THE STRUCTURAL EFFECT OF SEX RATIO ON SECONDARY PUBLIC SCHOOL TEACHERS

Thesis for the Degree of M. A. MICHIGAN STATE UNIVERSITY MARGARET M. PLUMRIDGE 1970





. .

<u>:</u>



ABSTRACT

THE STRUCTURAL EFFECT OF SEX RATIO ON SECONDARY PUBLIC SCHOOL TEACHERS

by Margaret M. Plumridge

This paper investigates in one body of data some occupational attitude differences which are believed to exist between males and females. The analysis concentrates on four variables: job satisfaction; exchange of information, ideas, and opinions; expectations for cooperation and support; and the importance of others maintaining a good opinion of oneself and ones professional accomplishments. The data for the analysis were obtained from questionnaires administered to secondary public school teachers in one high school and two junior high schools randomly selected in each of five school districts in Michigan (N=15 schools).

In the first phase of the analysis each school was ranked according to the proportion of male teachers within the school and the means of the individual responses within each school were ranked for each of the four variables. Spearman rank order correlations support the idea that attitudes and behavior vary among schools with differing sex ratios. The second phase of the analysis correlated the rank of mean responses of males within each school with the rank of mean responses of females within the school. The results indicated that satisfaction for males and females within the same school is similarly evaluated but this relationship did not exist for the other variables. The last phase of the analysis examines the percentage distribution of responses of males and females in the high schools with the highest and lowest proportion of males. Some consistent differences between males and females were found on particular items but no specific dimensions could be isolated.

THE STRUCTURAL EFFECT

OF SEX RATIO ON SECONDARY

PUBLIC SCHOOL TEACHERS

by

Margaret M. Plumridge

A THESIS

Submitted to Michigan State University in partial fulfillment of the requirements for the degree of

MASTER OF ARTS

Department of Sociology

ACKNOWLEDGMENTS

I am deeply grateful to Philip Marcus for the use of this pool of data, his many helpful comments and suggestions, and especially for his endless encouragement. I would like to acknowledge and thank Philip Marcus, Wilbur Brookover, and Harry Pearlstat for their reading and discussion of several drafts which were most helpful in broadening the scope of my thinking and in improving the content of this paper. I also want to thank the many persons whom I worked with for their efforts and cooperation in collecting and preparing the data for analysis.

INTRODUCTION

It is generally believed that males and females differ from each other with respect to attitudes and social behavior patterns. Though much research investigates differences between sex, and this is a variable which is often controlled for in sampling procedures, there is no consistent description as to why different patterns exist or the direction of these patterns under different structural situations.

Such studies as the Fortune Polls of 1946, Kinsey Report, and Margaret Mead's <u>MALE AND FEMALE</u> emphasize differences between male and female attitudes and behavior patterns. Most studies of social class, when not using the family as the major variable, use sex as the independent variable within a given class and relate this to demographic variables, behavior and attitudes. Some studies concerning social differences by sex have recognized the possible importance of social context. For example, Blood and Wolfe's study of husbands and wives in metropolitan and rural areas specifies the differences in marital interaction and tasks for each sex in the different environments. Herta Herzog specifically asked the question

of whether variations in "proximity to V.D." is a "primary characteristic of sex, or is it the contextual characteristic of the individual, the type of district in which he or she lives?"¹

The purpose of this paper is to investigate in one body of data some occupational attitude differences which are believed to exist between males and females. Specifically, we will attempt to relate differences in job satisfaction to other sociological variables. We will first examine how attitudes and behavior vary among groups with varying sex ratios. Secondly, we will compare male attitudes with female attitudes within groups. We will then attempt to explain similarities and differences between males and females in groups with extremely different sex ratios by examining the relationships between attitude and behavior variables.

Assuming that a distinct male and female pattern exist, what are some of the structural effects of the sex ratio within a group that might operate upon individuals?² For example, with a relatively high proportion of males we might find that 1) attitude patterns of females will tend toward resembling the characteristically male pattern or possibly 2) the female pattern might be even more distinct. Whichever might be the case, we would expect the opposite effect to appear with a relatively low proportion of males.

This study will contribute to organizational theory by studying some perceived social relations and individual attitudes of male and female school teachers within secondary schools. Comparing these characteristics among schools will illustrate the importance of membership composition, specifically sex ratio, for individual attitudes and social interaction within the organization. We should remember that a secondary school as a formal organization differs greatly from the typical highly structured bureaucratic organization. Teachers are all at basically the same level within the relatively flat structure of the total district school system. Salary range is small and the salary schedule is based on education and experience so that it is not directly related to sex. Teaching on the secondary level is one of the few occupations with a large proportion of females sharing similar positions, tasks, and salaries with males.

Beside contributing to organizational theory, this paper will also provide some useful information for the areas of sociology of professions and sociology of education. As Bucher and Strauss point out, "the sociology of professions has largely been focused upon the mechanics of cohesiveness and upon detailing the social structure (and/or social organization) of given professions."³ It is difficult to assume that an individual's professional role is completely separated from his non-professional

roles. A more logical picture is that an individual's professional role develops through the process of professional socialization but is somewhat influenced by his non-professional roles, especially sex role.

