# AN EXAMINATION AND ANALYSIS OF THE EFFECTS OF INDIVIDUAL BACKGROUND AND COMMUNITY STRUCTURE ON THE DEVELOPMENT OF SEX-ROLE EXPECTATIONS AMONG ELEMENTARY TEACHERS IN NON-METROPOLITAN KANSAS

by

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# Chapter 1

## INTRODUCTION

> The school attendance of children is such a common experience in our society that those of us who watch them go hardly pause to consider what happens to them when they get there (Jackson, 1968: 3).

Parents send their children to educational institutions so that the children learn to become capable of functioning in the society which created and continues to shape them. Children are expected to learn the roles they must assume and the norms they must observe in order to function appropriately (i.e., in line with others' expectations for them) in the society. However, parents may never question themselves as to what expectations their children will be asked to meet in their schooling experience and on what the expectations will be based.

The people responsible for the professional socialization of children are the key factors in children's microcosmic society of school. That is why it is indeed very unfortunate for the children when some teachers year after year use the same lesson plans, the same ideas, the same words, to "teach" entirely different classes -- entirely different children -- the same things.

Teachers present children with a small replica of what they may expect from their environment when they leave the educational boundaries of their schools. Models of adult

roles and the expectations of others to pattern themselves after those roles are presented to children every day of their schooling experience. The curricula they follow, the books they read, and most importantly, the teachers they have, are responsible for educating them as to what roles they may play and how they are to function in them.

We have all been socialized to expect males and females to excel in different areas, to be interested in different things, and to behave in oftentimes entirely different ways. We have norms of "typical" behavior for boys which vary greatly with our norms of "typical" behavior for girls. Tradition has reinforced these norms to such an extent that deviation from them is frequently considered abnormal. So-called "appropriate" sex-role behavior is reinforced in schools just as it is in homes. However, expectations are not always valuable forces, especially when they are based on sex-role behavior. It is very difficult to change people's expectations for sex-role appropriate behavior, but it is perhaps even more difficult to determine the source of the expectations and to explain the reason for their existence.

Most people assume that boys are better in math and science -- they can use their minds -- and that girls are better in reading and verbal expression -- they can use their mouths. Likewise, boys are expected to be agressive, independent and clever, while everyone knows that girls are passive, dependent and silly. These expectations based on sex roles prevent children from freely expressing themselves. Children's potentials can very easily be discouraged and

restricted when the expectations their parents and teachers have for their behavior are limiting devices. Inhibiting achievement is dangerous for anyone's self-concept, but especially for young children whose lives are shaped by the people responsible for their socialization.

What is required is a learning atmosphere where children are encouraged to be their own persons by exploring all the possibilities available to them. It is no more desirable to expect children to be good in one area and poor in another because of their sex than it is to expect them to excel because they are white or black. Sex role stereotypes have received considerable attention in recent years, particularly in the area of curriculum materials, but even though some changes have been made they have not been drastic; problems still exist. Efforts for stereotype-free education cannot end with the elimination of a few story and text books. Even though it is much easier to take some books off the shelf and put a few on than it is to fire and hire teachers, or even re-educate them, the latter is a much more necessary step. It is difficult to change people's attitudes and expectations, especially when those attitudes and expectations have been an integral part of their very existence from the beginning of their socialization. However, the challenge must not overcome the desire for a true sex-role stereotype-free education for all children.

Thomas Good wrote,

> The classroom may be looked upon as a roulette table where the teacher can place bets on pupils' performance and then has the power to manipulate forces that will allow her forecast to be realized (Good, 1970:193).

We cannot continue to let teachers gamble with children's futures. It is the author's hope that with this study of elementary teachers in non-metropolitan Kansas counties, the sources of teachers' attitudes, and their expressed expectations for children, we will be subjected to a realization of the seriousness of teachers' sex-role expectations and the meaning of those expectations for the children under their supervision.

# Chapter 2

## STATEMENT OF THE PROBLEM

The purpose of this study is to determine if elementary teachers have certain sex-role expectations of their students, as witnessed by their support or non-support of stereotypical behaviors expressed by hypothetical children. It is important to determine which particular sources of teachers' attitudes are forming their expectations. The sources of attitudes which will be analyzed in this study are community structure and individual attributes.

The following questions form the framework for this research problem:

1) To what extent do sex-role expectations exist among elementary teachers in general?

2) Which behaviors, when expressed by children, are sex-role stereotyped by elementary teachers?

3) To what extent does the structure of the community of which the teacher is a part determine the teacher's sex-role expectations for children?

4) To what extent do the teacher's background characteristics determine the teacher's sex-role expectations for children?

### Definition of Terms and Concepts

The following definitions are presented so that the major terms and concepts used in this study will be clarified.

Sex role is the arbitrary assignment of cultural and social norms, traits, abilities and expectations to people solely on the basis of their sex, disregarding their attributes

as individuals.

Sex role stereotyped behaviors are those behaviors which are considered appropriate when emitted by one sex but undesirable when emitted by the other (Levitin and Chananie, 1972). When behaviors are so typed, it is believed that one sex is superior to the other when a certain behavior is expressed. Sex-role stereotyping serves to regulate adult behavior as well as shape the behavior of children (Zach and Price, 1973).

Expectation refers to a conscious or unconscious evaluation which is formed by one person of another, and inevitably leads the evaluator to treat the person as though the evaluation were correct (Finn, 1972). It is assumed that attitudes and expectations are closely interrelated, so that one's expectations of people are representative of one's attitudes. Expectations affect both one's perception and interpretation of the behaviors for which the evaluative standards are formed.

Self-fulfilling prophecy as defined for this study is the end result of one's expectations. When an expectation is formed, even if it describes a situation which is false, the evaluator's behavior toward the person for whom certain expectations are held will eventually cause the situation to be true. The fulfillment of the prophecy or expectation is the completion of the expectancy process.

Sex-role expectations are those expectations formed solely on the basis of sex rather than ability. Traditional

sex-role expectations are relayed by the society and are followed as guidelines for what behaviors and actions may be expected from boys and girls. Sex-role expectations not only differ for girls and boys, but they are also vectored differently as behavior considered appropriate for boys meets with greater approval than does girls' appropriate behavior, whether it is displayed by boys or girls (Zach and Price, 1973).

Teacher, for the purpose of this study, is defined as a Kansas certified person who is responsible for the education of children at the elementary level. A teacher who is certified in Kansas is not required to take a course concerned with sex-role stereotyping (Utsey, 1975).

Community structure can be thought of as the type or style of a community which distinguishes it from other communities. The structural characteristics of a community are many and diverse. While it seems impossible to adequately define, a community's structure can be seen as the characteristics which set it apart from other communities with a degree of uniqueness. For this study community structure will be measured by degrees of differentiation, centrality, and fluidity -- three variables which do allow for the individuality of the communities studied. These structural variables represent the specific characteristics of a community, they measure the structure of the entire community, and they are very systematic in their measurement (Ho, 1976). Chapter 6, Methods for the Selection of Significant Variables, will be

more specifically concerned with the concept of community structure.

Status of women in a community can be defined as the position women hold relative to men. When women have high status in a community they are likely to be educated and employed to a degree more nearly approaching that of men. Education and employment are merely indicators of women's status but they serve to predict trends in women's status, its direction, and rate of change. In counties with a low status for women, women have less education and therefore are less likely to be employed outside the home. The status of women in a community could be considered to be the relative importance or value of the women to their community and the rank they hold in it.

## A Theory of Teacher Expectations

When a theory of expectations includes sex-role stereotyping, a rationale for the perpetration of traditional sex roles has been realized (Utsey, 1975). Elementary teachers in non-metropolitan Kansas counties are presumed to be similar to teachers everywhere in that they form expectations of students on the basis of the students' sex. Teachers find themselves committed to a certain set of expectations for boys and a certain set of expectations for girls which perpetuate the traditional sex-role expectations. While some may regard this as an "educational reality which cannot be wished out of existence" (Lee and Gropper, 1974:390), it is nonetheless the

cause of unequal treatment of students by teachers, and it results in a biased educational experience for both boys and girls.

It is difficult to conceive of all the factors which could form teachers' expectations, and undoubtedly some will never be conceptualized. For this study it is assumed that the sources of teachers' attitudes are the primary factors forming their expectations. More specifically, the structure of the community and the status of women in the community are believed to be the sources of teachers' expectations on the macro level, and the individual background attributes of the teachers are considered to be the source of their expectations on the micro level. Therefore, variables relating to community structure and status of women, and individual background variables are as important to this study as are the teachers' actual expectations.

The social structure and the attitudes contained in it may have an effect on teachers' expectations, but the possibility of the opposite relationship is quite unlikely (Wilkins, 1976). That is, people are somehow led to expect certain behaviors from others because of the social structure of which they are a part, but a change in their expectations due to their experiences will not have an effect on the structure which originally formed their expectations.

As for the individual attributes of teachers and their importance for the formation of teachers' expectations, it is not surprising that they would (as examples of the

teachers' development and orientation) result in particular kinds of teacher-pupil relationships (Biber, 1969). These relationships, when analyzed, can be seen as the visible signs of teachers' expectations. The teacher as a person is an important concept for this study.

Gross, Mason and McEachern (1958) have suggested two complementary principles concerned with variability in role definitions which are relevant here. Although Gross, Mason, and McEachern were interested in the analysis of the roles of school board members and school superintendents, their proposed hypotheses are applicable to this study of elementary school teachers. In fact, the researchers early in their work make a point of the importance of personal characteristics when studying expectations and note as an example, "a teacher may have somewhat different standards for 'bright' and 'dull' pupils," (Gross, Mason and McEachern, 1958:59). The researchers would have been just as correct in their assumption had they substituted the words "boy" and "girl" for "bright" and "dull" because teachers do have very different standards for boys and girls, just as they do for bright and dull pupils.

Concerning the two principles established by Gross, Mason and McEachern (1958), the first hypothesis states, "the longer the members of a social system have interacted with one another, the more consensus they will have on the expectations they apply to incumbents of positions in that social system" (Gross, Mason and McEachern, 1958:177).

This hypothesis was not accepted by the researchers

due to insignificant results. However, it seems important for this study that the period of interaction be considered. The length of time teachers have spent in a community, and the length of time they have taught can both be viewed as interaction situations. It would appear that the longer a teacher has been part of a certain community and the more teaching experience a teacher has, the more likely that his or her expectations will be similar to others in the community and/or teaching environment.

The second principle concerns possible similarities which could conceivably cause consensus on expectations. The principle is tagged the "homogeneity hypothesis", and it states, "The greater the homogeneity among or between position incumbents, the more consensus they will have on the expectations for their own and others' positions" (Gross, Mason and McEachern, 1958:182-183). In other words, it appears that people with kindred backgrounds are exposed to similar influences which result in the development of common expectations (Mackinnon and Summers, 1976).

Once again this hypothesis could not be accepted for the study conducted by Gross, Mason and McEachern. The researchers warn that the hypothesis may be quite limited and that it might not be an accurate description of any position under study, but they conceive of it as a reliable assumption.

For this study it is important to determine if, in fact, similarity of individual teachers' backgrounds has

caused them to have certain expectations. If the homogeneity hypothesis holds true for the elementary teachers in non-metropolitan Kansas communities, its implications for other teacher-networks could be very important.

Even though the interaction and homogeneity hypotheses advanced by Gross, Mason and McEachern (1958) were not formulated to deal specifically with sex-role expectations, the general theory behind the hypotheses can be accepted for this study.

Hypotheses

It is assumed that teachers will perceive hypothetical students as identical to those students with whom they have actual contact. Respective of this statement and the theoretical framework previously presented, a series of major hypotheses and the rationale supporting them can now be generated.

(1) The manifestation of certain behaviors will be considered by teachers as appropriate or inappropriate according to the sex of the child displaying the behaviors. These behaviors, when expressed by boys, will be viewed as appropriate: flexibility, nonconformity, untidiness, activity, independence and assertiveness. When expressed by girls these behaviors will be seen as desirable: rigidity, conformity, orderliness, passivity, dependence and acquiescence.

The rather broad, but very basic, assumption on which this thesis is based is that elementary teachers do have sex-role expectations for children and that certain behaviors, when expressed by children, are sex-role stereotyped by teachers as appropriate or inappropriate for the child expressing them. Specific behaviors such as independence, assertiveness and nonconformity will not be particularly favored by teachers as being desirable whether boys or girls display them, but it would seem that these behaviors would receive even less approval when they are expressed by girls since girls are not expected to be independent or assertive. Likewise, certain behaviors may be rewarded for all students, but some behaviors may be differently rewarded due to the sex of the child.

It is further hypothesized that ratings of intellectual attributes will be higher for the passive, dependent, acquiescent, rigid, conforming, orderly girls than for boys with the same behavior characteristics since a girl is expected to be dependent and conforming and a boy is not. Likewise, active, independent, assertive, flexible, nonconforming, untidy boys may not be considered to have superior intelligence, but they will receive a higher rating on the scale than will girls expressing the same behaviors merely because girls are not expected to behave that way.

This hypothesis will determine whether or not, in general, teachers have sex-role expectations for children, and whether certain behaviors when expressed by one sex of

child are more desirable than when they are expressed by the opposite sex of child.

(2) In counties with a high level of community structure (i.e., high degrees of differentiation, centrality and fluidity) and a high status for women (i.e., high rates of labor force participation and educational attainment, and low fertility rates), teachers will be less likely to have differential sex-role expectations for children. This will be especially true for teachers who have lived in the community for an extended period of time.

It is assumed that because the counties which are considered to have a high level of community structure and a high status for women will be less sexist in their environments, teachers will follow the example of equality practiced in the counties, and therefore will not expect certain behaviors from children solely on the basis of their sex.

It is further hypothesized that teachers who have lived for an extended period of time in communities with a high level of community structure and a high status for women will be more likely not to have sex-role expectations than will those teachers who have not lived in the communities for as long. This theory is derived from the interaction hypothesis of Gross, Mason and McEachern (1958) which states that the longer the period of interaction, the greater the consensus concerning expectations. The length of time spent in the community is here viewed as a type of interaction

situation. It seems possible that if teachers in communities with a high level of community structure and a high status for women have been in the communities for an extended period of time that they will be more likely to take on the attitudes of the community concerning equality than will those teachers who have not been in the community for as long, and will express those attitudes in their teaching of children. Therefore, it is hypothesized that teachers who have lived for a good number of years in a county which has a high level of community structure and a high status for women will not perceive boys as being different from girls in the expression of behaviors, nor will they expect certain behaviors from boys and girls merely because of their sex.

(3) In counties with a low level of community structure (i.e., low degrees of differentiation, centrality and fluidity) and a low status for women (i.e., low degrees of labor force participation and educational attainment, and high fertility rates), teachers will likely have sex-role expectations for children. This will be especially true for teachers who have lived in the community for an extended period of time.

It is hypothesized that teachers in counties which have a low level of community structure and a low status for women are not as aware of sexism in their classrooms and are more likely to have definite sex-role expectations for children. The sources of their attitudes have not freed them

from their expectations because they are conditioned by their less developed and unequal surroundings to expect certain behaviors from boys and girls simply because they are boys and girls.

It is also hypothesized that teachers who have lived for an extended period of time in communities with a low level of community structure and a low status for women will be more likely to have sex-role expectations than will those teachers who have not lived in the communities for as long. The teachers with a longer period of residence in such communities are more likely to take on the inequality attitudes of the communities and will reflect those attitudes in their expectations for children. Teachers who have not been in the community for as long will be less likely to have sex-role expectations because there has not been enough time for them to take on the attitudes of the community.

(4) Teachers' sex-role expectations for children will vary with the amount of teaching experience they have had. Teachers with many years of experience may have strong sex-role expectations, but it is believed that relatively new teachers will have even more rigid expectations for children.

It seems likely that persons who have been teaching for extended periods of time will have certain expectations for children's behavior based on their past experiences with children. With experience teachers may learn to categorize children and come to expect boys to behave one way and girls

another. On the other hand, people who have been teaching for several years have had more of an opportunity to work out their ideas concerning expectations and, therefore, may not have as many sex-role stereotypes as would new teachers.

Persons who have been teaching only a few years may be very traditional in their conception of appropriate behavior for children. These "new" teachers are likely to be very conscience of their performances, and having to establish a basis for authority, they may fall back on the old stereotypes to pull them through their duties. They have not had much teaching experience so they have not had the needed opportunities to change their conceptions of "appropriate" behavior, or their sex-role expectations, for children. Therefore, teachers new to the job will likely have more sex-role expectations than teachers with a great amount of experience even though the latter group will also have rather traditional sex-role expectations.

This hypothesis will consider the age of the teachers as well as their amounts of teaching experience. Young teachers will be expected to have the strictest sex-role expectations. This hypothesis can be related to the homogeneity hypothesis of Gross, Mason and McEachern (1958) since it is assumed that certain characteristics (amount of teaching experience and age of the teachers) form similar backgrounds and lead to common expectations for all those sharing the characteristics.

(5) Teachers' sex-role expectations for children will vary according to the size of the place where the teachers spent the majority of their childhood years.

Once again referring to the homogeneity hypothesis of Gross, Mason and McEachern (1958) it is assumed that those teachers coming from a similar background will share common expectations for children. It is further hypothesized that teachers who grew up in smaller communities will express more sex-role expectations than will those teachers who were raised in large cities.

The size of place can be easily related to the type of community structure. Differentiation tends to increase as the size of the community increases (see Chapter 6, Methods for the Selection of variables). Because there is a growing complexity and diversity of institutions with high differentiation the community obviously expands as more and more people begin to rely on the variety of services provided. Persons raised in communities of high community structure have likely been taught (because their environment has been less sexist with its equal opportunities for women) that women do have a high status in society and that males and females should not be expected to be different in terms of their behavior. It is hypothesized, therefore, that teachers coming from large, highly structured communities will not have rigid sex-role expectations for children. It seems likely that their childhood backgrounds will free teachers from expecting girls to

behave one way and boys another.

