Student's Occupational Aspirations Toward Farming/Ranching

Sex	Farm/Ranch	Other Occupations	Total
MALE	110 (43.3)	144 (56.7)	254 (100)
FEMALE	7 (9.0)	71 (91.0)	78 (100)
ALL	118 (62.1)	214 (37.9)	332 (100)

X2=30.9

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