Knowledge of the attitude patterns of male and female teachers as individuals may give some useful information as to whether there could be some significant effects operating on students as they pass from predominantly female environments on the lower school levels to predominantly male environments on the occupational level.

Assuming differences exist between male and female teachers' attitude patterns, this may be significant for the total school environment. McDill and Meyers' study of institutional effects on academic performance of high school students found that school environment has significant effects on academic performance when holding socioeconomic context of the school and personal characteristics of the students constant. This study did not investigate structural effects of the teacher sex ratio.

In recent literature we find several suggestions that investigations of differences between male and female teachers would be fruitful since it can no longer be stated with certainty that the female's primary role is within the nuclear family. We are not sure that an employed female's referent role is that of the traditional homemaker and subordinate rather than occupational. Natalie

Ramsoy pointed out that sociologists have explicit interpretations of the lower rates of participation by women than by men in the selective reaches of education - interpretations based on women's role in the nuclear family which are not supported by research.

Analysis of the attitude pattern of female teachers may give some indication as to whether females actually do have misgivings about participation in professions and "regard themselves as objects of collective discrimination." Hacker has suggested that women have the characteristics of a minority group. Summarizing some similarities between women and Negroes, Hacker provides the following basic categories of similarities: 1) social visibility, 2) ascribed attributes, 3) rationalization of status, 4) accommodating attitudes. Of most interest is the list of discrimination practices. She says that both groups are confined to traditional jobs and nonsupervisory positions. Also their competition is feared. At that time (1951) she saw no family precedents for new aspirations for women. She did not consider possible variations from these trends in groups with varying sex ratios.

REVIEW OF RESEARCH ON TEACHERS

Many surveys of demographic and social characteristics of teachers have separated their data by sex.

Most of these broad generalizations have implications for the maintenance of high quality teachers within the occupation and implications for possible effects on students. All these studies formed their conclusions from summaries of data on individual teachers. None compared whole schools, teachers within the same school, nor schools with similar or dissimilar sex ratios.

Occupational Characteristics of Teachers

Clark summarizes some characteristics of teachers that are repeated throughout the literature:

- 1. Education is a woman's occupation at the elemenlevel.
- 2. Education is mixed but inclined towards a woman's occupation at the secondary level.
- 3. Men suffer relative deprivation in status and renumeration and are less satisfied as a result.
- 4. Teaching is an unstable occupation. Women use it as an in-out-in career. Men use it as an up or out career.

Summary of National Education Association Survey

A survey done by the National Education Association in 1960-1961 reported some basic personal differences between male and female teachers from a national sample. The following is a brief summary of some of their major findings which when compared with past NEA surveys demonstrated that characteristics of teachers other than sex ratio within teaching have not changed much over the past decades.

Personal Characteristics

- 1. Male teachers tend to be younger than female teachers.
- 2. Male teachers tend to be married more than female teachers.
- 3. Married male teachers tend to have more children than married female teachers.

Professional Characteristics

- 1. Males have higher salaries than females.
- 2. Males have more college study than females.
- 3. Males have a higher proportion of Masters or higher degrees.
- 4. Males have less median years of teaching experience.

Teaching Assignments

- 1. There are insignificant differences between males and females except for miscellaneous non-instructional assignments.
- 2. More males are athletic coaches.
- 3. More females are sponsors of pupil organizations.
- 4. Females tend to be in charge when collection and handling of money is involved.

Political Life

Harmon Zeigler did an extensive study in 1966 concerning the political life of high school teachers. He oriented all of the empirical analysis around sex as a variable because of the diverse assumptions as to the reasons for a majority conclusion from past studies that "women are less active and less efficacious in the political process than men are." These assumptions may be categorized into two major areas: social and cultural restraints, and inherent psychological differences. The teaching occupation was chosen because of the equality of positions of males and females. It was seen as an "opportunity to observe the interaction of presumed psychological differences and social roles."

Because of the extensiveness and variety of findings reached by this study, the following is only a partial listing of a few of the basic conclusions which were drawn by Zeigler:

Values

- The low income males are less satisfied with their jobs, have the greater need for respect, and are more likely to oppose change. They are more liberal politically than females, but the most radically conservative of teachers are in this group. They are less educationally progressive than females.
- 2. The high income females have the greater satisfaction with their jobs, the lesser need for respect, the lesser opposition to change, the more conservative political opinions, not the lesser tendency to radical conservatism than high income males. They are also more educationally progressive.
- 3. For male teachers the clearest congruence of values is with those of other males, whereas females have a less exclusive tendency to adopt the values of other females.

- The majority of male teachers come from lowstatus backgrounds, the majority of females from high-status backgrounds.
- For both males and females, the uncertainties of mobility translate into alienation and cynicism, but the pattern is one of opposites: downward mobile males and upward mobile females are alienated, cynical ones.