Conversely, smaller, more homogeneous communities are less likely to have opportunities for women due to their smaller size and their lower levels of community structure. In such communities there are fewer institutions for women to participate in, so they do not necessarily need an education to advance themselves in the work-world. In fact, there are not many places where women can seek employment in smaller communities. People who grow up in small communities with traditional attitudes concerning women will perhaps be raised in somewhat sexist environments (due to the lack of opportunities for women and the low level of community structure) where certain behaviors are expected of people because of their sex. Therefore, when teachers come from such communities it is quite possible that their childhood experiences have conditioned them to expect certain behaviors from their male and female students.

This hypothesis, then, is formulated to test the significance of the size of place in which the teachers spent the majority of their childhood years for the determination of their sex-role expectations for children.

These five hypotheses are the major ones this research project will attempt to justify. The questionnaire which will be utilized to test the hypotheses will be presented and discussed in Chapter 7, Methods of the Survey Research.

Significance of the Study

Even though there have been studies dealing with teachers' general expectations and specific sex-role expectations none of the studies has been concerned with the sources of teachers' expectations or with the effects of the community structure on the development of expectations. In this regard, the significance of this study seems to be very great since a review of related research failed to produce a similar one, and therefore, its uniqueness can be almost completely guaranteed.

The purpose of this study is to determine whether the community structure or the individual's attributes are more important for the conception of teachers' expectations, what their expectations actually are, and if they base their expectations on sex-role stereotyped behaviors.

# Chapter 3

## THEORETICAL BACKGROUND: THE SELF-FULFILLING PROPHECY AND THE EXPECTANCY EFFECT

W.I. Thomas has been credited with the sociological theorem, "If men define situations as real, they are real in their consequences." Robert Merton (1948) termed this the "self-fulfilling prophecy" noting that even though a situation may be falsely defined, the behavior which arises in response to it will eventually cause it to be considered as true.

Merton (1948) discussed ethnic and racial prejudices which cause people to prejudge others and eventually fulfill their prophecies. He rightly could have spoken of prejudgements on the basis of sex. Merton saw self-fulfilling prophecies rising as "irresistible products" of people's observation. Race and sex are unquestionably the first two characteristics people notice when confronted with new individuals, but it seems reasonable to say that in the majority of cases a person's sex probably determines one's first action toward or response to them, rather than their race. We have been socialized to react differently to males and females, to treat them differently, and even to expect different things from them.

Like all of us, teachers have sex-based preconceptions and prejudices. But unlike those of us who are not directly responsible for the education and socialization of children,

teachers have the opportunity to daily practice their beliefs and see their expectations become self-fulfilling prophecies.

Studies Concerning the Expectancy Effect

Robert Rosenthal and Lenore Jacobson (1968) were the first to introduce the idea that teachers' expectations could foster self-fulfilling prophecies that would determine the response to their pupils and, in turn, their students' performance. Their study involved the use of false I.Q. scores. Elementary school teachers were given evidence of "unusual potential for intellectual growth" (Rosenthal and Jacobson, 1968:vii), among children who had been selected by the researchers at random. In eight months these "special" children had shown significantly greater I.Q. gains than had their classmates who had not been singled out by the researchers. The teachers had been presented with reasons for high expectations of the randomly selected children, and their expectations turned into self-fulfilling prophecies. Rosenthal and Jacobson's study verified their belief that teachers' expectations quite literally do affect their students' performance.

The Rosenthal and Jacobson study aroused much interest, but it also has been the focus of some trenchant criticism. Several critics (e.g., Snow, 1969; Thorndike, 1968) have emerged, citing fault with Rosenthal and Jacobson's methods of data gathering, data analysis, and the reliability of their conclusions. None of these critics, however, have questioned the self-fulfilling prophecy effect itself. Snow, for example,

wrote,

> Teacher expectancy may be a powerful phenomenon which, if understood, could be used to gain much of positive value in education. Rosenthal and Jacobson will have made an important contribution if their work prompts others to do sound research in this area (Snow, 1969: 199).

Much related research was generated after the publication of Rosenthal and Jacobsons's Pygmalion in the Classroom (1968), and many replications of the study have also been conducted. One such replication was Claiborn's (1969) study which failed to confirm Rosenthal and Jacobson's results. Claiborn concluded that the achievement of "special" children was not affected by the teachers' differential treatment. Claiborn's design was similar except for his period of re-testing; he waited only two months while Rosenthal and Jacobson waited eight. He noted that his results did "not support, nor suggest that there is, an expectancy effect," (Claiborn, 1969:382). The previously mentioned difference in the studies may not have greatly affected Claiborn's results nor would have it changed his disbelief in the expectancy effect, but one cannot be sure if shortening the time for experimental effect did cause a premature conclusion on Claiborn's part. However, our interest here is not whether the teachers in Claiborn's sample actually caused the "special" students to develop intellectually at a rate more rapid than that of their classmates, but rather if the teachers did indeed expect certain things from the students and if they did treat them differently because they had been singled out.

Sex and intelligence are quite obviously very different

variables. During the course of a year a teacher may forget what a pupil's past school records were or what another teacher told them concerning the student's performance, but he or she cannot possibly forget what sex the child is. A student's sex is not amenable to information change and, therefore, teachers' impressions and expectations of boys and girls remain relatively stable, not only for the children they are concerned with at that time, but for all those with whom they come in contact.

The Expectancy Effect

It seems that this expectancy process consists of two steps: 1) the formulation of expectations, and 2) the communication of expectations to the students (Kehle, Bramble, and Mason, 1974). The first phase is an extremely complex one. Teachers formulate their expectations of students for numerous reasons and in numerous ways. The sources of teachers' attitudes for this study are the structure of the community in which they live, the status of women in their community, and the teachers' own individual attributes. These sources, it is hypothesized, form the teachers' sex-role expectations which determine their classroom practices and affect their students' behavior.

Teachers have their preconceived notions about the differences between boys and girls, formulate their expectations of them, and then communicate them to the students. This second phase, the communication of the expectations and the

subsequent effects they have on the students' achievement, is not easily explained. At the center of the issue, expectations are communicated subtly and covertly. Teachers are likely not aware that they are communicating their expectations to students, but they are -- in ways which have profound effects on the children.

The predictable, even inevitable, chain of events in the expectancy model would seem to be linked something like this:

1) A teacher formulates differential expectations for achievement and behavior for male and female students.

2) The teacher begins to behave differently in accordance with the preconceived expectations, and then begins to treat the children differently.

3) The students perceive what the teacher expects from them.

4) The students begin to respond to the teacher, but differently, as they are expected to.

5) The teacher's expectations and the students' responses to them begin to affect their achievement, self-concepts, and desires to succeed.

6) The students for whom the teacher has high expectations, who respond appropriately (i.e., keep in line with the teacher's expectations) will find their achievement and behavior greatly enhanced, and will, with continued compliance, be consistently favored by the teacher.

7) The students for whom the teacher has low

expectations, will continue to decline, achieving less and less, because it is not expected of them to be successful.

8) The changes in the students have been in the direction of the teacher's expectations -- the prophecy has been fulfilled. The students who achieved did what was originally expected of them. Those who did not achieve did not surprise the teacher either; they were not expected to (Brophy and Good, 1970; Jeter, 1975).

Teachers' expectations are not fulfilled automatically, but neither are they fulfilled by chance alone. Expectations are translated into behavior, communicated to the students, perceived by them, and finally realized. The pattern is the same again and again whether teachers are expecting whites, upper-class children, or girls to surpass blacks, lower-class children, or boys.

Students can prevent their teachers' expectations from becoming self-fulfilling prophecies if they are able to resist or overcome them. Such a reaction would perhaps be the most definite way for teachers' expectations to be eradicated, but it is unlikely to be a frequent occurrence. What is more likely to happen when a teacher has an expectation that a pupil finds impossible to fulfill is that the teacher will psychologically "give up" on the student (Brophy and Good, 1974). The teacher will not be as determined that the student learns or succeeds at what he or she had previously expected the student to. A series of events occurs:

> First, the teacher is likely to treat the student with less enthusiasm than he treats other students,

> to call on the student less frequently, to persist in seeking responses with him less often and with less determination, and, in general, to make only half-hearted attempts to teach the student and to be relatively unconcerned when the student fails (Brophy and Good, 1974:36).

Indeed when it comes to failure on the part of the student, the teacher is more likely to notice it as well as expect it and will quickly pass off the few successes the student might have. The teacher is practicing selective perception, seeing only what is expected (failure) from a student for which low expectations are held, which only serves to reinforce the previously held expectations.

At the same time, because the pupil feels that less is expected from him or her it is easy not to try as hard. Because no one is expecting high achievement the student continues to fall behind, further confirming the teacher's expectations. The student in this situation rejectingly drags on, believing that the school holds a place of little importance. Frustration, apathy, withdrawal, and defeatism are all low-expectation students can claim from their school experience (Brophy and Good, 1974).

In actuality, then, the teachers' expectations are not really fulfilled unless the students have incorporated these expectations into their self-concepts. However, this study will not attempt to measure to what degree students meet their teachers' expectations.

# Chapter 4

## REVIEW OF RELATED LITERATURE

The effects of social institutions on the continuation and reinforcement of sex stereotypes have been under thorough investigation in recent years. In particular, the influence of schools has been analyzed since they, in addition to the parents, are responsible for the socialization of children. Hence, it is not surprising that the amount of literature concerning the schools' part in the whole area of sex stereotyping is rapidly expanding. Naturally, because teachers are the instruments of expression for the institutions some literature is concerned with those attitudes and practices which cause teachers to have different expectations for children, treat them differently, and, in general, "teach" children what others expect from them and how they will treat them.

Stereotypes inhibit boys' and girls' intellectual development by restricting them to activities and behaviors considered appropriate only for their sex (Sadker, 1975). By reducing available options children perceive that they are meant to be able to do only certain things and that they will be ridiculed, punished, or ignored if they stray from their "acceptable" ways. Girls are often prohibited from participating in active, aggressive activities, and boys are prohibited from quiet, passive activities, thereby restricting

and perhaps even stifling their creative and intellectual development.

Girls and boys are made to feel that there is a terrible difference between them when teachers find it necessary to line them up separately for going to lunch, out to recess, or to go home. Boys are often responsible for the "heavy" duties around the classroom, such as moving books and chairs and setting up audio-visual equipment, while girls are left to take the class roll and the milk money, water the plants, and dust the books. "This separation of tasks is often inappropriate and forced since some girls mature faster than boys, and in the early grades, are frequently as big and as strong" (Frazier and Sadker, 1973:86). Some teachers even go so far as to punish a girl by seating her next to a boy, or vice versa. Girls and boys are sometimes organized against each other in academic competition (e.g., spelling bees and math quizzes). Worst of all, the teachers do not even have good reasons for their separation of children on the basis of sex; it is just something they do, something all the other teachers do. Unfortunately, very few researchers have attempted to discover and explain teachers' reasons or the effects of them on children. So teachers continue their policies of making different assumptions about, and holding different expectations for, children solely on the criteria of sex. This has a sustaining influence and in the end leads teachers to promote boys on certain qualities (i.e., how well they have conformed to their expectations) and to promote

girls on other qualities. This is certainly not an "equal opportunity" education.

Some real sex differences evident in children have been studied, and while it would be impossible to present all of the findings here, it seems necessary to discuss a few of the important developmental differences. Of course, it remains to be determined if these differences are real because of natural ability or because of sex-role expectations and differential treatment from birth, but nevertheless the differences do exist.

Girls are ahead of boys when it comes to verbal performance (Bardwick, 1971; Fox, Lippitt, and Schmuck, 1964; Maccoby, 1972; Maccoby and Jacklin, 1974; Serbin et al., 1973; Smith, 1972), and excel in a variety of verbal skills. Even though there seem to be no consistent differences in the extensiveness of the vocabularies of boys and girls, girls have more developed grammar and are able to spell better (Maccoby, 1972). Girls learn to read sooner than do boys (Maccoby, 1972; Serbin et al., 1973), and to add to their troubles, boys are more likely than girls to have reading disabilities (estimated to be from 3 to 10 times more common for boys by Maccoby and Jacklin, 1974) and often require special assistance (Maccoby, 1972; Maccoby and Jacklin, 1974). Studies have shown that girls learn to count sooner, but other than that there is no consistent difference in the mathematical skills of boys and girls (Bardwick, 1971; Maccoby, 1972), so the well-believed "fact" that boys are mathematically

superior to girls, is indeed not true. Girls, in fact, receive better grades throughout their school years, even though boys may score higher on some achievement tests (Maccoby, 1972; Maccoby and Jacklin, 1974). The better grades that girls receive are probably a reflection of their willingness to cooperate with the teachers, their desire to please the teachers, and their overall dedication to school. Unfortunately, it is true that "girls tend to underestimate their own intellectual abilities more than boys do" (Maccoby and Jacklin, 1974:117).

Whether most teachers are aware of the actual differences between children which are due to sex, is a debatable question, and one that this study will not attempt to answer. It certainly is possible that the majority of teachers regard boys as being capable of excelling in certain areas (e.g., math and science) and girls in other areas (e.g., verbal and reading) and that they continue to expect achievement on the basis of sex. These stereotyped conceptions of students' abilities can be very harmful for both boys and girls. "When teachers believe that boys can learn to read as well as girls, or that girls are mathematically incompetent these expectations will probably be borne out" (Resource Center on Sex Roles in Education, 1976b:9). The problems faced by boys because of teachers' sex-role expectations will be discussed first.

Boys are likely to receive lower grades than girls in elementary school, and because they are often viewed as behavior problems by their teachers, they experience difficulty

adjusting to school and frequently dislike it (Adams and LaVoie, 1974; Lee, 1973; Meyer and Thompson, 1963). The problem is probably caused by the conflicting student and male roles with which little boys are faced. The school environment asks all children to be good pupils, to be passive and conform to the teachers' wishes. Society tells boys to be aggressive and independent, that they must learn those behaviors in order to function as adults. This double message which boys receive is a conflicting one for them, and school often becomes a conflict-ridden experience (Levy, 1972a; Resource Center on Sex Roles in Education, 1976b).

It has been suggested that boys are somewhat immune to teachers' influences because teachers are not as capable of socializing boys to dependence since they really do not expect male children to be dependent (Lee, 1973). There seems to be truth in that explanation, but it also seems possible that teachers, even though they may secretly wish that boys would behave like "good pupils" (i.e., girls), in actuality do not <u>expect</u> boys to be anything other than independent and aggressive. These expectations can be a heavy burden for introspective, sensitive boys, just as their opposites can be burdensome for aggressive, outgoing girls (Bernstein, 1972).

The situation fostered by teachers' expectations, which prevents boys from learning what they are capable of learning, may lead to one of two situations: 1) boys will become increasingly independent as they conceive of the teacher as a friend only to the girls, and therefore, their

self-confidence and self-identity will also be strengthened, or, 2) the constant stress on boys for conformity and intellectual achievement will produce pathology. The latter is quite possible since there are increasingly more learning and behavior disorders among boys (Bardwick, 1971).

The problem for girls is every bit as serious because "girls learn that if they have to be a girl, they had better be a 'good' one, since they have little else going for them" (Levy, 1972b:9). For girls, society's sex-role expectations and the school's pupil-role expectations are congruent (Levy, 1972a), since both view passivity, dependence, and conformity as appropriate behaviors for them. These expectations inhibit girls' creativity and curiosity, which in turn thwart their achievement drives and their intellectual development. Implicitly, girls are receiving from their teachers the message that they are expected to be good, conforming pupils, while creativity through individuality is often restricted to boys (Sears and Feldman, 1966).

The most alarming problem here, in addition to girls' loss of self-esteem, is that of the replacement of learning for teacher approval. Girls find it easier to adjust to teacher expectations because they are identical to those their parents have already socialized them to accept, so they have little difficulty in doing what pleases the teacher. Unfortunately, girls may begin to see approval as the only valuable thing to be found in their schooling experience. Even school subjects become to be seen "only as an adjunct,

a vehicle for earning approval" (Smith, 1972:41). By confusing genuine learning with being a good pupil girls relinquish intellectual curiosity and the desire to achieve for the praise of their teachers and their rewards of good grades, and this can "literally be translated into a decline of ability" (Frazier and Sadker, 1973:96).

Schools, as they presently function, serve to domesticate girls. Females are hampered from reaching their full potentials because of teachers' sex-role expectations. These expectations consider independence, assertiveness, and aggression as being inappropriate behaviors for girls. Teachers tighten the lock on girls' sex-roles previously chained to them by society. Although the effects of the sex-role restriction may not show as rapidly for girls as they do for boys who have early experiences with behavior and learning disorders, it is possible that they will surface in the females' later years when, in fact, the rate of mental illness is quite high for women.

So, apparently, "pressure is placed upon boys to accomodate to a pupil role which conflicts with their sex-role and, perhaps more perniciously, on girls not to deviate from their female sex role" (Gunderson, 1976:302). Both girls and boys are deprived of certain attributes and responses which would expose them to a free and open life. Children should be presented with all the possible options and there should be no expectations which restrict and prohibit them on the part of parents or teachers. Teachers may indeed recognize

some disadvantages, but it is possible that they more frequently create them.

It is true that schools cannot change society overnight. But by unknowingly cheating some children and by exposing all children to a biased education (Dusek, 1975), teachers are not attempting to promote change toward a sex-role stereotype-free society. Their expectations are inhibitors for their development as surely as they are for the children with whom they necessarily come in contact.

# Chapter 5

# REVIEW OF RELATED RESEARCH

## Teacher-Pupil Interaction

It would seem that teachers' perceptions of boys' and girls' activities and behaviors in the classroom would influence their interactions with students. These interactions are the observable phenomena of teachers' expectations for pupils' development and functioning, and, therefore, play a very important part in the study of sex-role expectations.

Brophy and Good (1974) hypothesized that a large number of teacher-pupil interactions are associated with high expectations, while low expectations are correlated with few teacher-pupil interactions. Theoretically this makes a great deal of sense. If a teacher has high expectations for a pupil's performance, whether or not those expectations are appropriately justified, he or she is much more likely to have frequent interactions with the pupil to see that the expectations are met. A pupil whom a teacher cares little about and does not expect much from is not likely to cause the teacher much anxiety over the amount of time, or rather the lack of time, spent with the pupil.

Studies ranging from samples of preschool to sixth grade students have revealed that teachers interact more

frequently with boys (Brophy and Good, 1970; Meyer and Thompson, 1956, 1963; Serbin et al., 1973; and Willis and Brophy, 1974). These studies point out that not only do teachers talk and listen to male students more frequently, but they also praise them more often. Teacher-pupil contact for male students is not always positive, however. Studies by Brophy and Good (1970), Felsenthal (1971), Meyer and Thompson (1956 and 1963), Serbin et al. (1973), and Willis and Brophy (1974) are in conclusive agreement that boys receive more teacher disapproval than do girls. This may be due to the fact that teachers conceive boys to be aggressively behaved, and they are afraid that their behavior might be a disruption to the class, or rather to the girls. Not surprisingly, this expectation for aggressive behavior among boys prompts teachers to respond to them quickly and react with them frequently (Serbin et al., 1973). So although boys may be interacting more frequently with their teachers, they are more likely than girls to receive disapproval for their actions. Apparently teachers can tolerate and even accept deficiencies among girls, but when boys have such difficulties, disapproval and disappointment results from their failure to meet the teachers' expectations (Zach and Price, 1973). However, that criticism may not be harmful for boys; it may actually lead to greater independence. Boys are quick to realize that they will receive the attention of their teacher for nonconforming behavior (for whatever reason boys still receive more teacher attention than do their female

counterparts), and that attention may cause them to repeatedly satisfy themselves by calling the teacher's attention to their behavior. That tends to develop boys' self-confidence as they feel that they are important enough for the teacher to be concerned with them. Boys may therefore begin to become more independent as they realize their value to the teacher and their personal capabilities.

Bardwick (1971) noted that girls are less likely than boys to develop an "independent sense of self-esteem" because of their strong feelings of dependency toward their teachers. Bardwick, along with Levy (1972b), Levy and Stacey (1973), Sadker and Sadker (1972), and Sears and Feldman (1966), contended that girls receive more teacher approval for conformity than for any other reason. The girls are simply complying with their teachers' expectations for them. Girls are expected to be silent and neat, and by doing so they conform with the teachers' own personal ideas concerning an ideal student. Unfortunately for the girls this conformity hampers their learning process. Because they would rather be rewarded than challenged, they forsake an education for a pat on the head, and the difference between schooling and learning becomes quite apparent (Sadker and Sadker, 1972).

Fox, Lippitt, and Schmuck (1964) formulated the following pertinent conclusions concerning teacher influences:

1) The more a teacher likes a particular pupil, the less isolated he is from the teacher.

2) Isolation from the teacher is greater when a pupil perceives himself as being disliked by his teacher than when he thinks he is liked by the teacher.

3) A high level of isolation from the teacher is accompanied by a high level of dissatisfaction with the teacher.

4) A pupil's dissatisfaction with his teacher is accompanied by dissatisfaction for himself (low self-esteem).

5) Pupils who are isolated from the teacher have more negative attitudes toward school than those who are not isolated from the teacher . . .

7) Satisfaction with the teacher is significantly related to the utilization of intelligence for girls at every social status level (Fox, Lippitt, and Schmuck, 1964:141-142).

The first conclusion seems reasonable in light of the preceeding discussion; a teacher who had high expectations for a pupil would certainly "like" that pupil, and would also interact frequently with the pupil, reducing the isolation between them. The pupil's perception of the situation also has a great deal to do with the amount of interaction; no one is going to try very hard to communicate or interact with someone when it is quite obvious that the person is not fond of him or her. That increased isolation leads the pupil to be dissatisfied with the teacher, and perhaps what is more tragic, with him- or herself. It is no wonder that such students become "school-haters." That developing attitude may not be due entirely to the lack of contact with the teacher, but it would seem to be in great part responsible for it.

The results of the study by Fox, Lippitt, and Schmuck (1964) lead them to conclude that for girls satisfaction with

their teachers has a significant relationship with the degree to which their intelligence is utilized. If girls are isolated from their teachers (i.e., seldom interact with them) and such isolation leads to dissatisfaction, then it follows, according to Fox, Lippitt, and Schmuck, that they will not fully utilize their intelligence. That is a very unfortunate but nonetheless accurate portrayal of a girl's educational experience.

Teachers' interactions with their pupils are indicative of the expectations they hold for them, and, as we have seen, the length and type of interaction are determined in large part by the pupil's sex. As unfair as it may seem, students are even discriminated against by their teachers, who, whether intentionally or not, find reasons for differentially treating and reacting to boys and girls.

Studies Concerning Sex-Role Expectations

An important study in the area of teachers' sex-role expectations was conducted by Palardy (1969). Surveying first-grade teachers in an Ohio city, Palardy examined their expectations for boys' and girls' reading achievements. After matching characteristics of teachers who thought boys were as capable as girls and teachers who thought boys were not as likely to achieve in reading, Palardy obtained the reading achievement scores of their students by use of the Stanford Achievement tests. At the beginning of the school year there were no significant differences between the students' scores,

but in May differences were discovered. Palardy used W.I. Thomas' maxim concerning the definition of the situation to interpret his findings:

> . . . when teachers in this study reported that they believed that boys are far less successful than girls in learning to read (when they defined a situation as real), the boys in their classes were far less successful than the girls (the situation was real in its consequences). Conversely, when teachers reported that they believed that boys are as successful as girls, the boys in their classes were as successful as girls (Palardy, 1969:374).

Palardy found evidence of the teacher expectation effect, but more importantly he found that teachers have expectations based on the sex of their pupils and not just on their reported intelligence levels. The teachers in Palardy's sample were operating on certain attitudes that affected not only their perception but also their interpretation. The teachers saw what they wanted to see and distorted the facts when they were not consistent with their expectations. Palardy's sample is unfortunately not an isolated example; the majority of teachers operate in the same manner.

Chasen (1974) had twenty-four prekindergarten teachers from the Manhattan area of New York respond to a questionnaire concerning teachers' expectations. The research produced several interesting findings. First of all, even though developmental research has proven that girls have better verbal ability than boys (Bardwick, 1971; Fox, Lippitt, and Schmuck, 1964; Maccoby, 1972; Maccoby and Jacklin, 1974; Serbin et al., 1973; Smith, 1972), 58 percent of Chasen's sample believed that girls and boys had equal verbal ability.

Chasen surmises that girls apparently have to greatly surpass their male counterparts in order to even be considered equal to them, and that teachers seemingly fail to recognize girls in an area in which they really do excel.

The teachers also expected boys to be active and girls to be passive. Chasen argues that even though the children may be entering school with this stereotypical behavior, it is not necessary for teachers to daily reinforce it by their expectations. That action on the part of teachers prevents boys and girls from becoming what they want to become, and causes them to be inhibited by their behaviorisms.

The teachers in Chasen's sample were found to discourage aggressive behavior in girls more often than in boys because they expected boys to be more aggressive; another example of the self-fulfilling prophecy. Finding after finding in Chasen's study is evidence of teachers' existing sex-role expectations. Teachers' beliefs and actions are the eyes through which children perceive how they are to behave and react, and they soon learn what is expected of them.

A study by Levitin and Chananie (1972) was conducted with female first- and second-grade teachers in a suburban, Midwestern school system. The researchers were operating on the assumption that dependency and aggressive behaviors are so frequently associated with females and males, respectively, that these behaviors are the primary referents for sex typing (by the age of seven children have apparently accepted the sex-typed behaviors, according to Levitin and Chananie). To

see how elementary teachers respond to sex-typed behaviors, in hypothetical situations they were asked which behaviors they approved of, how much they liked the child in the situation, and how typical they perceived the child to be. Situations involving boys and girls expressing achievement, dependency, and aggressive behaviors were presented to the teachers.

Dependent girls received the most teacher approval, probably for two reasons: they were not only found to exhibit behavior which was congruent with the professional values of teachers, concerning how students should behave, but congruency was also evident in the teachers' personal values which formed their opinions concerning how girls should behave, whether or not they are in the classroom. The dependent girl was also "liked" by the teacher significantly more than the aggressive girl, but the aggressive boy was not significantly more "liked" than the dependent boy. And regarding the third situation concerning how typical the hypothetical children were, the dependent girl and the aggressive boy were seen as very representative of children the teachers had actually taught. The aggressive girl and the dependent boy were viewed by the teachers as atypical students.

The aggressive girl was least liked in the hypothetical situations presented to the teachers in Levitin and Chananie's (1972) study. This type of behavior when expressed by girls was apparently in strong opposition to both teachers' professional and personal values. This is not a surprising finding since teachers do not expect aggressive behavior from girls.

In the situations concerning boys, the teachers may have found boys' behavior to be in violation of their personal values (i.e., a dependent boy is not normal) or perhaps in violation of their professional and classroom values (i.e., an aggressive boy is a problem) but neither situation involving boys violated both the teachers' values simultaneously as did the situations involving girls.

Children who expressed achievement behaviors were seen as typical, so apparently the achieving boy and girl both exhibit behavior which is congruent with teachers' values. The achieving girl was significantly more liked than was the achieving boy, but Levitin and Chananie noted that the finding may be true for the female teachers in their sample simply because they were identifying with their same sex and were more likely to desire achievement for girls.

It is interesting that the teachers granted approval for certain behavior, achievement, but they did not approve of an achieving girl more than an achieving boy. However, the response of liking was definitely associated with the sex of the child rather than the particular behavior which was expressed. It is evident by the results that "different kinds of responses are associated with different patterns of relationships" (Levitin and Chananie, 1972:1315).

While Levitin and Chananie's study did not determine whether teachers would expect certain behaviors from their own students, it was proven that in hypothetical situations the teachers did approve of certain behaviors, like certain

students who exhibited specific behaviors, and considered such behaviors as typical of particular children. This would appear to be evidence enough of their strongly established sex-role expectations.

In related research, LaVoie and Adams (1973) questioned teachers concerning children's conduct in the classroom. The sample consisted of 350 first- through sixth-grade teachers in a large school system in a metropolitan area. LaVoie and Adams' study determined that pupil conduct does influence teachers' evaluations and expectations.

LaVoie and Adams concluded that boys were more likely to be viewed disapprovingly because of their more aggressive conduct. Interestingly, it was discovered that girls who were seen by their teachers as having poor conduct (i.e., aggressive behavior), were rated as being more intelligent than their passive counterparts. The difference for boys was nonsignificant. Apparently the quiet girl is viewed as being incapable of achievement merely because she is not aggressive. The girl who is assertive is believed, at least by the teachers in LaVoie and Adams' sample, to be more intelligent because she takes on characteristics of the male role. This would explain the non-significance of the difference between the groups of boys since their behavior whether passive or active apparently has nothing to do with their intelligence. However, if a girl wants the teacher to consider her intelligence she has to be very aggressive in order to even be noticed; that is, she has to behave out of the ordinary, for a girl, to get her

teacher's attention. In other words, a boy is considered smart no matter how he behaves, but a girl has to be aggressive, perhaps even unruly, before her intelligence will be recognized.

If a teacher expects certain behavior from children -- boys will be aggressive and assertive, girls will be acquiescent and passive -- they will evaluate their students accordingly, and those deviating from their rigid conceptions of appropriate behavior will likely be treated by the teachers as just that -- deviants. This certainly is not fair to the students, whether girls or boys, who are the recepients of the teachers' disapproval for behaviors which are considered to be appropriate for one sex or the other but not for both.

Another study of children's behavior preferred by teachers (by far the most thorough and interesting discovered in the review of research) was conducted with female graduate students in elementary education at the University of California by Freshbach (1971) in 1969. The students were divided into two groups, those who had just taken their first student teaching assignment, and those who were beginning their second teaching assignment and had completed 10 weeks of classroom practice. The students were grouped because differences were expected, but there were none; apparently the limited direct contact with children in the classroom did not affect the already well-formed expectations of the student teachers.

Four triadic clusters of personality characteristics were evaluated with the idea being that certain triads would likely receive lower ratings from the teachers, and that sex

differences would be discovered in the ratings. The clusters were: (1) Independent, Active, Assertive; (2) Dependent, Passive, Acquiescent; (3) Flexible, Nonconforming, Untidy; and (4) Rigid, Conforming, Orderly. As an example of the reasoning behind the researcher's expected differences in ratings by behaviors and by sex, Feshbach noted,

> . . . while it is hypothesized that assertiveness and independence will receive less favored ratings when displayed by boys or girls, it should be even less acceptable in girls since these traits are less compatible with the female role (Feshbach, 1971:75).

An instrument was constructed which consisted of 16 story situations depicting children involved in classroom activities and displaying one of the previously listed personality traits. Two situations were constructed for each sex for each of the four triads and they were closely matched on intensity of activity and the number of words used to describe the situation. The student teachers were asked to base their ratings on the following judgments: (1) the intelligence of the child; (2) the expected grades the child receives; (3) the generosity of the child; (4) the child's popularity; and (5) the desire of the teacher to have the depicted child in her class (Feshbach, 1971).

The data disclosed some interesting results as there were significant relationships between the personality triads and sex for every judgment dimension (see Appendix I, Table 1). The dimensions concerning popularity, generosity, and preference for having the child in the classroom, plus the total ratings, were found to rate the personality clusters (from most

desirable to least desirable) in the following order: (1) Rigid, Conforming, Orderly; (2) Dependent, Passive, Acquiescent; (3)Flexible, Nonconforming, Untidy; (4) Independent, Active, Assertive.

For the two intellectual dimensions the ratings were quite varied. Dependent, Passive and Acquiescent children were rated by the teachers as the least intelligent, while Rigid, Conforming and Orderly children were viewed as receiving the highest anticipated grades. The Rigid girl was expected to be the most intelligent while the Flexible boy was ranked second, and the Independent boy ranked third. It seems that the student teachers in this sample believed that well behaved girls were the most intelligent pupils. In agreement with LaVoie and Adams' (1973) results the Assertive, Agressive girl was viewed as being more intelligent than her Passive counterpart. The Flexible boy was ranked second by Feshbach's (1971) sample on intelligence, but seventh on anticipated grades. The Dependent boy was expected to be the least intelligent of all while he was ranked fifth on anticipated grades, and the same difference was found for dependent girls. Apparently dependent students are not considered to be too bright, but the teachers like to be depended on.

Perhaps the simplest and most convincing way to summarize the results of Feshbach's study is to note that the type of child most positively perceived by the student teachers was the Rigid, Conforming, Orderly girl, and the type of student given the lowest rating was the Independent, Active,

Assertive girl. It seems that the teachers prefer behavior which makes their teaching easier by causing fewer discipline problems. Unfortunately, that desired behavior on the part of the teacher is probably stiffling the creativity and spontaneity of children who respond in a manner which is pleasing to the teacher but harmful for their own self-growth.

Of course, one cannot be sure that the teachers' expressed preferences for children's behavior in hypothetical situations would be the same they would choose, and have certain expectations for, in their classrooms, but it seems reasonable to assume that their attitudes would be reflected by their behavior.

When the subjects were ordered to rate personality types and behaviors of children the signals for approval or disapproval flashed in their minds. Their attitudes toward the behaviors determined their expectations concerning the popularity, generosity, achievement and ability of boys and girls (Feshbach, 1971) and they responded in accordance with their expectations. The insignificance of the 10 week period of actual classroom experience by a group of the student teachers on their ratings of expected behaviors certainly is evidence of the power of the expectancy effect. If people being trained as teachers have certain expectations even before they have contact with children, it is possible that experience may not change their expectations and may make them even more sex-role conforming. But experience with children could also feasibly rid young teachers of their sex-role expectations.

This is one of the issues this study will attempt to answer.

Summary of Related Research

There is not a large number of studies concerned with teacher expectations, and, therefore, the number dealing directly with teachers' sex-role expectations is even smaller. Studies of teacher-pupil interactions have been somewhat more numerous. These studies were considered here because of the theoretical linkage of interactions and expectations, as one can assume that interactions with pupils are the observable reflection of the expectations teachers hold for students' behavior. The results of several interaction studies were discussed, and it was concluded that boys have more teacher contact even though it is frequently in the form of disapproval (believed to lead to greater independence and self-confidence), while girls receive praise for conformity, directly reinforcing their already expected passivity and compliance behaviors. Boys receive the teacher's attention and girls are either ignored or praised for complying with the rules forced to keep them from achieving. A study by Fox, Lippitt, and Schmuck (1964) found conclusive evidence that for girls an inverse relationship exists between the amount of teacher interaction and the degree to which their intelligence is utilized.

Palardy's (1969) study of teachers' sex-role expectations only concerned reading achievement expectations, but nonetheless it is an important study in the topic area. Palardy discovered that when teachers did not expect boys to

achieve in reading they indeed did not.

A study by Chasen (1974) resulted in the conclusion that teachers expect boys to be active and girls to be passive. Aggressive behavior is more easily accepted when it comes from boys.

Levitin and Chananie (1972) found that teachers approve of the dependent girl and disapprove of the aggressive girl more than any other type of student. Dependent girls and aggressive boys were perceived as the most typical. These preferred student types were found to be in congruence with teachers' professional and personal values.

In a study of the effects of student conduct on teacher evaluations, LaVoie and Adams (1973) discovered that girls having poor conduct were considered to be more intelligent than those with passive behavior, who were found to be more acceptable by the teachers. The difference was not significant for boys.

In Feshbach's (1971) study of student teachers' preferences for student behavior, the most desirable to the least desirable type of students were: Rigid, Dependent, Flexible, and Independent. The type of student most preferred by the student teachers was the Rigid, Conforming, Orderly girl, while the type least preferred was the Independent, Active, Assertive girl.