Role Perceptions and Social Sanctions

- Both males and females feel that certain activities which thought proper outside the classroom are improper in it. This distinction applies not only to role perception, but also to actual behavior (political).
- 2. The overall impact of perceived sanctions seems to produce docility and conformity in teachers. Men, who typically speak out more in class than women do, are more threatened than women; men do not share the ideological orthodoxy of women.
- 3. Schools themselves inhibit teachers more than does the community, a fact that suggests that the typical picture of the school as under constant attack from conservative interest groups is incorrect.

Reasons For Entering Teaching

Lindley Stiles summarized studies and drew the following conclusions as to the reasons for persons entering the teaching profession:

- 1. Teachers come from a wide range of backgrounds.
- 2. Teachers come from families with moderately adequate incomes.
- 3. Teachers' interest in teaching appeared early largely due to family interest.

- 4. Men from middle class families enter teaching in order to maintain a way of life. They perceive security and authority.
- 5. Men from lower class families enter teaching to obtain a new way of life. Those who strive for administrative positions definitely want to break with the past.
- 6. Women enter teaching expecting marriage and children.

It is generally agreed that women enter the labor force to supplement the family income. Further, it is generally accepted that the primary role of women is within the home and that they are not expected to pursue professional and technical careers.⁴

Extension of Societal Role

Vollmer and Mills raise the following question, "And if, as seems to be the case, some occupations are less stressful for females what is there about them that is less stress engendering?" Perhaps extension of the female role within the occupation is the answer. This role extension might be what the female teachers in Colombotos' study called "service" or what Moore and Kohn classified as "other 'internal' influences" for dental students. In Nelson Foote's terms, the occupation permits ratification of the individual's total societal self-conception by both occupational and non-occupational significant others. As previously mentioned, when examining an occupation, there is a need to consider the extraoccupational roles of the incumbants. Davis and Olsen point out that career socialization has been looked at as a "uni-dimensional, institutionally self-contained process" when there is a need to investigate the knowledge of occupational and extra-occupational role orientations.

Career Patterns

Lieberman, and Mason, Dressel and Bain support the in-out-in career pattern for females and the up or out pattern for males. The latter also report that job satisfaction for males is highly related to their intention to remain in teaching until retirement and that women in general report higher job satisfaction than men. It is suggested that women make fewer demands of the job because of a lack of intrinsic concerns.

Job satisfaction may be looked at as a measure of the discrepency or congruence between expected and actual rewards of an occupational position. It is expected that deprivation of expected rewards or what an individual feels important to the job will be reflected by low satisfaction. This may not necessarily be the case. Cottrell points out that role satisfaction varies with how one role leads to another and accessibility of

substitute gratifications. This agrees with the previously mentioned conclusions about satisfaction. The proportion of males within a particular school may influence the career expectations of both males and females within the school. We would assume that the fewer males, the more hopeful each would be of moving up into an administrative position.

Structured Situation and Well-defined Behavior

Zeigler refers specifically to the authority crisis of the male teacher. He is referring to males' greater expectations for authority within the organization. After studying sex, income, and teaching experience, Zeigler concluded that sex is the most important variable in determining teachers' behavior in reference to job satisfaction, political values, educational values, and personal orientations toward life. He claims that male teachers more so than female teachers demand respect and rigidity of their occupation.

Stiles draws a similar conclusion from his study of why persons enter the teaching occupation. He says that they enter because they desire the perceived "structured setting and value its relative security and predictibility." A relatively high proportion of males within a school may result in an overall atmosphere quite different from that of a school with a relatively low proportion of males.

Waller similarly referred to status and income deprivation for all teachers and the problems of authority which teachers face. He said that "the authority of the school executives and teachers is in unremitting danger from 1) students, 2) parents, 3) school board, 4) each other." Zeigler also concluded that "teachers fear parents, school administrators, and the school boards... more than they fear the community."

Summary of Research and Relation to the Present Study

From these studies we conclude that male teachers are in general less satisfied than female teachers with their occupation. There is a general picture of the male experiencing relative deprivation with respect to status and salary, desiring respect and authority but restrained, and having greater investments in teaching with generally more education than females. In contrast, the female appears to be less concerned with the occupation while her primary interests are with future marriage or supplementing the family income which may be an over-generalization. None of the literature has considered the possibility of a relatively large proportion of either males or females within a school altering these trends for either or both males and females.

HYPOTHESES

The following hypotheses which are based on the research reviewed clarify why we selected particular variables. We will control for sex ratio in testing these hypotheses so that we can determine whether these patterns exist independently of sex ratio.

<u>Hypothesis I</u>. Males will report less satisfaction than females. We assume that males experience relative deprivation with respect to status, salary, and respect and authority. We also assume that lack of satisfaction with some aspects will be generalized to other aspects of the occupation.

<u>Hypothesis II</u>. Males will report more expectations for cooperation and support than females. Because of males greater investment in the occupation, we expect them to depend upon stronger colleague relationships.

<u>Hypothesis III</u>. Males will report more extensive exchange of information, ideas and opinions than females. This assumes that such exchanges are supportive of their teaching role and desire to achieve respect and authority.