## Limitations of Related Research's Significance For This Study

Perhaps the major problem with all the research

concerned with sex-role expectations, regarding its importance for this study, is that none of the studies utilize community structure as a variable affecting teachers' expectations. The sources from which teachers' expectations are developed have, to my knowledge, yet to be discussed or analyzed in studies of expectations. Frequently the size or type of community in which the studies were conducted would be mentioned but it was never an important variable. Also, in the research cited here, teacher background characteristics were seldom important variables. A review of literature did not produce any studies dealing specifically with such characteristics as teachers' length of time in the community or amount of teaching experience.

It is apparent that there simply are not enough studies concerning teachers' sex-role expectations to draw conclusive statements. The majority of the research analyzed in the search for teachers' sex-role expectations dealt with teachers' expectations in general and not sex-role expectations in specific.

Because this study is concerned with non-metropolitan Kansas counties, the community structure in the counties, and the teachers' individual attributes, the research previously discussed does not provide much with which to compare results or to determine generalizability of the findings. But the research in the area of teachers' sex-role expectations does explain which behaviors expressed by children teachers are likely to see as stereotypical and which behaviors they approve and disapprove of for girls and boys, and therefore, provides important support for this study.

# Chapter 6

## METHODS FOR THE SELECTION OF SIGNIFICANT VARIABLES FOR THE MEASUREMENT OF TEACHERS' SEX-ROLE EXPECTATIONS

Without a precedent concerning the specific issue of the effect of the structure of a community and the status of women in it on the conception of teachers' expectations of sex role appropriate behavior for children, a basic theory was developed by Drs. Cornelia and Jan Flora of the Kansas State University Department of Sociology, and the author. It was hypothesized that community structure and women's status were related since it is conceivable that community structure could cause changes in, and highly affect, the status of women. Because it is impossible for the status of women in a community to influence its structure, the latter was considered to be the independent factor in the relationship.

It was decided that community structure would be measured by Differentiation, Centrality, and Fluidity variables. Each variable is concerned with specific components of community structure, and the indicators of the variables had been validated in past research as being accurate reflections of such (e.g., Young and Young, 1973).

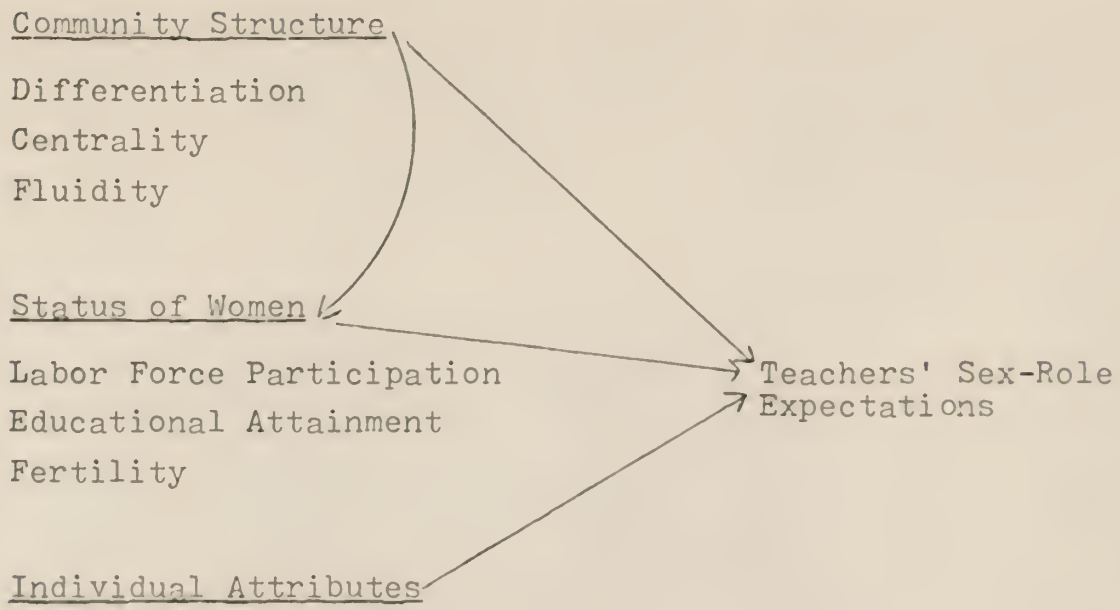
The status of women, the dependent factor, was measured by variables concerning Labor Force Participation, Educational Attainment, and Fertility. These variables appeared to be among the best available which could have been chosen to

determine the status of women in a community since they encompass three very important areas in women's lives.

With community structure and the status of women as sources of teachers' sex-role expectations, the importance of individual attributes in the formation of expectations was also introduced in the theory. The attributes selected were the teachers' age, the size of place where their childhood was spent, the grade they taught, the length of time they had lived and taught in the community in which they were teaching, the extent to which they were involved in community activities (as a measure of their degree of association to the community), and their amount of teaching experience. With the inclusion of individual attributes in this model a micro dimension was added to the macro dimension of community structure and the status of women. It was hoped that the depth which the dichotomous views added to the study would intensify its importance and value as one of its type which had yet to be conducted.

The following simple model of the sources of teachers' sex-role expectations resulted from the basic conception of the problem.

SOURCES OF TEACHERS' ATTITUDES




Independent Variables: Definition of Concepts

The independent variables were selected to measure community structure and are derivatives of the concepts of Differentiation, Centrality, and Fluidity. These concepts are discussed individually in the following sections. It was

hoped that not only would these concepts, and the variables designed to measure them, serve as indicators of the structure of Kansas non-metropolitan counties, but that they would also have explanatory powers for the status of women in the counties.

Differentiation

As a measure of a community's level of development, differentiation is concerned with institutional complexity and the diversity of institutions. Differentiation can be defined as "the number of specialized social symbols (or clusters of symbols) maintained by a community" (Young and Young, 1973:5). While these "social symbols" are not considered to be confined strictly to institutions, a scale of such, or a simple count of a community's institutions, is often the measuring device of differentiation.

That direct method of measuring the level of differentiation in a community implies that the community's "score" can either be high or low, depending on how large the count of varied institutions is. "Structural differentiation is in principle an unlimited dimension" (Young and Young, 1973:6), since a community has many ways to increase or decrease its number of institutions, and therefore its differentiation. As a community's population expands, differentiation also increases, since a large population requires greater institutional complexity and diversity to meet its needs. While differentiation is not conceptually the same as development, it is true that if a community has a high level of

differentiation it is most likely to be considered highly developed. Hence, the theoretical correlation of the two concepts does appear to be a significant one.

For this study the differentiation variable utilized was developed by Dr. Jan Flora and Kansas State University's Population Research Laboratory assistants and was used in a study of the 101 non-metropolitan Kansas counties by Angela Fong-Chu Ho (1976). The differentiation score for the entire county was measured by the level of differentiation of the largest city in the county and/or the county seat (for most counties the two were one in the same, but when they were different, the scores for both were used). Also if a city whose population was at least three-fourths the size of that of the largest city existed in the county, that city's services were also measured.

For the city or cities in each county that were included by the above method, the different occupations, services and institutions were counted. The information for the variable was gathered from the yellow pages of the 1970 telephone directories from the non-metropolitan counties. There were 109 total items that were scaled including "goods, commercial, financial, transportation, construction, medical, social welfare, governmental and agricultural services" (Ho, 1976:38), and they were chosen to represent the greatest number of sectors possible. Any service coded as being present in one city was automatically coded for the entire county. While the number of items varied from county to county, all

were scored to form a Guttman scale of unidimensionality. That method made it possible to rank the counties by their level of differentiation, ranging from simple to complex.

The four 1970 metropolitan counties in Kansas: Johnson, Sedgwick, Shawnee and Wyandotte, were excluded from the analysis of differentiation due to their obviously higher levels of institutional complexity. The four 1970 metropolitan counties were also omitted from analysis in this study because of their extreme structural differences from the 101 non-metropolitan counties.

Centrality

Centrality is an indication of a community's degree of linkage to a larger community or structure. Services often cluster in a central place, which is a convenience, not only to those native to that area, but to those in the hinterland surrounding the central place. It is often a major function of the "central place" to serve its hinterland, and therefore a massing of services into a given area is quite a common feature in Kansas non-metropolitan counties.

Centrality can be defined as,

> . . . the access that the community has to a region, or, in more formal terms, the degree to which the symbols of the subsystem are 'congruent' with those of the system. Thus, the centrality that a community has defines its place in the region, and that place is associated with a given level of differentiation (Young and Young, 1973:12).

The relationship of centrality with differentiation implies that the location of a community, and its importance

to the surrounding area, can affect its degree of growth. In order to increase the level of differentiation it is most often necessary for the centrality of the community to be increased, and that is something which is usually quite difficult to achieve. From another perspective, it would seem that a community that has moderately high centrality would not be as likely as a community with lower centrality to differentiate further because of its already high degree of hinterland accessibility. People will naturally take advantage of the services closer to them.

> . . . relationships among communities are hierarchical, not flat. Without interpreting the meaning of such hierarchy, whether it represents dominance-subordination, convergence of information exchange, etc., there can be little question that some communities are more "central," or "higher" in the hierarchy than others (Young and Young, 1973:42).

This existing hierarchy of communities is evident of the existing power structure in the county.

For Ho's study (1976), and for this one, the centrality of the largest community in each county was used as the centrality score for the entire county. The cities were grouped into five categories, or orders, by their degrees of differentiation. The centrality scores were measured by a formula ($P_1 \cdot P_2/D_{12}$) involving the community's population ($P_1$), the population size of the city in the higher order ($P_2$), and the distance between the two cities ($D_{12}$).

As another measure of centrality it was decided to use Kansas newspaper circulation data. Because it can be assumed that the more major newspapers a community receives,

the greater is its linkage to the larger structure, the use of newspaper circulation data as a centrality variable was justifiable. Newspaper circulations for this project can be viewed as a measure of centrality rather than fluidity because the data was compiled for papers which originate in metropolitan counties and, therefore, the circulation rates are measures of the non-metropolitan counties' linkages to the larger structure (i.e., their levels of centrality). If the information had been gathered strictly for each county's newspaper then the variable would be a measure of fluidity rather than centrality.

An attempt was made to gather circulation data for three decades, 1950, 1960, and 1970, and to use the data for each year as indicators. However, it was impossible to obtain the complete sets of data for 1950 and 1970 so the 1960 figures were used as lone indicators of newspaper centrality. It is believed that the newspaper circulation rates for the years 1950 and 1970 would be similar to 1960's, but, of course, complete confidence in the comparability cannot be assured.

County circulation data for three Kansas newspapers, The Kansas City Star and Times, The Wichita Eagle and Beacon, and The Topeka Daily Capital and Journal, were gathered for the year 1960 through use of The Audit Bureau of Circulation Reports. The distribution for each paper was given in the Audit Bureau Reports for a typical day in the year, and the morning and evening figures were used as a combined daily total for each county.

Circulation figures in The Audit Bureau of Circulations Reports were given for counties in which 25 or more copies of the papers were sent on any single day. Because a large number of counties had fewer than 25 copies of each paper, the difference between the total number of papers circulated and the total number going to the counties having more than 25 copies was divided equally among the remaining counties. Newspapers were also alloted to counties not listed as having a county circulation by the use of another part of the Audit Reports in which the rates were listed by cities. If it was discovered that a city in a county that did not have its own rate was included in the city list, then the figure for the city was transferred to the county so that the county's circulation rate became that of the city. This method decreased the number of papers and the number of counties that would have otherwise been included in the averaging of circulation figures of the three papers for each county.

The averaging method of assigning papers to counties receiving less than 25 copies and the method of transfering city figures to county figures together allowed every county to have a circulation total for each paper.

As another method for determining newspaper centrality, a proportion of papers per family in 1960 was determined for each county. The number of households (head of households) was used as the total number of families for each county, with the data being taken from the 1960 Census of Population. The total of all three papers in each county was divided by

the number of households to determine the proportion of papers per household. As there were three papers, the highest proportion possible would have been 300 percent, meaning of course that every household in the county had access to each of the three papers. The highest proportion was in Johnson County, one of the metropolitan counties, with 171 percent, and the lowest, 2 percent, was in Rice County.

These variables were utilized as measures of centrality, in addition to the general centrality variable discussed previously in this section. All of the variables served as independent measures of community structure which were believed to influence the status of women in the community.

Fluidity

Fluidity is "the degree to which information is flowing in a community" (Eberts, 1976a:4). Fluidity can be seen as a process of organization and internal communication. When participation and competition takes place high fluidity is said to be present in a community. Conversely, when there is low participation and low competition then a low degree of fluidity exists. If there is a high degree of fluidity the flow of information means that "problems either are more easily resolved or the resolutions are more easily accepted," (Eberts, 1976a:4). Therefore, with a low degree of fluidity there is difficulty in solving community problems.

Fluidity can be viewed as a measure of equality. An open communication flow leads to a sense of trust which promotes

equality. The exchange of information is an ideal situation for the development of trust and integration between sub-units. Therefore, the greater the linkages between sub-units of a system, the greater will be the flow of information (i.e., the higher the degree of fluidity) between them (Eberts, 1976b).

Fluidity is influenced by changes in equality and the economic base (Eberts, 1976a). Income variables, then, are appropriate measures of a community's degree of fluidity. If people in a given community have a similar economic background they are more likely to participate in an internal communication process. When any inequality in a community is great there is a low degree of fluidity because people do not share the background that is necessary for an open flow of communication.

For this project fluidity in non-metropolitan Kansas counties was measured by five income variables: (1) Median Family Income; (2) Families Below Poverty Income; (3) Families Above $25,000 Income; (4) Mean - Median Family Income; and (5) Mean - Median/Mean Family Income. The first three variables were selected to measure the absolute income levels in the counties.

The variables Mean - Median Family Income, and Mean - Median/Mean Family Income were especially designed to measure economic inequalities. It seems quite obvious that a high degree of economic equality represents fewer class diversions. When a county has a high mean family income it contains a lot of wealthy people whose incomes tend to push the mean value

further away from the median family income figure. Because extreme high and low values have a powerful influence on the mean, and the median alone is not a very accurate reflection of the range of incomes, it was believed that the variable Mean - Median Family Income would be a better measure of economic inequality. It was also decided that dividing the difference between mean family income and median family income by the mean value would be a good method of standardizing the measure.

When a county's mean family income level is higher than its median family income level, the measure Mean - Median/ Mean Family Income has a positive value because there is more economic equality and therefore fewer class diversions, so the degree of fluidity is high. Conversely, if a county's median family income is higher than its mean family income level the measure Mean - Median/Mean Family Income has a negative value. When economic inequality is great the degree of fluidity is low since information is not adequately exchanged between the people in the county due to their economic differences.

A low degree of fluidity with persisting economic inequality would be expected to worsen when the level of differentiation in a community is high since the greater complexity means that there is greater potential for an unequal dispersion of information. Low fluidity will also impede a community's rise to a higher level of differentiation. The affect on, and relationship of, fluidity and

differentiation is quite recognizable. Concerning centrality, if all the non-metropolitan counties had high levels of centrality then there would also be high fluidity throughout the state because there would be an even flow of information. However, we can be assured that the latter situation will never occur.

Fluidity is a very important measure of community structure. It was believed that the five income variables selected to determine economic inequalities in the non-metropolitan Kansas counties would serve to adequately explain the levels of fluidity in the counties.

Dependent Variables: Definition of Concepts

The dependent variables were selected to measure the status of women in the 101 non-metropolitan Kansas counties. The rationale for the selection of these variables and their importance as indicators of female status in the counties is discussed in the following sections.

Labor Force Participation

Labor force participation is probably the strongest indicator of the status of women. The number of women workers has increased dramatically over the past 25 years. For this study several different measures of labor force participation were used so that multiple aspects of the effect of labor force participation on the status of women could be analyzed. Marital status and the presence and age of children have

historically affected the labor force participation rates of women (Current Population Reports: "A Statistical Portrait of Women in the United States," 1976). Therefore, for this study not only were the percentages of labor force participation separated by age categories, but the participation rates of married women, with their husband present in the home, and women with children (preschool -- under 6 years -- and school age -- between 6 and 17 years) were also examined.

Concerning the effect of children on labor force participation, it is known that women with preschool children are less likely to work than are women with children of school age only (nationally, in 1975, 37 percent vs. 52 percent, respectively, Current Population Reports: "A Statistical Portrait of Women in the United States," 1976). Therefore, Kansas non-metropolitan counties which have high percentages of employed women who have children of preschool age and of school age are considered as counties which hold a higher status for women. This would be especially true for high rates of labor force participation of women with preschool children, since it is necessary for the roles of mother and worker to become rapidly compatible.

Fertility

High labor force participation rates are known to be associated with relatively low rates of fertility (Current Population Reports: "A Statistical Portrait of Women in the United States," 1976) but the priority of the two cannot be

established. A woman's fertility could determine if she will work, or her labor force participation could determine her fertility. It was not important for this study to establish which variable caused or influenced the other, but it was important to realize the close relationship of the two and their influence on, and indication of, the status of women.

The sole measure of fertility used for this study was the cumulative fertility rate of women aged 35 to 44 years. "A sensitive index to the changing fertility pattern of American women is the cumulative number of live births born to women of specified ages," (Ferriss, 1971:68). The age group 35-44 years is important because it was the women between those ages in 1970 (the year on which the data for the measurement of community structure and status of women is based) who were the mothers of children born during the 1950's "baby boom" (without doubt the highest period of fertility in recent years) and who by 1970 were, for the most part, probably completing their child-bearing. The variable was also chosen because it was a measure of children ever born per 1,000 women of all marital classes, and therefore was not restricted only to women who were married at the time the data was gathered.

Educational Attainment

High educational attainment is also known to be associated with high labor force participation rates and low levels of fertility (Current Population Reports: "A Statistical

Portrait of Women in the United States," 1976). The relationship of all these variables serves to strengthen their power as indicators of the status of women.

Women who have achieved high levels of educational attainment have improved their chances for employment. With each higher level of education women increase their employability (Ferriss, 1971). The variable used to measure the significance of educational attainment on the status of women in this study was the number of women 25 years old and over who had completed 4 or more years of college. The variable was believed to be a very important and significant one since it included all women at the highest educational level.