<u>Hypothesis IV</u>. Males will place relatively more emphasis upon others maintaining a good opinion of their professional accomplishments because of their stronger desires for respect and authority.

SAMPLE AND DATA

The data for our analysis was obtained from questionnaires administered to secondary public school teachers in one high school and two junior high schools randomly selected in each of five school districts in Michigan (N=15 schools).⁵ Secondary schools are particularly useful since they are one of the few organizations having relatively large proportions of both males and females in the same occupational positions with similar distributions of age, income, education, and social background. Also the actual task performance on the job is relatively standardized over schools and districts.

The questionnaires obtained a large variety of personal and occupational information. Our major interest is with four Likert-type scales asking for rating of items in reference to:

- Degree of satisfaction with occupation related items.
- Expectations for cooperation and support from others for ideas about doing the job.
- Extent of exchange of information, opinions and ideas about doing the job.
- Degree of importance that others maintain a good opinion of the teacher's professional accomplishments.

See Appendix A for a complete copy of the items used.

VARIATION AMONG GROUPS WITH VARYING SEX RATIOS

In the first phase of our analysis each school was ranked according to the proportion of male teachers within the school. The means of the individual responses within each school were ranked for each of the four scales. These means may be referred to as the general group value within each school on each scale.

A significant correlation between rank of the school on any specific variable by proportion males could result from several alternatives because we are using the mean response for each school. The following are three obvious possibilities.

Alternative 1. The larger number of male respondents within a school may weight the mean of the responses in the direction characteristic of males. Thus the females' mean response could differ significantly from that of males but would not be indicated.

Alternative 2. The female respondents in high proportion male schools may be responding at an extreme end of the scale weighting the overall mean in that direction.

Alternative 3. Males and females within each school may be responding similarly to each other, but

high and low proportion male schools differ because their mean responses are in opposite directions.⁶

Table 1.--Correlation of the Rank of Schools by Proportion of Males with the Rank of Schools by mean Response on Likert-Type Scales.

Likert-type scale	Spearman Rank Order Correlation
Satisfaction	43
Expectations for cooperation and support	41
Exchange of information, opinions and ideas	26
Importance of others maintaining a good opinion	50 (N=15)

The rank of schools by proportion of males was correlated with the rank of schools by mean response on each of the four scales. These results appear in Table We see that the most significant correlation is between Ι. the proportion of males within a school and the importance of others maintaining a good opinion $(r_s=-.50)$. Such that the greater the proportion of males within a school, the less importance is attached to others maintaining a good opinion of the teacher. With greater proportions of males within schools, less satisfaction with the teaching occupation is expressed (r_=-.43). With greater proportions of males within schools, there are less expectations for cooperation and support from others $(r_{e}=-.41)$. Less significant but still in the same direction is the

correlation that with greater proportions of males within schools, there is less exchange of information, opinions, and ideas. These significant correlations support the original idea that attitudes and behavior may vary among groups with varying sex ratios.

To determine whether the satisfaction scale was related to the other scales, we correlated the rank of schools by mean response on satisfaction with the ranks for the other three scales. These results are reported in Table II.

Table II. Correlation of the Rank of Schools by Mean Satisfaction with the Rank of Schools on other Scales.

Likert-type scale	Spearman Rank Order Correlation
Expectations for cooperation and support	.50
Exchange of information, opinions, and ideas	.43
Importance of others maintaining a good opinion	.16 (N=15)

We see that there are significant positive correlations between degree of satisfaction and expectations for cooperation and support (r_s =.50) and exchange of information, opinions, and ideas (r_s =.43). Though the latter appear to be significantly related to satisfaction, the importance of others maintaining a good opinion is not as significantly related (r_s =.16).

COMPARISON OF MALE AND FEMALE ATTITUDES WITHIN SCHOOLS

To determine whether males and females within the same school have similar mean responses, we ranked the mean responses of males within each school and ranked the mean responses of females within each school. We then correlated the male rank with the female rank. These results are reported in Table III.

Table III. Correlation of the Rank of Schools by mean Male Response with the Rank of Schools by mean Female Response.

Likert-type scale	Spearman Rank Order Correlation
Satisfaction	.72
Expectations for cooperation and support	02
Exchange of information, opinions and ideas	05
Importance of others maintaining a good opinion	31 (N=15)

The results shown in Table III indicate that there is a strong positive correlation between mean satisfaction of males and females within the same school $(r_s=.72)$. At the same time, there is almost no similarity between males and females within the same school as to their exchange of information, opinions and ideas $(r_s=-.05)$, and expectations for cooperation and support $(r_s=-.02)$. Curiously, there is a slight negative correlation for males and females responses

to the importance of others maintaining a good opinion of their professional accomplishments. This would indicate that if males feel this is of little importance, females would feel it was of great importance or vice versa.

The results in Table III indicate that the satisfaction for males and females within the same schools is similarly rated. To determine what variables are relevant to satisfaction, the rank of schools by male satisfaction was correlated with the rank of schools on the other variables for males, and then the same was done for females. These results are reported in Tables IV and V, respectively.

Table IV.--Correlation of the Rank of Schools by mean Male satisfaction with the Rank of Schools on the other Variables for Males.

Likert-type scale	Spearman Rank Order Correlation
Expectations for cooperation and support	.62
Exchange of information, opinions and ideas	.54
Importance of others maintaining a good opinion	n .26 (N=15)
Table VCorrelation of the Rank of Schools by Female satisfaction with the Rank of on the other Variables for Females.	
Likert-type scale	Spearman Rank Order Correlation
Expectations for cooperation and support	.33
Exchange of information, opinions and ideas	.16
Importance of others maintaining a good opinion	n05 (N=15)

From Table IV it is apparent that significant positive correlations exist between male satisfaction and males' expectations for cooperation and support ($r_s = .62$), and males' exchange of information, opinions and ideas ($r_s = .54$). There is only a slight positive correlation between male satisfaction and males' importance of others maintaining a good opinion of their professional accomplishments ($r_s = .26$).

The results for females are quite different from those for males. The results in Table V indicate that there is a slight positive correlation between female satisfaction and females' expectations for cooperation and support (r_s =.33). Female satisfaction does not appear to be related to females' exchange of information, opinions and ideas (r_s =.16) or females' importance of others maintaining a good opinion of their professional accomplishments (r_s =-.05).

Combining the results so far, we may say that the proportion of males within a school is negatively related to overall satisfaction within the school, to expectations for cooperation and support, to exchange of information, opinions and ideas, and to the importance of others maintaining a good opinion of their professional accomplishments. Our important finding is that males and females within the same schools have similar satisfaction responses. For males, satisfaction is related to the other variables while for females it is not except slightly for expectations for cooperation and support. We might suppose that females take on the attitude of males toward satisfaction regardless of the other variables while male satisfaction affects or is affected by these other variables.

COMPARISONS OF AND WITHIN HIGH AND LOW PROPORTION MALE SCHOOLS

One of the first questions we want to answer is why is there such a strong positive correlation between male and female satisfaction within schools when the literature consistently reports that males are usually less satisfied than females. To answer this we isolated those satisfaction items on which a large majority of males did not respond positively.

We looked at satisfaction items with high intercorrelations for which 25% or less of the males in either the high school with the highest proportion of males (62% male, N=84) or the high school with the lowest proportion of males (49% male, N=87) responded in the two most positive categories of the Likert-type scale. Only three such items were found. The percentage distributions are shown in Table VI.

Table VI

Percent of two most positive responses for satisfaction with teaching load

School with high proportion males		School with low proportion males
Males	25	46
Females	42	33

Percent of two most positive responses for satisfaction with fringe benefits

	School with high proportion males	School with low proportion males
Males	47	23
Females	68	49

Percent of two most positive responses for satisfaction with salary

	School with high proportion males	School with low proportion males
Males	23	16
Females	45	43

First, we should note that two of these items are socio-economic items. These are items which the literature suggests that we expect males to be less satisfied with than females as is the case. Looking over all three of the items together, we find two consistent relationships:

 Males in the high proportion male school are less satisfied than females in the high proportion male school. 2. Males in the high proportion male school are less satisfied than females in the low proportion male school.

No similar consistent relationships were found for items on which either male group had 75% or more responses in the two most positive response categories. These results indicate that the component items of the total satisfaction scale are extremely important to the final results. For instance, with an overload of socio-economic items in the satisfaction scale, there probably would not be a significant positive correlation between male and female responses within schools.

Looking over those items in the scale for expectations for cooperation and support that had high intercorrelations, we do not find any consistent relationships over items. Looking within individual items, the only consistent relationship appears for expectations for cooperation and support from the department head. Here regardless of school, males have lesser expectations than females. But there is a greater difference between males in the high and low proportion male schools than between the two female groups. Though this may seem very interesting, no inferences will be made from this because the relationship was found on only one item. This example points out the variety of relationships that could be examined for each individual item within each of the scales. See Table VII.

Table	VIIPercent	of 1	two m	ost	positive	resp	onses	for
	expecta	tions	s for	coc	operation	and	suppor	t
from department head.								

	School with high proportion males	School with low proportion males
Males	71	56
Females	81	78

The highly intercorrelated items for exchange of information, opinions and ideas also show no consistent relationships over the items. Within one item, exchange with teachers within your specialty, we find that males exchange less than either group of females. Also, males in the high proportion male school report they exchange less than males in the low proportion male school. See Table VIII. Realizing that we are talking about only two schools, this instance is a complete contradiction of our original hypothesis that males will report more extensive exchange of information, opinions and ideas. There is some indication that we should question the assumption that exchanges are supportive of the teaching role and desire for authority and respect or question whether males need support and desire authority and respect more than females.

Table VIII.--Percent of two most positive responses for exchange of information, opinions and ideas with other teachers in your specialty.