## Methods of Analysis

There were three types of statistical analysis which were utilized in the determination of important variables for the explanation of community structure and the status of women: factor analysis, correlation analysis, and stepwise multiple regression analysis. Explanations of each of these and their purposes for this study are presented in the following sections.

Factor analysis. Factor analysis was used as a preliminary technique for analysis of the independent variables concerning community structure. Factor analysis attempts to serve an explanatory function when the interrelationships of several variables are considered simultaneously. This method of multivariate analysis isolates and identifies traits or

factors that underlie the observations with which one is concerned (Ericksen, 1970).

The purpose of the technique is to determine the smallest number of unique factors that will explain as much variation as possible. While each variable loads on every factor, it has its highest loading on only one factor, the one with which it becomes identified. While it is most desirable that only one variable from each factor be chosen for further analysis, more than one can be selected if the correlation between the two is relatively low (strong correlations would inhibit the variance-explanatory powers of the variables).

Correlation analysis. The dependent variables which were selected for use as measures of women's status were derived through the utilization of correlation analysis. When a factor analysis of the dependent variables was attempted, due to the large number of variables, 28, extremely high intercorrelations caused many variables to load highly on one factor which made it impossible to select the most important variable, and a few variables considered to be important to this study did not load highly on any of the factors. Thus, simple correlations of the dependent variables were relied upon as an analysis measure.

Pearson's r served as the correlation measure, and though its values are suggestive of covariance, they do not imply causality based on the strength of a relationship. A strong (high) correlation suggests a significant empirical

relationship between two variables, and a low correlation is evidence of little or no direct relationship between them.

The value $r^2$ is a measure of variance accountable, and $1-r^2$ tells one the portion of the total variance that is not accounted for by the relationship of the variables. The greater the degree of the linear relationship between two variables, the greater is the $r^2$ value. The coefficient of determination ($r^2$) is always a positive value and, therefore, does not reflect the direction of the relationship between two variables. Its more useful function is that of a measure of the variance explained by the relationship (i.e., correlation ) of two variables.

Stepwise multiple regression analysis. In the process of condensing the variables into a few factors and eliminating both unnecessary and redundant variables as well as factors, a multiple regression analysis became important to determine the contribution of the independent variables to the variance in the dependent variables. Multiple regression analysis considers the interrelationships of a number of variables. In this case the independent variables were analyzed by factor analysis while the correlations of the dependent variables served as the method for selecting them for use in the multiple regression program.

The purpose of multiple regression analysis is to assess the contribution of several independent variables to one dependent variable through consideration of the total proportion of variance accounted for by the independent

variables. For each selection, then, one dependent variable is used with a number of independent variables.

The multiple regression coefficient serves to explain the direction as well as the degree of change in the dependent variable which is due to the change of a standard deviation in one independent variable while all the remaining independent variables are being held constant (Ho, 1976). This is true for each "step" in the selection process, therefore, the name: stepwise multiple regression analysis.

For each equation in the selection process the independent variable which has the highest partial correlation (explains most of the variance in the dependent variable) is entered first. With each additional step another independent variable is added. The F value indicates, for each step, whether or not the variance explained in the dependent variable by the independent variable(s) is significant. The t value for each step indicates the significance of the contribution of each independent variable, considered separately, to the dependent variable. Therefore, the F-test can be considered to be the examination for the completeness of the regression model while the t-test checks the validity of the multiple regression.

For this study four independent variables were used for each selection process so there were four generated equations in each process. However, only one equation was selected from each selection process -- the one which accounted for as much variance as possible while including as few

variables as possible. If the addition of another variable did not increase the multiple r value then the regression model was considered to be complete with that step. Even if the introduction of a new variable did increase the r value it is possible that the F-test determined the increment to be insignificant, so the previous step was considered to be the completion of the regression model.

Beta weights, which are generated in the multiple regression analysis, are the standardized regression coefficients. They are actually partial correlation coefficients, and are important in the assessment of the significance of the independent contribution of the independent variables to the dependent variable in terms of the standard deviation.

Factor Analysis: Independent Variables

The variables which were entered into a factor analysis of independent variables are as follows:

(1) Centrality, 1970

(2) Differentiation, 1970

(3) Mean-Median Family Income, 1970

(4) Mean-Median/Mean Family Income, 1970

(5) Circulation of The Kansas City Star and Times, 1960

(6) Circulation of The Wichita Eagle and Beacon, 1960

(7) Circulation of The Topeka Daily Capital and Journal, 1960

(8) Total Paper Circulations, 1960

(9) Papers Per Family, 1960

(10) Families with Incomes Below Poverty, 1970

(11) Families with Incomes Above $25,000, 1970

(12) Median School Years Completed by Persons 25 Years and Older, 1970

(13) Median Family Income, 1970

Appendix I, Table 2, lists the means and standard deviations of the independent variables, and Appendix I, Table 3, presents the correlation matrix.

Concerning the sources of the above data, the Centrality and Differentiation scores for Kansas counties in 1970 were taken from the thesis data of Ho (1976), having been previously compiled by Ho, Dr. Jan Flora, and employees of the Population Research Laboratory at Kansas State University. The variables Mean-Median Income and Mean-Median/Mean Income were computed by the author from data available in the General Social and Economic Characteristics Census of Kansas 1970. The latter was also the source for the county data on Median School Years Completed by Persons 25 Years and Older, Median Family Income, Families with Incomes Below Poverty, and Families with Incomes Above $25,000. The data for the variables concerning newspaper circulation for the year 1960 were compiled by the author from information received from the Audit Bureau of Circulation.

The thirteen independent variables loaded on five factors. The variables loading highly on the first factor were Centrality, Differentiation, Circulation of The Kansas City Star and Times, and Total Paper Circulations. The

correlation matrix of these four variables (see Appendix I, Table 4) shows moderate to high relationships. Because of the circulation of the Kansas City paper's moderate to high correlations with Centrality (.59), Differentiation (.40), and Total Paper Circulations (.87), the variable was assessed as not being of critical importance to the factor. The variable, Total Paper Circulations, was retained as a measure of newspaper circulation for the multiple regression procedure to determine its significance as a centrality measure (note the moderate, positive correlation of Total Paper Circulations to Centrality, .58). Since the correlation between Centrality and Differentiation was a moderately low .44, both variables were retained for use in the stepwise multiple regression process. In all these intercorrelations between Total Paper Circulations, Centrality, and Differentiation, the relationships were relatively moderate to low, which is desirable for regression analysis since strong correlations act as impediments to explaining variance in the dependent variables. Therefore, the three variables, Total Paper Circulations, Centrality, and Differentiation comprised Factor One: Differentiation-Centrality.

The variables which loaded highly on the second factor were Median Family Income, Families Below Poverty, and Median School Years Completed by Persons 25 Years and Older. The intercorrelation matrix of these variables (Appendix I, Table 5) shows moderately high relationships. Because the variable Median Family Income had the highest intercorrelations with

the other two variables, and since it was the highest loading variable in the factor, it was selected to represent the others as Factor Two: Level of Living.

Those variables loading highly on a third factor were Mean-Median Family Income, Mean-Median/Mean Family Income, and Families Above $25,000 Income. Mean-Median/Mean Family Income was chosen as the variable to represent the factor because it was a standardized measure which was designed to measure economic inequality (the greater the economic inequality the lower the degree of fluidity). The variable correlated very highly (.94) with the unstandardized measure of economic inequality, Mean-Median Family Income (see Appendix I, Table 6). The variable was identified as Factor Three: Economic Inequality.

Circulation of The Topeka Daily Capital and Journal and Papers Per Family loaded highly on the fourth factor. It was decided that Factor One which included the variable Total Paper Circulations, was more important than either of the variables loading on Factor Four, and therefore the two variables comprising the latter factor were eliminated from further analysis.

The only variable loading highly on the fifth factor was circulation of The Wichita Eagle and Beacon. For the same reason as that given above, the variable and the entire factor were eliminated.

Five independent variables, which loaded on the first three factors, were identified as being most important for use

in the multiple regression analysis. Their intercorrelations are shown in Appendix I, Table 7. Independent variables to be used in regression analysis should have as little intercorrelation as possible. The highest correlation between these variables is .58 between Centrality and Total Paper Circulations, and since both are centrality measures the moderate relationship was not believed to inhibit their importance nor their effectiveness as predictors of the dependent variables.

Correlation Analysis of Dependent Variables

Data for twenty-two dependent variables was taken from the General Social and Economic Characteristics Census of Kansas 1970, and six more variables were computed from the data (see Appendix I, Table 8, for means and standard deviations of the dependent variables and Appendix I, Tables 9 and 10, for their correlation matrix). Those variables taken directly from the Census were:

(1) Women 16 Years and Older

(2) Women 16 Years and Older with Own Children Under 6 Years

(3) Women 16 Years and Older in Labor Force and With Own Children Under 6 Years

(4) Women 16 Years and Older With Own Children 6 to 17 Years Only

(5) Women 16 Years and Older in Labor Force and With Own Children 6 to 17 Years Only

(6) Married Women with Husband Present

(7) Married Women in Labor Force, with Husband Present

(8) Married Women, Husband Present, with Own Children Under 6 Years

(9) Married Women, Husband Present, in Labor Force and With Own Children Under 6 Years

(10) Married Women, Husband Present, with own Children 6 to 17 Years Only

(11) Married Women, Husband Present, in Labor Force and with own Children 6 to 17 Years Only

(12) Cumulative Fertility Rate of Women 35 to 44 Years

(13) Percent of Women 16 Years and Older in Labor Force

(14) Women 25 Years and Older Completing 4 or More Years of College

(15) Women 25 Years and Older

(16) Percent of Women 18-19 Years in Labor Force

(17) Percent of Women 20-21 Years in Labor Force

(18) Percent of Women 22-24 Years in Labor Force

(19) Percent of Women 25-34 Years in Labor Force

(20) Percent of Women 35-44 Years in Labor Force

(21) Percent of Women 45-64 Years in Labor Force

(22) Percent of Women 65 Years and Older in Labor Force

The variables computed from existing data and entered into the analysis were:

(1) Women 16 Years and Older in Labor Force and with own Children Under 6 Years/Women 16 Years and Older with own Children Under 6 Years (i.e., Percent of Women with Children of Preschool Age, and in the Labor Force)

(2) Women 16 Years and Older in Labor Force and with own Children 6 to 17 Years Only/Women 16 Years and Older with own Children 6 to 17 Years Only (i.e., Percent of Women with Children of School Age Only, and in the Labor Force)

(3) Married Women 16 Years and Older, Husband Present, in Labor Force and with own Children Under 6 Years/ Married Women 16 Years and Older, Husband Present, with own Children Under 6 Years (i.e., Percent of Married Women, Husband Present, with Children of Preschool Age, and in the Labor Force)

(4) Married Women 16 Years and Older, Husband Present, in Labor Force and with own Children 6 to 17 Years Only/Married Women 16 Years and Older, Husband Present, with own Children 6 to 17 Years Only (i.e., Percent of Married Women, Husband Present, with Children of School Age Only, and in the Labor Force)

(5) Married Women 16 Years and Older, Husband Present, and in Labor Force/Married Women 16 Years and Older, Husband Present (i.e., Percent of Married Women, Husband Present, and in the Labor Force)

(6) Women 25 Years and Older Completing 4 or More Years of College/Women 25 Years and Older (i.e., Percent of Women 25 Years and Older Completing 4 or More Years of College)

These last six variables were included because it was considered important to determine what proportion working women who had children of certain ages were of all women with children of the same ages. Therefore, percentages were computed for working women with children under six years and for those with children between the ages of six and seventeen only. Both the numbers of all women and the numbers of married women were used in order that the data could be compared between the two groups. The variables concerning women and married women who were mothers of children under six years of age and who were employed, as percentages of all women, and of all married women, with children under six years, had a correlation of .97, proving their close relationship and similarity as variables representative of mother employment. Likewise the variables concerning women and

married women who were mothers of children of school age (6 to 17 only) and employed, as percentages of all women, and of all married women with children between the same ages, also had the extremely high correlation of .97.

Determining the percentage of employed married women with husband present in the home of all married women with husband present was also important. It signifies the proportion of working women among women who are married with husband present -- a very good measure of women's labor force participation status.

In the same regard it is interesting to note the proportion of those women 25 years old and older who have completed four or more years of college of those women 25 years old and older. Not only is education an important predictor of labor force participation (the more years of education a woman has the more likely she is to be employed) but the proportion of women completing college is also an indicative measure of the status of women in the community, and is important in the analysis of community structure.

A large number of variables were omitted from further analysis because of their extremely high, and in some cases nearly perfect, intercorrelations. They included the following:

(1) Women 16 Years and Older

(2) Women 16 Years and Older with own Children Under 6 Years

(3) Women 16 Years and Older in Labor Force and with own Children Under 6 Years

(4) Women 16 Years and Older with own Children 6 to 17 Years Only

(5) Women 16 Years and Older in Labor Force and with own Children 6 to 17 Years Only

(6) Married Women with Husband Present

(8) Married Women, Husband Present, with own Children Under 6 Years

(9) Married Women, Husband Present, in Labor Force and with own Children Under 6 Years

(10) Married Women, Husband Present, with own Children 6 to 17 Years Only

(11) Married Women, Husband Present, in Labor Force and with own Children 6 to 17 Years Only

(14) Women 25 Years and Older Completing 4 or More Years of College

(15) Women 25 Years and Older

Redundancy was another reason for the exclusion of these variables. For example, it seemed unnecessary to chose the variable Women 16 Years and Older with own Children Under 6 Years and the variable Women 16 Years and Older in Labor Force and with own Children Under 6 Years when the variable that expressed the proportion of women in the labor force with children of preschool age could be used and have much more theoretical, as well as statistical, importance. The variable Percent of Women with own Children of Preschool Age, and in the Labor Force was chosen rather than the variable Percent of Married Women, Husband Present, with own Children of Preschool Age, and in the Labor Force because the former variable (all women) includes the latter (married women) and the correlation of the variables was .97. For the same reason the variable concerning women with school age children only and in the labor force was chosen over the same variable concerned with married women only, again with a correlation

of .97. These two variables were considered to be of more value for the regression analysis than their separate components would have been.

It should be noted that the variable Percent of Women 25-34 in the Labor Force had a high correlation (.70) with the variable concerned with the proportion of working women with children of preschool age, while the variable Percent of Women 35-44 in the Labor Force also had a moderately high correlation (.64) with the variable concerned with the proportion of working women with school age children. The relationships between these two sets of variables are easily explained since those women between the ages 25 and 34 are most likely to be the mothers of children under 6 years of age, and women between the ages of 35 and 44 are likely to have children between the ages of 6 and 17. Because the variables concerning the proportions of working mothers with children in the two different age groups were again considered to be theoretically more important than the variables concerning the percent of women in the labor force, another reason for their inclusion in the regression analysis was established.

Cumulative Fertility Rate of Women 35-44 is a measure of children ever born per 1,000 women of all marital statuses. This variable was chosen over that of children ever born per 1,000 women ever married (for which Census data was also available) because it did include women of all marital statuses and because of its age-specificness. Because of fertility's significance as a labor force participation factor the variable

was chosen to be placed in the regression analysis. It had low, negative correlations with all the other dependent variables except one (it had a low positive correlation, .05, with the variable expressing the percent of married women who were in the labor force). Because of its negative and low correlations with the other dependent variables, and its theoretical importance, the variable Cumulative Fertility Rate of Women 35-44 was chosen for use in the regression analysis.

Percent of Women 18-19 Years in the Labor Force and Percent of Women 25 Years and Older Completing 4 or More Years of College were also chosen for placement in the stepwise regression analysis. The correlation between these variables was a low, negative .15. The inverse relationship is an understandable one since a county having a high proportion of women age 18 to 19 in their labor force would not have as many women attending and completing college, and vice versa. These two variables were also important to this analysis in their own right. The percent of women 18-19 years old in the labor force is the only variable which really considered women of those ages in the counties, and because the status of women in a community is affected by women aged 18-19 just as surely as it is by all other age groups, the inclusion of this variable in the regression analysis seemed justifiable. The importance of education for the status of women in a community is very recognizable, and, therefore, the variable Percent of Women 25 Years and Older Completing 4 or More Years of College

was also considered valuable for further analysis.

The variable Percent of Women in the Labor Force was also chosen for the regression analysis. Its correlations with the variables concerning women in the labor force by age groups were moderate to fairly high, and because the age-grouped variables (other than the 18-19 group) were not chosen for further analysis, the total percent variable was. Its obvious theoretical importance for this study was also a primary reason for its selection.

The intercorrelations of the six dependent variables, Cumulative Fertility Rate of Women 35-44; Percent of Women in the Labor Force; Percent of Women 18-19 in the Labor Force; Percent of Women with own Children of Preschool Age, and in the Labor Force; Percent of Women with own Children of School Age Only, and in the Labor Force; and, Percent of Women 25 Years and Older Completing 4 or More Years of College, used in the multiple regression analysis for the determination of the most important variables in the explanation of community structure and the status of women, are presented in Appendix I, Table 11.

## Hypotheses Concerning Community Structure And the Status of Women

This section presents the general framework within which a multivariate theory of community structure and the status of women in non-metropolitan Kansas counties is constructed. The variables which serve as explanatory measures of community structure are those concerned with centrality,

differentiation, and fluidity. It is these variables which are believed to determine and affect the status of women in the community. If a community has high degrees of differentiation, centrality and fluidity (i.e., a high level of community structure) it is likely that the labor force participation of women in that community will also be high, and the same theory would apply to the educational attainment of women. This is expected to be true because in such a community there is greater institutional complexity and a wider diversity of institutions which ultimately provides increased employment opportunities for all members of the community. With expanding employment the percentage of women in the labor force greatly increases. High levels of educational attainment will also be typical among women in such communities, as an education becomes increasingly important if one wants a good, well-paying job. It is also to be remembered that employability increases with each level of education attained. Also lower fertility rates would be expected in a community which was highly structured (i.e., has a high level of differentiation, centrality and fluidity) because low fertility implies a higher status for women than does its opposite since it frees them to do things other than care for children (e.g., go to school, obtain a paying job).