	School with high proportion males	School with low proportion males
Males	50	60
Females	80	64

Table IX gives the data for the five highly intercorrelated items from the scale for importance of others maintaining a good opinion of the teacher's professional accomplishments. Here we find two consistent relationships:

- 1. Males in the high proportion male school more often feel it of great importance that others maintain a good opinion of their professional accomplishments than males in the low proportion male school.
- 2. Males in the low proportion male school more often feel it of little importance that others maintain a good opinion of their professional accomplishments than females in either the high or low proportion male schools.

We should also notice that females in the high proportion male school, similar to the males, feel greater importance for others maintaining a good opinion of their professional accomplishments than females in the low proportion male school for all the items except other teachers in their specialty. On this particular item, males in the high proportion male school attach greater importance to teachers in their specialty maintaining a good opinion than any other male or female group.

		-
	School with high proportion males	School with low proportion males
	Department Head	
Males	58	35
Females	66	50
	Other Teachers in your s	specialty
Males	62	46
Females	54	59
	Students	
Males	86	74
Females	85	81
	Friends not in educa	ation
Males	30	28
Females	42	37
	Other Teachers not in your	r specialty
Males	44	26
Females	36	28

Table IX.--Percent of two most positive responses for importance of others maintaining a good opinion of your professional accomplishments.

SUMMARY

The review of the literature on teachers gives the impression that males experience relative deprivation in status, renumeration, respect and authority while females are less concerned with these occupational aspects. Most of the studies drawing such conclusions centered their argument around the apparent lack of occupational satisfaction for males relative to females. None of the studies had considered the possibility of sex ratio within schools affecting these trends.

When we correlated the rank of schools by proportion of males with the rank of schools by mean response on the Likert-type scales, we found that the proportion of males within a school was negatively related to each of the scale variables. In order to explain these negative relationships we attempted to interrelate them. We found that satisfaction correlated positively with expectations for cooperation and support and with exchange of information, opinions and ideas; but not with importance of others maintaining a good opinion. At that point we could conclude that satisfaction, expectations for cooperation and support and exchange of information, opinions and ideas were positively related to each other and were negatively related to the proportion of males within schools.

In looking at male-female differences within schools we hoped to get at an explanation for the relevance of the proportion of males and the relationship of satisfaction to expectations for cooperation and support and exchange of information, opinions and ideas. We found that males and females within the same schools report basically the same degree of satisfaction. Combining this result with the negative correlation between proportion of males and satisfaction, we conclude that the greater the proportion of males within schools, the less satisfaction for both males and females within the school as compared to males and females in schools with lower proportions of males.

Further analysis indicated that satisfaction for males is positively related to expectations for cooperation and support and to exchange of information, opinions and ideas. So the less satisfaction, as was generally the case with a greater proportion of males, the less expectations for cooperation and support and the less exchange of information, opinions and ideas for males within schools. Similar strong positive relationships were not found for females. The only conclusion we can draw with some assurance is that females' attitude toward satisfaction is similar to that of the males within the school regardless of their expectations for cooperation and support and exchange of information, opinions and ideas.

Our final analysis of the two individual schools indicates clearly that there are differences between males and females in general but we were not able to isolate particular dimensions. It is suggested that the conclusions of the literature fail to take into account who male and female teachers use as their referent group with respect to different aspects of the occupation. For example, if male teachers compare themselves to males of similar education and years of experience in other occupations, they would be expected to experience less satisfaction with socio-economic aspects than female teachers, but this would probably not be the case if they compare themselves with other teachers. Similarly for females, it seems that whether they use other females in general (including housewives), other working females or teachers as their referent group would affect their attitudes.

This analysis combined with our previous findings clearly indicate that sex ratio does have a structural effect on some attitude dimensions. Because of the abundance of generalizations about male teachers experiencing less satisfaction than female teachers, our findings concerning structural effects are particularly important. Further, we have found that satisfaction is not an isolated variable for males but is somehow related positively to expectations for cooperation and support and exchange of information, ideas and opinions.

Because we did not find any consistent relationships for importance of others maintaining a good opinion of professional accomplishments, we should question the literature indicating the importance of respect and authority to males. Our negative correlation of this variable with proportion of males and the very low positive correlation with satisfaction for males leads to our questioning besides the irregular relationships between males and females within the high and low proportion male high schools.

FOOTNOTES

¹Herzog's work is used as a methodology example in: Paul Lazarsfeld and Allen Barton, "Qualitative Measurement in the Social Sciences," in <u>THE POLICY</u> <u>SCIENCES</u>, eds., Daniel Lerner and Harold Lasswell, (Stanford: Stanford Univ. Press, 1951), p. 191.

²Structural effects here refers to the effects of the social context. For further discussion see: Peter Blau, "Structural Effects," <u>AMERICAN SOCIOLOGICAL</u> <u>REVIEW</u>, VOL. 25, April, 1960, pp. 178-193.

³Bucher and Strauss develop the idea of the process of segmentation in the development of professional associations. They recognize differences of interests within the professions which tend to become patterned and shared by groupings which they refer to as segments.

⁴For support of these generalizations refer to: Esther Peterson, "Working Women," <u>DAEDALUS</u>, 93, (Spring, 1964) pp. 671-699. Carl Degler, "Revolution Without Ideology: The Changing Place of Women in America," <u>DAEDALUS</u>, 93, (Spring, 1964), pp. 653-670. Alice Rossi, "Equality Between the Sexes: An Immodest Proposal," <u>DAEDALUS</u>, 93, (Spring, 1964) pp. 607-652. Gertrude Bancroft, THE AMERICAN LABOR FORCE: ITS GROWTH AND <u>CHANGING COMPOSITION</u>, (New York: John Wiley and Sons, 1958).

⁵Study conducted by Philip Marcus and Michael Betz, Dept. of Sociology, Michigan State Univ. The author was a research assistant participating in the collection, coding and analysis of data.

⁶For further discussion of the uses of ecological data see the following articles: Paul Lazarsfeld and Allen Barton, <u>OP. CIT.</u>, Herbert Menzel. Comment on Robinson's "Ecological Correlations and Behavior of Individuals," and W. S. Robinson, "Ecological Correlations and Behavior of Individuals," <u>AMERICAN SOCIOLOGICAL REVIEW</u>, VOL. 15, p. 674 and pp. 351-357, respectively; and Hanan Selvin, "Durkheim's <u>SUICIDE</u> and Problems of Empirical Research," <u>THE AMERICAN JOURNAL OF SOCIOLOGY</u>, VOL. 63, pp. 607-619.

- AMERICAN PUBLIC SCHOOL TEACHER, 1960-1961, Research Monograph 1963-M2, Research Division, National Education Association.
- Bancroft, Gertrude, THE AMERICAN LABOR FORCE: ITS GROWTH AND CHANGING COMPOSITION, (New York: John Wiley & Sons, 1958).
- Blau, Peter, "Structural Effects," AMERICAN SOCIOLOGICAL REVIEW, VOL. 25, April, 1960. pp. 178-193.
- Blood, Robert O., and Donald M. Wolfe, <u>HUSBANDS AND</u> <u>WIVES: THE DYNAMICS OF MARRIED LIVING</u>, (New York: Free Press, 1960).
- Bucher, Rue, and Anselm Strauss, "Professions in Process," <u>THE AMERICAN JOURNAL OF SOCIOLOGY</u>, VOL. 66, No. 4, January 1961, pp. 325-334.
- Clark, Burton, "Sociology of Education," in <u>HANDBOOK OF</u> <u>MODERN SOCIOLOGY</u>, ed. Robert Faris, (Chicago: Rand McNally & Co., 1964), pp. 734-769.
- Colombotos, John, "Sex Role and Professionalism: A Study of High School Teachers," <u>THE SCHOOL REVIEW</u>, VOL. 71, No. 1, 1963, pp. 27-40.
- Cottrell, W. F., "The Adjustment of the Individual to his Age and Sex Roles," AMERICAN SOCIOLOGICAL REVIEW, VOL. 7, pp. 617-620.
- Davis, Fred, and Virginia Olsen, "Initiation Into A Woman's Profession: Identity Problems in the Status Transition from Co-ed to Student Nurse," SOCIOMETRY, VOL. 26, No. 1, 1963, pp. 89-101.
- Degler, Carl, "Revolution Without Ideplogy: The Changing Place of Women in America," <u>DAEDALUS</u>, VOL. 93, Spring, 1964, pp. 653-670.
- Foote, Nelson, "Identification as the Basis for a Theory of Motivation," <u>AMERICAN SOCIOLOGICAL REVIEW</u>, VOL. 16, February, 1951, pp. 14-22.
- Hacker, Helen, "Women as a Minority Group," SOCIAL FORCES, VOL. 30, October, 1951, pp. 60-65.

- Lazarsfeld, Paul, and Allen Barton, "Qualitative Measurement in the Social Sciences," in THE POLICY SCIENCES, eds. Daniel Lerner and Harold Lasswell, (Stanford: Stanford Univ. Press, 1951).
- Lieberman, Myron, EDUCATION AS A PROFESSION, (Englewood Cliffs, N. J.: Prentice Hall, Inc., 1959).
- Mason, Ward, and Robert Dressel, and Robert Bain, "Sex Role and the Career Orientations of Beginning Teachers," HARVARD EDUCATION REVIEW, XIX, 1959.
- McDill, Edward, and Edmund Meyers, and Leo Rigsby, "Institutional Effects on the Academic Behavior of High School Students," <u>SOCIOLOGY OF EDUCATION</u>, VOL. 40, No. 3, Summer, 1967, pp. 181-199.
- More, D. M., and Nathan Kohn, "Some Motives for Entering Dentistry," <u>THE AMERICAN JOURNAL OF SOCIOLOGY</u>, VOL. 66, No. 1, July, 1960, pp. 48-53.
- Peterson, Esther, "Working Women," <u>DAEDALUS</u>, VOL. 93, Spring, 1964, pp. 671-699.
- Ramsoy, Natalie, "Public Education in America: A Research Program," <u>SOCIOLOGY OF EDUCATION</u>, VOL. 37, No. 1, Fall, 1963, pp. 1-8.
- Rossi, Alice, "Equality Between the Sexes: An Immodest Proposal," <u>DAEDALUS</u>, VOL. 93, Spring, 1964, pp. 607-652.
- Stiles, Lindley, ed., THE TEACHER'S ROLE IN AMERICAN SOCIETY, (New York: Harper & Brothers, 1957), pp. 8-41.
- Vollmer, Howard, and Donald Mills, "Professionalization and Technological Change," in PROFESSIONALIZATION, eds. Howard Vollmer and Donald Mills, (Englewood Cliffs, N. J.: Prentice Hall, Inc., 1966), pp. 22-28.
- Waller, Willard, THE SOCIOLOGY OF TEACHING, (New York: Russell & Russell, 1932).
- Zeigler, Harmon, THE POLITICAL LIFE OF AMERICAN TEACHERS, (Englewood Cliffs, N. J.: Prentice Hall, Inc., 1967).