The variable selected as the measure of economic inequality, Mean-Median/Mean Family Income, and the variable selected to signify the level of living in the county, Median Family Income, are both measures of fluidity. A high degree

of inequality in a community would hypothetically be a depressent for the status of women since it implies a poor exchange of information due to the great economic differences in the community. Since there is less economic equality, women in counties typified by low fluidity are likely to have few opportunities for employment, low levels of education, and higher fertility rates.

High median family income, on the other hand, is expected to be a positive sign for high status of women in a community since it is a possible indication of the woman's employment outside the home. A high median family income might also signify increased levels of educational attainment which should mean that fewer 18 to 19 year old women would be in the labor force since they are college-aged.

The foregoing line of reasoning fostered the conception of the following hypotheses concerning the relationship of community structure and the status of women:

(1) With a high level of Differentiation the Cumulative Fertility Rate is low.

(2) With a high level of Centrality (General and Total Paper Circulations) the Cumulative Fertility Rate is low.

(3) With a high level of Median Family Income the Cumulative Fertility Rate is low.

(4) With a high level of Inequality the Cumulative Fertility Rate is high.

(5) With a high level of Differentiation the Percent of Women in the Labor Force is high.

(6) With a high level of Centrality (General and Total Paper Circulations) the Percent of Women in the Labor Force is high.

(7) With a high level of Median Family Income the Percent of Women in the Labor Force is high.

(8) With a high level of Inequality the Percent of Women in the Labor Force is low.

(9) With a high level of Differentiation the Percent of Women 18 to 19 Years Old in the Labor Force is high.

(10) With a high level of Centrality (General and Total Paper Circulations) the Percent of Women 18 to 19 Years Old in the Labor Force is high.

(11) With a high level of Median Family Income the Percent of Women 18 to 19 Years Old in the Labor Force is low.

(12) With a high level of Inequality the Percent of Women 18 to 19 Years Old in the Labor Force is high.

(13) With a high level of Differentiation the Percent of Women 16 Years and Older with Preschool Children and in the Labor Force is high.

(14) With a high level of Centrality (General and Total Paper Circulations) the Percent of Women 16 Years and Older with Preschool Children and in the Labor Force is high.

(15) With a high level of Median Family Income the Percent of Women 16 Years and Older with Preschool Children and in the Labor Force is high.

(16) With a high level of Inequality the Percent of Women 16 Years and Older with Preschool Children and the Labor Force is low.

(17) With a high level of Differentiation the Percent of Women 16 Years and Older with School Age Children and in the Labor Force is high.

(18) With a high level of Centrality (General and Total Paper Circulations) the Percent of Women 16 Years and Older with School Age Children and in the Labor Force is high.

(19) With a high level of Median Family Income the Percent of Women 16 Years and Older with School Age Children and in the Labor Force is high.

(20) With a high level of Inequality the Percent of Women 16 Years and Older with School Age Children and in the Labor Force is low.

(21) With a high level of Differentiation the Percent of Women 25 Years and Older Completing Four or More Years of College is high.

(22) With a high level of Centrality (General and Total Paper Circulations) the Percent of Women 25 Years and Older Completing Four or More Years of College is high.

(23) With a high level of Median Family Income the Percent of Women 25 Years and Older Completing Four or More Years of College is high.

(24) With a high level of Inequality the Percent of Women 25 Years and Older Completing Four or More Years of College is low.

The significance of each hypothesis was tested by use of multiple regression analysis.

Results of Multiple Regression Analysis

Regression analysis was used to further decrease the number of independent and dependent variables necessary for the explanation of community structure and status of women. It is important to note the manner in which the stepwise multiple regression analysis is conducted. Several independent variables can be used for one dependent variable in each selection. For this analysis of important Community Structure and Status of Women variables the dependent variables were each used twice with different groups of independent variables. The independent variable groups were: (1) Differentiation, Centrality, Median Family Income, and Economic Inequality; and (2) Centrality, Total Paper Circulations, Median Family

Income, and Economic Inequality. In group (1) the Differentiation and Centrality variables were used, and for group (2) the two Centrality variables, General Centrality and Total Paper Circulations, were used without Differentiation. The reason for this method was to determine if the effect of Centrality and Differentiation together was greater than Centrality alone.

Concerning the dependent variable cumulative Fertility Rate of Women 35 to 44 Years, and the independent variables, Differentiation, Median Family Income, and the Economic Inequality measure, the results show that with the other variables controlled there is a moderate, negative relationship (Beta, the standardized regression coefficient, is -.36) between Cumulative Fertility Rate and Differentiation, and the $t$ and $F$ values (-3.83 and 14.71, respectively) are significant at $p<.01$. This means that as the level of differentiation increases the cumulative fertility rate decreases (Hypothesis 1), or, in other words, the more advanced or developed the county, the smaller family size. Controlling on Median Family Income increased the predictability of Differentiation, but Median Family Income's contribution was not significant in itself and was not in the predicted direction (Hypothesis 3). Likewise, Centrality and the Economic Inequality measure did not produce significant results in the analysis, and, therefore, Hypotheses 2, 3, and 4 were not accepted.

For the regression selection in which the two

centrality variables, Median Family Income, and the Inequality measure were simultaneously correlated with Cumulative Fertility Rate it was found that the Total Paper Circulations variable had an independent negative correlation (Beta = -.24) and the $t$ value (-2.42) was significant at $p<.01$. The other three variables only weakened the predictability of the paper circulation centrality measure and did not have significant relationships with the dependent variable by themselves. Therefore, Hypothesis 2 does seem to have some reliability, but since the General Centrality measure did not prove significant here, and because newspapers can serve as only a small part of a community's level of centrality, its importance to the analysis was not that great, and Hypothesis 2 was not accepted.

The only significant finding concerning the dependent variable Cumulative Fertility Rate is that the level of Differentiation predicts it (inverse relationship) and Hypothesis 1 was accepted.

Concerning the Percent of Women in the Labor Force variable and the independent variables Differentiation, Centrality, Median Family Income and Economic Inequality, Differentiation was the greatest predictor of the labor force participation of women ($t$ = 7.57, $p<.01$, Beta = .61). Apparently as the level of differentiation increases so does women's labor force participation (Hypothesis 5). As differentiation increases the jobs for women at all ages increase (since there are more differentiated occupations women have a greater

chance for employment). Not only does greater institutional complexity imply that there are more women in the labor force, but so does higher Median Family Income (Hypothesis 7), controlling for the effect of Differentiation ($r$ = .71, $F$ = 48.90, $p<.01$). When the Inequality measure is entered in all relationships remain significant ($r$ = .72, $F$ = 34.99, $p<.01$) and the three variables combine to explain 52 percent of the variance in the dependent variable. The Economic Inequality measure had a significant negligible effect ($t$ = -2.02, $p<.05$, Beta = -.15), which means that a high level of economic inequality in the community is related to a smaller number of women in the labor force. These findings assure acceptability of Hypotheses 5, 7, and 8. High levels of Differentiation and Median Family Income cause the percent of women in the labor force to increase, while a high level on the Inequality measure causes the percent to decrease. Centrality, however, does not make a significant contribution and, therefore, Hypothesis 6 was not accepted; the level of centrality apparently did not significantly affect the percent of women in the labor force. The Total Paper Circulations centrality variable also did not significantly predict the percent of employed women.

None of the community structure variables could significantly predict, in the hypothesized direction, the Percent of Women 18-19 Years Old in the Labor Force, and therefore Hypotheses 9, 10, 11, and 12 were not accepted. It was found that the Economic Inequality measure had a significant negative

effect (Beta = -.27, $t$ = -2.81, $p$<.01), but it had been hypothesized (Hypothesis 12) that a high level of inequality would be associated with a high percentage of 18-19 year old women in the labor force.

The dependent variable Percent of Women 16 Years and Older with own Children Under 6 and in the Labor Force had a negative correlation with the Inequality measure (Beta = -.31) and the $t$ and $F$ values (-3.25 and 10.55, respectively) were significant at $p$<.01. Differentiation weakened the effect of the Inequality measure but it remained significant at $p$<.01 ($t$ = -2.67). The effect of Differentiation was also significant at $p$<.01 ($t$ = 2.67) when Inequality was controlled for. Economic Inequality and Differentiation combined their effects to explain 16 percent of the variance in the dependent variable ($r$ = .40). The introduction of General Centrality into the regression analysis, however, only weakened the effect of the first two variables and was not significant alone, and the same is true for the Median Family Income and Total Paper Circulations variables.

Therefore, Hypothesis 13 was accepted; an increasing level of differentiation does increase the proportion of working women with preschool children. Hypothesis 16 was also accepted because the Inequality measure does reduce the proportion of such women in the labor force. Hypotheses 14 and 15 were not accepted because the two centrality measures and the one income measure did not affect the labor force participation of mothers with preschool children.

Quite surprisingly, none of the independent variables were capable of significantly predicting the number of women with children 6 to 17 years only who were also in the labor force. The variable Median Family Income strengthened the effect of Differentiation to make it significant (its $t$ value, 2.16, was significant at $p<.05$, but the $F$ value, 2.37, is not) but neither one alone had significance. Therefore, Hypotheses 17, 18, 19, and 20 were not accepted. It was assumed that not only did the community structure variables fail to predict the percent of working women with school age children, but also that the dependent variable was not as representative of the status of women as were the variables previously discussed.

Centrality was the first variable to significantly predict the Percent of Women 25 Years and Older Completing 4 or More Years of College ($t = 6.63$, $p<.01$, Beta = .55). Median Family Income was also significant at $p<.01$ ($t = 3.78$, Beta = .31) when the effect of Centrality was controlled for. Controlling for Centrality and Median Family Income, Differentiation was also significant, at $p<.05$ ($t = 1.87$, Beta = .17) in predicting the percent of women completing college. The final correlation coefficient was .64, so 41 percent of the variance in the dependent variable was explained by the three independent variables. The variables Total Paper Circulations and Economic Inequality were not significant in the explanation of the percent of women 25 years and older who had completed four or more years of college.

With this evidence Hypotheses 21, 22, and 23 can be accepted; high levels of Differentiation, Centrality and Median Family Income are related to high levels of the percent of women completing four or more years of college. Theoretically this means that since the community structure is considered to be high, the status of women is greatly improved (i.e., there are more women completing four or more years of college). However, Total Paper Circulations did not have this effect and it must not be included with the General Centrality measure. Hypothesis 24 was not accepted; Economic Inequality is not capable of predicting the college education levels of women.

In summary of the results of the multiple regression analysis, only 9 of the 24 hypotheses which were generated were accepted. Qualifying them with their appropriate control variables they are:

(1) With a high level of Differentiation the Cumulative Fertility Rate is low.

(5) With a high level of Differentiation, controlling on Median Family Income and Economic Inequality, the Percent of Women in the Labor Force is high.

(7) With a high level of Median Family Income, controlling on Differentiation and Economic Inequality, the Percent of Women in the Labor Force is high.

(8) With a high level of Inequality, controlling on Differentiation and Median Family Income, the Percent of Women in the Labor Force is low.

(13) With a high level of Differentiation, controlling on Economic Inequality, the Percent of Women 16 Years and Older with Preschool Children and in the Labor Force is high.

(16) With a high level of Inequality, controlling on Differentiation, the Percent of Women 16 Years and Older with Preschool Children and in the Labor Force is low.

(21) With a high level of Differentiation, controlling on Centrality and Median Family Income, the Percent of Women 25 Years and Older Completing Four or More Years of College is high.

(22) With a high level of Centrality (General only), controlling on Differentiation and Median Family Income, the Percent of Women 25 Years and Older Completing Four or More Years of College is high.

(23) With a high level of Median Family Income, controlling on Differentiation and Centrality, the Percent of Women 25 Years and Older Completing Four or More Years of College is high.

The relative unimportance of the dependent variables Cumulative Fertility Rate and Percent of Women 18 to 19 Years Old in the Labor Force is quite evident as only one supported hypothesis (Hypothesis 1) regarded the fertility variable and none of the advanced hypotheses concerning the employment of 18 and 19 year old women were supported. The other dependent variables, Percent of Women in the Labor Force, Percent of Women 25 Years and Older Completing Four or More Years of College, and Percent of Women 16 Years and Older with own Children of Preschool Age and in the Labor Force, were included in three, three, and two hypotheses, respectively (Hypotheses 5, 7 & 8; 21, 22, & 23; and 13 & 16).

The independent variable Centrality significantly predicted only one status of women variable, Percent of Women 25 Years and Older Completing Four or More Years of College. This is to be expected since colleges and universities are located in highly centralized places. The importance of this variable is not as great as is that of the other three

independent variables since Differentiation, Economic Inequality, and Median Family Income predicted four, two, and two dependent variables (Hypotheses 1, 5, 13 & 21; 8 & 16; and 7 & 23, respectively) by themselves.

Considering the above analysis, the dependent variables Percent of Women 18-19 in the Labor Force and Cumulative Fertility Rate, and the independent variable Centrality, were not considered to be important in the explanation of community structure and the status of women, and were, therefore, omitted from further analysis.

The dependent variable Percent of Women in the Labor Force had the strongest correlations with the independent variables and with the remaining dependent variables (see Appendix I, Table 12, for correlation matrix of all variables used in the regression analysis and Appendix I, Table 13 for correlation matrix of the variables selected by multivariate analysis as those most important for the explanation of community structure and the status of women in the non-metropolitan Kansas counties). Because of its high correlations with other theoretically relevant variables, the labor force variable was considered to be the most indicative of women's status. Likewise, Differentiation had the strongest correlations with the dependent variables and with the other independent variables, so it was considered the most important of those variables selected to measure community structure.

These six variables emerged as the most significant of the original 41 involved in this study: independent

variables measuring community structure -- Differentiation, Median Family Income, and Economic Inequality; dependent variables measuring the status of women -- Percent of Women in the Labor Force, Percent of Women 25 Years and Older Completing Four or More Years of College, and Percent of Women 16 Years and Older with own Children of Preschool Age and in the Labor Force. A correlation sketch of these variables appears in Appendix I, Table 14.

Chapter 7

# METHODS OF THE SURVEY RESEARCH

## The Methods for the Measurement of Expectations

Due to the sensitivity of the topic of sex-role stereotypes and the difficulty of arriving at a true testing of teachers' expectations, a method of indirect questioning through the use of projective situations was analyzed as being the most desirable method for this study. Indirect measurement was also viewed as a nonthreatening form of questioning and one with which respondents would feel comfortable in the expression of their opinions. Therefore, a method of indirect measurement was selected so the respondents would not be aware of the true nature and purpose of the study (i.e., the determination of sex-role expectations) but yet would respond in such a way that the purpose would be met.

Phillips (1971) notes that by using an indirect method, "the respondent is no longer motivated to conceal information because he is not made aware that it reveals behavior he considers to be socially undesirable" (Phillips, 1971:143). If the respondents are unaware of the exact nature of a study they will unconsciously respond to questions in a manner which expresses their true opinions. Those responding to indirect instruments are free to provide the desired information because of the nonthreatening approach of the instrument. Perhaps if

the true nature of the study were known respondents would not be willing to submit their opinions. Certainly respondents' desires to answer questions in a manner that is considered socially acceptable and appropriate can be enough to jeopardize the quality of the data (Phillips, 1971).

Selecting an Indirect Measure of Sex-Role Expectations

Very few thorough studies of teachers' sex-role expectations have been conducted and, therefore, the number of instruments designed to measure expectations is also quite small. Some of the instruments used by other researchers dealt with the teachers' actual students while others were designed to measure only one certain sex difference (e.g., reading achievement and/or difficulties). Other instruments were not completely discussed by the researchers whose studies were reviewed, or were not exactly what this researcher was interested in.

The only instrument which seemed potentially replicable and related to the issue of this study was developed by Dr. Norma Feshbach (1971) of the School of Education at the University of California, Los Angeles. It was agreed to use Feshbach's instrument rather than attempt to develop one, since the possibility of constructing a sound and valid measure of sex-role expectations without several pre-tests to correct for error seemed quite small. Feshbach's instrument was an indirect measure of sex-role expectations as it consisted of projective situations depicting both male and

female students, in nearly identical classroom situations, displaying the same behaviors.

Dr. Feshbach was contacted and with her permission for this researcher's utilization of her instrument the question of how to measure the sex-role expectations of elementary teachers in non-metropolitan Kansas counties had been answered.

The Questionnaire

The part of the instrument to be used for this study that is designed to indirectly measure teachers' sex-role expectations was constructed by Feshbach (1971). The instrument is known as the "Situation Test" and it consists of 16 short, projective "situations" which were designed to measure the preferences of female graduate students in elementary education at UCLA for certain "types" of children. Because the situations vary by behaviors and sex of child the instrument is capable of measuring sex-role expectations.

After each situation had been presented in Feshbach's study, the respondents were asked to answer five questions by replying that they considered the depicted pupil to be: (1) considerably below average; (2) below average; (3) somewhat below average; (4) somewhat above average; (5) above average, or (6) considerably above average. The five questions asked for each situation were:

1. How intelligent (bright) do you think this child is?
2. What grades do you think this child usually gets?

3. How generous do you think this child is?

4. How popular do you think this child is?

5. If you were a teacher, in comparison to other children how much would you like to have this child in your class?

For this study the questions and the response categories were somewhat altered while the situations were used exactly as designed by Feshbach. Because it is much easier for purposes of data analysis to have five response categories rather than six (so that the middle score really represents an average), five categories were used for each question in this study.

The first two questions concerning expected intelligence and grades were used as they are here presented. These questions are important for the understanding of teachers' views of the expected level of intelligence of the children displaying specific behaviors, and for the determination of particular sex-role expectations.

Feshbach's questions #3 and #4 were not used for this study as it was believed by this researcher that they were not directly concerned with the measurement of actual sex-role expectations but rather with the characteristics of the depicted child. One question was designed to replace the original #3 and #4:

3. How typical of elementary children is this child's behavior?

This question was designed to be a better measure of teachers' sex-role expectations for children. Teachers should find it

necessary to answer this question on the basis of their own experience so that the differences between hypothetical and real children should be eliminated.