APPENDIX A

To what extent can you expect cooperation and support for your ideas about doing your job from each of the following? CHECK ONE ON EACH LINE.

		To a very great exten	ext	a eat tent	To som ext	e ent		a ght ent	To ext at	
a.	Member(s) of the school board	()	()	()	()	()
b.	Other teachers in your special in your school	ty ()	()	()	()	()
c.	Your department head	()	()	()	()	()
d.	Superintendent of schools	()	()	()	()	()
e.	Officers in the local chapter of your teacher organization (no the building representatives	ot	()	()	()	()
f.	Principal of your school	()	()	()	()	()
g.	Officer(s) of the PTA in your school	()	()	()	()	()
h.	Parents of the children in your classroom	()	()	()	()	()
i.	The superintende staff	ent's ()	()	()	()	()
j.	Other teachers not in your specialty in you school	ur ()	()	()	()	()
k.	The principals's assistants	s ()))			()

To what extent do you exchange information, ideas about doing your job with each of the CHECK ONE ON EACH LINE.							opinions and following?				
		To a very grea exte	, it	-	a at ent	To som ext			a ght ent	To ext at	ent
a.	Memb er(s) of the school board	()	()	()	()	()
b.	Other teachers in your special in your school)	()	()	()	()
c.	Your department head)	()	()	()	()
d.	Superintendent of schools	()	()	()	()	()
e.	Officers of the local chapter o your teacher organization (n the building representatives	f ot)	()	()	()	()
f.	Principal of your school	()	()	()	()	()
g.	Officer(s) of the PTA in your school	()	()	()	()	()
h.	Parents of the children in you classroom	r ()	()	()	()	()
i.	The superintend staff		;)	()	()	()	()
j.	Other teachers not in your specialty in yo school	ur ()	()	()	()	()
k.	The principal's assistants	()	()	()	()	()

ON	E ON EACH LI	INE.						-			
g			Very greatly satisfied				Somewhat satisfied				s- 11
a.	The prestic and respect receive fro the communi	: I om)	()	()	()	()
b.	My teaching load)	()	()	()	()
c.	The relation ships I have with the pr pal's assts	ve Sinci-)	()	()	()	()
đ.	My vacatior and free ti)	()	()	()	()
e.	The physica conditions which I wor	under)	()	()	()	()
f.	The amount autonomy gi me by the principal t my job	lven to do)	()	()	()	()
g.	The fairnes with which duties are distributed this school building	l in)	()	()	()	()
h.	The student with whom I have contac	[)	()	()	()	()
i.	My fringe benefits	()	()	()	()	()
j.	The relation ships I have with the superintend assistants	ve lent's)	()	()	()	()
k.	My subjects I teach)	()	()	()	()

How satisfied are you with each of the following? CHECK ONE ON EACH LINE.

		Very greatly satisfied				Somewhat satisfied				Not satis- fied at all		
1.	My salary compared to others at r level of education)	()	()	()		()
m.	The friend- ships I develop wit the people at work	:h)	()	()	()		()
n.	My present job in the light of my career expectation)	()	()	()		()
ο.	The size of the classes I teach)	()	()	()		()
р.	The adequad of the supervision I receive from the superintend staff	1)	()	()	()		()

For each of the following persons or groups, how important is it that you maintain their good opinion of you and your professional accomplishments? CHECK ONE ON EACH LINE.

		Very great impor- tance		-		Some impor- tance				Not impor- tant at all	
a.	The departmental chairman	()	()	()	()	()
b.	Other teachers in my specialty	()	()	()	()	()
c.	The district superintendent	()	()	()	()	()
d.	The students	()	()	()	()	()
e.	The principal in this school	()	()	()	()	()
f.	Local MEA or MFT officials (not building representatives)	()	()	()	()	()
g.	The school board	()	()	()	()	()
h.	Friends who are not in education	()	()	()	()	()
i.	Other teachers not in my specialty	()	()	()	()	()