The original question #5 was numbered #4 for this study and was altered slightly to read:

4. In comparison to other children how much would you like to have this child in your class?

This question should test the teachers' preferences for certain behaviors expressed by children and their attitudes concerning the appropriateness of the behaviors based on their sex-role expectations for such.

Again concerning the response categories for each question, besides reducing the number from six to five, some new categories were designed. Feshbach used the same responses for each question which did not seem very desirable to this researcher. For questions #1 and #2 similar responses to those used by Feshbach were used, those being: (1) considerably below average; (2) below average; (3) average; (4) above average; and (5) considerably above average. These responses seem entirely appropriate for the first two questions which were concerned with the child's intelligence and grades. For question #3, which asked how typical the child was believed to be, the following responses were designed: (1) almost all children would act this way; (2) many children would act this way; (3) about half of the children would act this way; (4) a few children would act this way; and (5) very few children would act this way. For question #4 which asked the teachers how much they would want the depicted child in their classroom,

the designed responses were: (1) would very definitely not want; (2) would probably not want; (3) would not matter; (4) would probably want; and (5) would very definitely want.

The 16 situations were designed by Feshbach to present children with a particular set of behavior characteristics. Four triadic clusters of behaviors were used: (1) Flexible, Nonconforming, Untidy; (2) Rigid, Conforming, Orderly; (3) Active, Independent, Assertive; and (4) Passive, Dependent, Acquiescent. Two situations for each sex were constructed for each of the four behavior-sets, totaling 16 situations. The situations were very closely matched for boys and girls similarly depicting the given behavior traits as well as matching the intensity of activity and the number of words used for the description of the situations. Obviously this was necessary so that the only difference in the situations would be the sex of the children portrayed.

I have determined this to be the "key" for what behaviors each situation is attempting to depict (the situations appear in final questionnaire form in Appendix II):

Flexible, Nonconforming, Untidy:
Boys - Situations #1 and #11
Girls - Situations #7 and #14

Rigid, Conforming, Orderly:
Boys - Situations #8 and #10
Girls - Situations #2 and #15

Active, Independent, Assertive:
Boys - Situations #3 and #13
Girls - Situations #6 and #9

Passive, Dependent, Acquiescent:
Boys - Situations #4 and #16
Girls - Situations #5 and #12

The order for presenting the situations was randomly determined by Feshbach (1971) and the same order will be used for this study.

In addition to the 16 situations and the four questions asked concerning each of them it was necessary to include in the questionnaire a page of background information questions. The questions were designed by this researcher to test the proposed hypotheses concerning elementary teachers' sex-role expectations for children. In addition, a cover sheet was designed for purposes of introducting the researcher and the study, and for a brief explanation of instructions. The complete questionnaire, as it was designed and used to measure sex-role expectations, appears in Appendix II.

The questionnaire was submitted to The Committee on Research Involving Human Subjects of the Department of Sociology, Anthropology, and Social Work, College of Arts and Sciences, at Kansas State University, for approval in April, 1977. The questionnaire was approved by the committee in the same month.

## Validity and Reliability of the Instrument

The evaluation of the validity and reliability of any instrument to be used for research purposes is a very necessary step in the research process. The validity of an instrument is met when it is considered to be a successful measurement of what it was actually designed to measure. Reliability is the precision of an instrument which determines if it measures the same thing under various conditions.

The face validity of the instrument to be used for this study does not have the strength that would be inherent in other measures since indirect methods are used to determine the respondents' sex-role expectations for children. But it is believed, due to the nature of the study, that the instrument is the best type which could be used for this project since a more direct method of questioning would be threatening to the respondents.

The instrument's attempt to depict children portraying certain behaviors was demonstrated by Feshbach (1971) to be valid. In order to ensure that the situations were representative of the behavior clusters they had been designed to reflect, Feshbach had five psychologists, who were not aware of the purpose of the study, indicate the traits that were characteristic of the children in the situations. The initial group of situations was 50 and the psychologists were given a list of 20 adjectives for each, 12 of which actually described the behavior cluster being portrayed. "The situations which constitute the Situation Test were selected from among those in which all five raters selected at least two of the three adjectives constituting the trait cluster the situation is intended to depict" (Feshbach, 1971:77). This method greatly strengthened the validity of the instrument.

To determine the reliability of the instrument it was necessary to do some pilot studies to test it. Two evening Education courses at Kansas State University which were offered in the Spring term of 1977 were selected to pre-test the

questionnaire. The availability of respondents and the concern for time were primary in choosing the two courses for pre-testing. It was felt that the two classes would contain some elementary teachers and people studying to become elementary teachers since the course titles were "Contemporary Mathematics Education in the Elementary School" and "Kindergarten Education." The pilot studies were conducted so that any imperfections in the instrument could be worked out before the actual testing began so that the final results would not reflect measurement error. In other words, it was assumed that if the instrument proved to be reliable with one testing that under future testing conditions the results would be strengthened by the reliability of the instrument.

Results of the Pilot Studies

The instructors of the two courses were personally contacted and their approval was requested for the indirect questioning of the students in their classes about their preferences and attitudes for student behavior. The actual reason for questioning the students (i.e., for purposes of measuring their sex-role expectations for children) was not openly given as the reason for desiring the students to participate in the study. The instructors were both willing to have their courses utilized as pilot study cases and arrangements were made to administer the questionnaires in the two classes.

It was assumed that not all of the people taking the

courses would be elementary teachers, and the assumption was correct. However, because the purpose of a pre-test is to test the validity and reliability of the instrument before it is used in the actual study, the fact that the hypotheses could not be tested with the pre-test sample did not mean that the validity and reliability of the instrument could not be. Therefore, all of the completed questionnaires were included in the pilot study sample regardless of the respondent's status. The pre-test produced 18 useable questionnaires. Only six of the 18 people completing the questionnaire were teachers, substitutes, or student teachers at the time they responded to the questionnaire.

For purposes of data analysis the responses to the four questions asked after each of the 16 situations were coded by weighting them from 1 to 5 with 5 being the rating for the child who was "considerably above average" on intelligence and grades, the one who teachers would expect "almost all children" to act like, and a pupil who the teacher "would very definitely want", in all cases the highest possible ratings.

Because two situations were designed to depict boys displaying each of the four behavior groupings (i.e., Flexible, Nonconforming, Untidy; Rigid, Conforming, Orderly; Active, Independent, Assertive; and Passive, Dependent, Acquiescent) and two were designed depicting girls for each grouping, the ratings for the two that were paired were in each instance combined and averaged so that there were 8 over-all means for

each behavior grouping by sex. In addition, a mean total score was computed by averaging the ratings for each situation. These numerical summaries of the pre-test data appear in Appendix I, Table 15, and the ranking of each of the 8 means for the total score and for the four judgment dimensions (with the highest mean rated as 1) appears in Appendix I, Table 16.

The rankings produced some interesting findings. On the Intelligence dimension the Rigid, Conforming, Orderly girl held the highest rating while the Dependent, Passive, Acquiescent girl held the lowest. Boys were considered to be more intelligent for every behavior grouping except for the Rigid, Conforming, Orderly group. The boys barely rated above the girls on the Dependent grouping, but then boys are not <u>expected</u> to be dependent.

For the Grades dimension the Rigid girl still held the highest ranking while the Flexible, Untidy girl was ranked lowest. It is interesting to note that for all except the Rigid, Conforming, Orderly boy and girl and the Dependent, Passive and Acquiescent girl, the means on the Intelligence dimension were higher than those on the Grades dimension, suggesting that perhaps these three types of students, because of their accepting behaviors, are the only ones to receive grades higher than they may actually deserve.

The Dependent boy was rated in the pre-test results as the most typical elementary student, even more so than the Dependent girl, an unanticipated result. It is not surprising that the Flexible boy is viewed as more typical than his female

counterpart, but it is confusing to find the Independent boy rated lower than the Independent girl, and the Rigid boy rated higher than the Rigid girl.

It is somewhat difficult to determine exactly why the ratings on the Typical dimension were, except for those in the Flexible, Nonconforming, Untidy behavior grouping, opposite of what had been predicted. It can be postulated that the typicalness of a given child does not influence the expectation for one sex or the other to behave in a certain way, even though it might not be as typical of children as was previously supposed.

The ratings for the final judgment dimension, preference for the child in class, were interesting in that the Rigid, Conforming, Orderly girl took the top ranking while the Independent, Active, Assertive girl took the lowest. The expectations for girls to be conforming rather than independent are again evident in these results.

The total ratings show the average rating with the four judgment dimensions combined for each behavior grouping. The proposed hypothesis that sex-typed behaviors are more likely to be accepted when they are depicted by the "appropriate" sex is confirmed by the results. The Rigid, Conforming, Orderly students are the easiest to accept, but a girl displaying such behavior seems more appropriate and, therefore, is more highly rated. Flexibility, nonconformity, and untidiness are not highly valued, but it seems much easier to accept such behavior from boys, who are expected to behave that way, than it is from girls, who are <u>not</u> expected to have such behaviors. The

dependent girl is rated as the third most valued type of student, a reasonable choice to follow the children displaying conforming behaviors. The independent boy is more easily accepted over the dependent boy but the independent girl meets with very little approval. The largest difference in ratings is for the Independent behavior grouping in which the boy depicting such behavior is rated three ranks above the girl who displays independence; a finding which would anger anyone concerned with a sex-role-stereotype-free educational system.

These pre-test findings uncovered some interesting results and pointed out the respondents' expectations for girls and boys depicting certain behaviors and their opinions of them on four judgment dimensions. It was necessary to test the statistical importance of the findings before full acceptance of some of the obvious differences in ratings could be granted.

Separate analyses of variance, using a 4 x 2 factorial design (personality cluster x sex) were conducted for each of the four behavior dimensions and for the total rankings. Analyses of variance (ANOVA) are conducted to determine the probability that the means of several groups of scores or ratings deviate from one another merely by sampling error. The results of these tests appear in Appendix I, Table 17.

For the total ratings and for each judgment dimension there were significant main effects for the behavior clusters. These findings confirm the belief that the pre-test respondents would perceive actual differences in the behaviors depicted by

the children and would express specific preferences for them. Although it cannot be determined exactly where the differences lie, it is obvious that the depicted behaviors have effects on the ratings given on the four judgment dimensions and for the total score.

While there were no main effects for sex (Feshbach's (1971) results found a significant main effect on the Intelligence dimension), there was a significant interaction between personality clusters and sex for the Intelligence dimension. For this dimension the combined effects of male/female and behavior groupings are related to the ratings given by the pre-test respondents.

In order to determine where the differences discovered in the ANOVA tests actually were and thereby more fully investigate the hypothesis that the mean ratings differed for boys and girls on each judgment dimension and for each behavior grouping, small sample tests for the difference in means were computed. A summary of the results of the tests appears in Appendix I, Table 18. The negative values indicate that the girls' means were higher than the boys', while the positive values indicate that the boys had higher means on those behaviors and for those judgments.

Three of the 16 tests for the difference between means were proven to be statistically significant at the $p<.05$ level. The behavior grouping which had the greatest number of significant findings was the Rigid, Conforming, Orderly group, with the girls' means being significantly higher than the boys' on

two of the four judgment dimensions. The Independent and Passive behavior groupings did not have any significant results in the test for the differences between means, a finding which implies that those responding to the situations did not perceive any differences between girls and boys who displayed passive behaviors, or between girls and boys who displayed independence.

The test to determine the significance of the difference between the means for the Intelligence dimension in the Rigid group was accepted at the $p<.05$ level. This finding results in the belief that 95 percent of the time the mean for rigidly behaving girls' intelligence will be higher than that for boys, supporting the hypothesis that girls are expected to be conforming and orderly students and, therefore, should also be more intelligent.

There were no significant differences for the tests between the means for boys' and girls' grades for any of the four behavior groupings. The pre-test sample did not perceive a difference in the expected grades a child should receive no matter what their behavior may be.

There was a significant difference between the means for the Typical dimension for the Flexible behavior grouping with boys displaying such behavior being considered most typical 95 percent of the time. The differences between the means for the other three groupings were not large enough to be significant.

The Rigid, Conforming, Orderly girl was significantly

preferred over her male counterpart. Again the differences for the other means on this preference dimension were not significant.

There are several possible reasons for the small number of significant findings, foremost being the small sample size (18) which quite likely prohibited a true testing of the instrument. Also because very few of the respondents in the pre-test sample were actually elementary teachers it is possible that they did not respond to the questions in the same manner that actual teachers would have. Nevertheless, there were some highly significant results which were enough to cautiously support the instrument as a valid measure of sex-role expectations. Although a greater number of statistically significant findings would have encouraged full acceptance of the validity of the instrument, it did not seem to have any major flaws that would have limited its effectiveness, so, therefore, it was not altered in any way for the final testing of it.

# Chapter 8

## DATA GATHERING PROCEDURES

### The Selection of Subjects for the Measurement of Teachers' Sex-Role Expectations

The problem of how to contact elementary teachers in non-metropolitan Kansas counties, to seek their participation in this study, was a major one. It was decided that several difficulties would be avoided if teachers would be surveyed without the knowledge of, and permission from, their school boards, superintendents, and principals, which most surely would have been required had the teachers been contacted directly through their schools. Therefore, it was agreed to question teachers who were students in Continuing Education courses offered by Kansas universities. This method, it was believed, would provide a large and rather diverse sample of elementary teachers.

Data collection was conducted for three consecutive semesters; Spring 1977, Summer 1977, and Fall 1977. During the first semester only Continuing Education courses taught by instructors from Emporia State University, Emporia, Kansas, and Kansas State University, Manhattan, Kansas were sampled. For the last two semesters courses at both previously mentioned universities and at Fort Hays State University, Hays, Kansas, were included in the sample.

Since it was necessary to choose courses that would

feasibly have elementary teachers enrolled in them the courses to be included in the sample were selected by their titles and course descriptions. At times it was relatively easy to make the decision as to whether or not a course would qualify (e.g., "Reading for the Elementary Teacher") but judgmental decisions had to be made in other instances and, therefore, it is quite possible that courses which might have contained some elementary teachers could have been inadvertently overlooked.

For each course expected to have elementary teachers enrolled information was gathered on time of class meeting, length of class meeting, and the name of the professor teaching the course. Courses were not included if the length and amount of class time remaining were relatively short.

This selection process during the Spring semester produced a total of 15 courses as possibilities for sampling. Of the 15, three courses were taught by instructors from Kansas State University and 12 were taught by Emporia State University instructors.

A letter was sent to each of the 15 professors teaching the selected courses which briefly explained the study and asked for their permission to administer the questionnaire in their courses. A copy of the letter which was used for each of the three data gathering periods appears in Appendix III. Of the 15 professors seven agreed to administer the questionnaire, five responded that they would be unable to administer it, and the three remaining instructors did not reply to the letter requesting the use of their courses. Therefore, the

overall response rate was 7/15 or 47 percent.

A total of 164 questionnaires was mailed to the seven instructors of Continuing Education courses, and 110 were returned. Of the 110 questionnaires only 49 were complete and were responded to by people who were full time teachers in elementary schools at that time.

Because the summer months provide a better opportunity for teachers to take classes than the regular school year semesters do it was decided to use on-campus courses as well as Continuing Education courses for the second testing of the questionnaire. Course schedules for on-campus and Continuing Education courses were obtained from the three universities. Again, courses were selected by their titles and descriptions, and place, date and length of class meeting.

Twenty-three instructors, teaching 28 Continuing Education and on-campus courses during the summer months, were contacted to ask their consent for the administration of the questionnaire in their courses. Eight of the 23 instructors did not respond to the request, the same number replied that they were unable to administer the questionnaires in their courses, and the remaining seven instructors agreed to have their students respond to the questionnaire (34 percent response rate). The seven professors requested 108 questionnaires and 97 of them were returned. Seventy-two questionnaires were fully completed by full time elementary teachers.

In the Fall semester there were 14 courses offered at the three universities that were regarded as being appropriate for sampling. After receiving the letter requesting their help in the administration of the questionnaire, three

professors replied that they would not be able to use the questionnaire, two presented notification of course cancellations, and five (36 percent of those contacted) agreed to allow their students to be respondents. The remaining four professors did not respond. The five professors requested 98 questionnaires. Seventy-eight questionnaires were returned and 29 were useful for the purposes of the study.

During the period of data collection 52 professors were contacted regarding the study and 19 of them agreed to administer the questionnaire in their courses, which is an overall cooperation rate of 36.5 percent. Three hundred and seventy questionnaires were mailed out but only 285 of those were used and returned. Of the 285, 150, or 52.6 percent, were useable for the purposes of this study and, therefore, comprise the sample.

Background Characteristics of the 150 Sample Respondents

The overwhelming majority (142 or 94.7 percent) of the 150 elementary teachers responding to the questionnaire were employed full time in public school systems. The remaining eight teachers were full time employees in private or parochial schools. The respondents were teaching in a total of 42 different counties. Riley County, the home of Kansas State University, had the greatest number of respondents teaching in it with 24, or 16 percent of the total. Ninety percent (135) of the teachers lived in the same county in which they taught. Of the 15 living in a different county,

the greatest number, five, lived in Riley County (see Appendix IV, Map 1 for counties in which the 150 sample respondents lived).

A total of 80 percent of the respondents were kindergarten through fifth grade teachers. In numbers and percentages the breakdown by grades taught is as follows:

| | | | |
|---|---|---|---|
| Preschool | 3 (2%) | Eighth | 2 (1.3%) |
| Kindergarten | 19 (12.7%) | Junior High | 2 (1.3%) |
| First | 21 (14%) | Elementary Music | 4 (2.7%) |
| Second | 18 (12%) | Elementary Reading | 2 (1.3%) |
| Third | 20 (13.3%) | | |
| Fourth | 22 (14.7%) | Elementary Physical Education | 1 (.7%) |
| Fifth | 20 (13.3%) | | |
| Sixth | 9 (6%) | Elementary Librarian | 1 (.7%) |
| Seventh | 6 (4%) | | |

The average category for years of teaching experience was two to five years with 59 (39.3 percent) of the teachers having that amount. Eleven teachers (7.3 percent) had less than two years of experience in the classroom. Twenty-eight percent of the elementary teachers, or 42, had six to ten years of experience, while 17 teachers had 11 to 15 years. Ten teachers had 16 to 20 years of teaching experience, and eleven of the respondents had been teaching for more than 20 years (6.7 and 7.3 percent, respectively).

The greatest number of respondents, 65 (43.3 percent), had been teaching for two to five years in the same county

they were teaching in at the time they were surveyed. Twenty-nine (19.3 percent) had been teaching in the county less than two years. A large number of teachers, 32 or 21.3 percent, had six to ten years of teaching experience in their county. Only 24 respondents had been teaching for 11 or more years in the county they were currently teaching in; 13 (8.7 percent) having 11 to 15 years, six (4 percent) with 16 to 20 years, and five (3.3 percent) having taught over 20 years in the same county.

The respondents had most typically been living in the county in which they were living at the time they were surveyed for two to five years (57, or 38 percent). The next largest percentage was 22.7 for the 34 people who had lived in the county for over 20 years. Twenty-nine teachers (19.3 percent) had lived in the county for six to ten years, and ten 6.7 percent) for 11 to 15 years. Only three of the teachers (2 percent) had been living in their county for 16 to 20 years.

The most common size of place where the teachers spent their childhood was on farms or in the open country with 39 teachers or 26 percent of the sample in the category. Twenty-six respondents (17.3 percent) had lived in towns under 2,500 in population, 13 (8.7 percent) in towns with 2,500 to 7,500 population, and 29 (19.3 percent) in towns with 7,500 to 15,000. Twenty-six of the teachers (17.3 percent) had grown up in cities having 15,000 to 50,000 people, while only three were from cities of 50,000 to 100,000. Cities with

over 100,000 population were the homes for 14 (9.3 percent) of the sample.

The majority of the sample, 98 (65.3 percent), reported that they were involved in a few community activities. Twenty-one of the respondents (14 percent) reported that they were in a lot of community affairs, however, a larger number, 31 (20.7 percent) were not at all involved in their community's activities.

Female teachers comprised the large majority of the sample (135, or 90 percent). Nineteen of the teachers (12.7 percent) were younger than 25, while only two (1.3 percent) were 60 years or older. Forty of the respondents (26.7 percent) were 25 to 29 years old. The majority of the teachers, 56 (37.3 percent), were between the ages of 30 and 39. Nineteen respondents (12.7 percent) were in their forties and 14 (9.3 percent) were in their fifties.

In summary, the average or most typical respondent for this study could be described as a 30 to 39 year old female, from a rural background, teaching fourth grade in a public school in Riley County. She has had two to five years of teaching experience and has taught and lived in the county for two to five years, being involved in a few of her community's activities.

# Chapter 9

# DATA ANALYSIS AND INTERPRETATION

## The Examination of Teachers' Possible Sex-Role Expectations

With the responses of 150 elementary teachers to a series of questions concerning 16 children of various behavior styles depicted in short story situations, the first basic data analysis procedure was to determine the over-all mean for each behavior grouping on each judgment dimension by sex of the children depicted. Using the same method for computing the means as was used for the pre-test of the study, an average score was computed for boys and girls in the four behavior groupings: (1) Flexible, Nonconforming, Untidy; (2) Rigid, Conforming, Orderly; (3) Active, Independent, Assertive; and (4) Passive, Dependent, Acquiescent, for each of the four judgments the teachers were asked to make: (1) Intelligence; (2) Grades; (3) Typicalness; and (4) Preference for the child. The resulting means and their rankings, with the highest rated as 1, appear in Appendix I, Tables 19 and 20, respectively.

The most striking way to summarize these results is to note that the type of child most positively perceived by the teachers was the Rigid, Conforming, Orderly girl, while the students viewed most negatively were the independent and flexible girls. This finding is identical to that discovered in the pre-test of this study and by Feshbach (1971).

Apparently little girls are expected to conform to the teachers' wishes for desirable behavior, but they certainly are not to be active or even flexible in their behavior. The results suggest that sex-typed behaviors in children meet with more teacher approval when the appropriate sex is displaying them. Independence and flexibility in children are not highly valued, but such behavior when displayed by girls is certainly not acceptable. Likewise, dependency and conformity are not as highly valued in boys because they are not behaviors that are expected of them.

The Rigid, Conforming, Orderly boy is rated as the second most positively perceived type of student, a sharp contrast in rank to the Flexible, Nonconforming and Untidy boy who receives the next highest rating for boys. Somewhat surprisingly the dependent boy received a higher mean rating than the independent boy, but the difference was only by one.

It is interesting that the girls receive both the highest ratings for the behavior groupings which they are expected to portray and the lowest ratings for the behaviors the boys are expected to portray. The teachers' sex-role expectations for the girls are quite obvious in these results. The greatest discrepancy in ranks for the children is in the Flexible, Nonconforming, Untidy grouping where the difference in teacher expectations for boys and girls is quite pronounced (the rankings are 4 and 8, respectively).

Concerning the individual judgment dimensions, when the intelligence of the depicted children was in question, the

type of students receiving the highest ratings were the Flexible, Nonconforming, Untidy boy and the Independent, Active, Assertive boy. In the pre-test of this study and in Feshbach's (1971) study the student receiving the highest rating on Intelligence was the Rigid, Conforming, Orderly girl, but for this study she was rated third. The dependent boy and girl are not considered to be very bright but apparently the teachers like to be depended on since the children are ranked fourth and third on the expressed preference for them in the classroom. The independent boy is regarded as much more intelligent than his female counterpart, but the most striking difference is for the children portraying flexible behavior. If the flexible boy is so intelligent, then one would think that it would have something to do with the behavior that is displayed but that is obviously not the case since a girl with the same behavior is ranked sixth, five places behind the boy. Apparently the ranking difference is due to the teachers' sex-role expectations for the children. It is interesting that the Independent and Flexible girls are rated higher on the Intelligence dimension than are their Dependent counterparts. The Independent, Assertive, Flexible and Nonconforming girls are probably considered to be more intelligent because they are expressing male traits. These findings support the results of LaVoie and Adams' (1973) study.

The rankings of the Intelligence dimension were in the direction that was expected since the girl ranked above the boy in the Dependent and Rigid groupings and the boy

ranked above the girl in the Independent and Flexible groupings.

For the question asking, "What grades do you think this child usually gets?" the mean rankings were highest for the Rigid, Conforming, Orderly children with the girl displaying such behavior receiving the highest rating. Since a little girl is expected to be conforming it is not surprising that she is viewed as the recepient of good grades which supposedly result from her conformity and dedication. For both the Rigid and Dependent behavior groupings the girls were rated higher than the boys, and the independent and flexible boys were viewed as receiving better grades than the girls with such behavior. The flexible girl is the recepient of the lowest grades in the teachers' opinions.

Some interesting differences can be noted between the ratings on the Intelligence and Grades dimensions. The Flexible, Nonconforming, Untidy boy is expected to have the highest intelligence but he ranks next to last for the grades he probably receives. The dependent and conforming children appear to receive better grades than their levels of intelligence would suggest, perhaps because their behavior is pleasing to the teachers.

When the teachers were asked to determine how typical the depicted children were in comparison to actual children, the dependent children were considered to be the most typical. The ratings were very close within all the behavior groupings for the boys and girls. The Independent, Active, Assertive girl was considered to be the least typical student.

Surprisingly the conforming girl was not viewed as being a very common type of student.

The Typical dimension was designed for this study and was, therefore, previously untested by other researchers. However, for the pre-test of this study the ratings were very similar. It is possible that the ratings were not those which were hypothesized because the Typical question was perhaps not a good measure of the teachers' expectations for elementary school children's behavior.

For the final judgment dimension which questioned the teachers to what degree they would want the depicted child in their own classroom, the conforming girl and boy were the most preferred, and then the teachers preferred the students expressing dependency, both behaviors which cause few, if any, difficulties for the teachers in their classrooms. The independent girl was least preferred, but a nonconforming girl was seen as less desirable than an independent boy so apparently the sex of the child was influencing the teachers' opinions of the children. The conforming, orderly girl received the most approval from the teachers. Bardwick (1971), Levy (1972b), Levy and Stacey (1973), Sadker and Sadker (1972) and Sears and Feldman (1966) all concluded that conformity was the chief reason girls receive a great deal of teacher approval. The expressed preference for the conforming girl quite possibly is related to the teachers' expectations for such a girl to have the highest grades, even though she may not be the most intelligent pupil in the teacher's opinion.

Quite interestingly the rankings on the preference judgment dimension were identical to those in Feshbach's (1971) study, so this conclusion of the results of the Preference for Child dimension is strikingly applicable here; "The picture that emerges of the type of child that they most prefer is one whose behavior will facilitate expedient classroom management perhaps at the cost of other educational objectives such as spontaneity and creative problem solving," (Feshbach, 1971:83).

Even though two of Feshbach's judgment dimensions, Popularity and Generosity, were not used in this study, and one dimension, Typicalness, was specifically developed for this study, it is interesting to note the many similarities in rankings between the studies. A comparison of the rankings for Feshbach's study, the pre-test and final results of this study, for all dimensions, appears in Appendix I, Table 21. The many identical ratings in all three studies, and the additional identical ones for Feshbach's and this final testing alone, quite dramatically and substantially confirm the reliability of the instrument.

The rankings of mean scores obtained for each behavior grouping on the four judgment dimensions have caused the first hypothesis proposed in this study to be accepted. Certain behaviors that children express are viewed as being more desirable than others. The Rigid, Conforming, Orderly pupils are the most positively perceived by the teachers. Independence and nonconformity are not totally approved of when

displayed by either a boy or girl but they are somewhat more acceptable when boys are characterized by such since the behaviors are considered to be compatible with the male role. The conforming and dependent girls are more positively perceived than their male counterparts and the independent and flexible boys are more positively perceived than are the girls displaying such behavior. Because girls are not expected to be independent or flexible, when teachers witness the behavior it is met with disapproval.

The results suggest that it is alright for boys to display behaviors that are expected to be displayed by girls and that they will not be disapproved of (the conforming and dependent boys have fairly high overall ratings), but the girls who are characterized by behaviors that are considered to be male traits (i.e., independence and flexibility) received the lowest rating from the teachers. Zach and Price (1973) noted that behavior considered appropriate for boys meets with greater approval than does that considered to be appropriate for girls whether it is displayed by boys or girls, and this would seem to be the case with this study. This high positive value on male characteristics could provide self-concept problems for the female students who are not expected to display the traits but who are to realize that the teachers prefer those behavior characteristics more than the ones which they, as females, are expected to display.

In order to determine if the means for the four judgment dimensions of each behavior grouping deviated from

each other by sampling error alone, separate analyses of variance (ANOVA) were computed. A 4 x 2 factorial design was used so that the four behavior or personality groupings could be computed by sex, and so that the significance of the difference in the total rankings could be tested. Appendix I, Table 22, presents the results of the ANOVA tests.

For each judgment dimension and for the total rating there were significant main effects (the possible differences between levels of factor A or factor B collapsed over the other are called main effects) for the behavior clusters, with all but the Total rating $F$ value being significant at $p<.01$. The 150 elementary teachers in this sample did perceive differences in the children's behavior and viewed certain behaviors as more appropriate than others. The behavior of the depicted children did affect the teachers' rankings of them on the Intelligence, Grades, Typical and Prefer Child dimensions. The boys and girls do differ on their assigned scores in relation to their portrayed behaviors.

There were two significant main effects for the sex factor, on the Intelligence and Typical dimensions. When the teachers were asked to determine the child's intelligence and how much they perceived the child to be like other students they were familiar with, the sex of the depicted child had an influence on the teachers' rating of them. Even though the results confirm that the behavior expressed by the children has more bearing on the teachers' opinions of them, it is still important to note that at least for certain judgments

teachers make of children, the sex of the child is also a determining factor.

The potential joint result of factor A and B is known as an interaction. For the Intelligence, Grades, and Prefer Child dimensions the probability that the means differ merely by sampling error is very small ($p<.01$). For these three dimensions the sex of the depicted children and their displayed behavior patterns influenced the teachers' ratings of them; the combined effects of sex and behavior produced an interaction effect which shows a relationship between them and the scores the teachers gave the children.

The interaction effect for the Typical dimension was not significant; however, the factors alone were significant in explaining the teachers' ratings of the students. Interestingly, the Total judgment dimension measure produced only one significant main effect, behavior, and the interaction effect was very minimal. Apparently when the overall ratings of the male and female students were compared very few differences were detectable, but when the judgment dimensions were studied individually the significance of the teachers' differential opinions of the children became evident.

In order to more closely examine where the true differences in the teachers' opinions of the children could be found, it was necessary to test the significance of the differences between the mean scores for girls and boys in each behavior grouping, for all four judgment dimensions and the total rating. To do this, tests for differences in means were

computed. The results of the tests appear in Appendix I, Table 23.

For the Intelligence dimension the differences between nonconforming boys and girls and between independent boys and girls were highly significant; the boys were definitely considered by the teachers to be more intelligent than their female counterparts. The differences for the Conforming and Dependent behavior groupings were not significant.

All of the differences between groupings were significant for the Grade dimension. The findings suggest that the observed differences are real and that the evidence is sufficient to indicate that the ratings for boys and girls actually do differ. Boys who are nonconforming or independent do receive higher grades than girls with the same behavior. Conversely, girls portraying conforming and dependent behavior receive higher grades than do boys. Maccoby (1972) and Maccoby and Jacklin (1974) contended that girls receive better grades throughout their schooling years. For this sample, however, the behavior a girl displays seems to dictate whether or not she receives higher grades than her male counterpart; apparently if girls are "good" they will get better grades.

For the Typical dimension only one mean difference was significant, that of the Flexible, Nonconforming, Untidy behavior grouping. The boy displaying such behavior is likely to be considered as being more typical than a girl behaving in a nonconforming manner. In the rankings the nonconforming boy was rated seventh and the nonconforming girl eighth, but

even so the difference between the mean values was large enough to tell us that there is a significant difference between how "typical" a nonconforming pupil can be when the pupil is a boy and not a girl.

On the dimension concerned with how much the teachers would want the depicted child in their own classes, the differences were significant for all the behavior groupings except the Dependent, Passive, and Acquiescent group. The flexible boy is much preferred over the flexible girl. The teachers also prefer a conforming girl to a conforming boy, and an independent boy is more desirable than a girl who acts independently.

Concerning the Total ratings the differences were significant for all but the Dependent grouping. Flexible, Nonconforming and Untidy boys, and Independent, Active and Assertive boys are viewed as being more acceptable than their female counterparts, no doubt because the teachers do not expect girls to display those behaviors. The conforming girl also ranks significantly higher than the conforming boy, but girls are supposed to be rigid students and are to conform to the teachers' wishes.

The behavior grouping having the fewest significant differences was the Passive, Dependent and Acquiescent group. Apparently girls and boys who are dependent upon the teacher are not viewed as being different from one another, except for their expected grades, for which the girls do excel.

All of the differences were statistically significant

for the Flexible, Nonconforming, Untidy behavior grouping. For every dimension the boys were rated higher than the girls. Because boys are expected to be flexible students it is not surprising that teachers would consider them to be more intelligent, to receive better grades, and to be more typical students. Naturally, then, a teacher would prefer a flexible boy to a flexible girl since girls are not expected to express such behavior.

For 13 of the 20 differences between the means for the boys and girls on each judgment dimension and for the four behavior groupings, and the total rating, the observed differences were proven to be real and not just due to random variation. Therefore, for the majority of situations there is a significant difference between the scores for the boys and girls, which provides strong evidence that the sex of the given child determines the teachers' expectations for their behavior. Obviously sex-typed behaviors are approved by the teacher when they are displayed by the sex of child that the teacher expects, and are not approved when the opposite sex child displays them. This certainly substantiates the hypothesis that elementary teachers do have certain sex-role expectations for children and that their expectations are based on the pupil's sex.

The Sex-Role Expectation Score and Its Analysis

As another method of measuring the 150 elementary teachers' differential expectations for boys and girls, a score

for each determined from their ratings of the 16 children depicted in the situations was calculated. The score was determined in the following manner: The two situations for both boys and girls for the four behavior groupings were matched, so that, for example, the ratings given the two boys who were Flexible, Nonconforming and Untidy could be compared with the two girls displaying the same behavior. The ratings for each of the judgment dimensions (Intelligence, Grades, Typical, and Prefer Child) were added together for both situations depicting the same sexed child with identical behaviors. In the case of the Flexible behavior grouping, because it was hypothesized that teachers would more likely expect boys to display the behaviors, the total score given to the two girls in the grouping was subtracted from the total score given to the boys. For example, if the teacher had given the two boys with flexible behavior a total of 28 points and the two girls 25 points, the difference between the scores would be +3 points, whereas the difference would be -3 if the boys had 25 points and the girls had 28. The differences between girls and boys were computed for the remaining three behavior groupings in the same manner, with the Rigid girl, the Passive girl, and the Active boy having the scores of their counterparts subtracted from their scores due to their hypothesized higher position in sex-role expectations of teachers. When the differences for the four behavior groupings were determined the total was computed by balancing out the positive and negative values. This procedure was conducted

for each individual teacher's responses to the questionnaire.

This method produced the following set of sex-role expectation scores for the 150 elementary teachers in this survey:

| Sex-Role Expectation Score and Absolute Frequency ( ) | | Sex-Role Expectation Score and Absolute Frequency ( ) | |
|---|---|---|---|
| -13 | (1) | +5 | (11) |
| -7 | (3) | +6 | (7) |
| -6 | (2) | +7 | (6) |
| -5 | (3) | +8 | (11) |
| -4 | (1) | +9 | (6) |
| -3 | (5) | +10 | (3) |
| -2 | (4) | +11 | (8) |
| -1 | (9) | +12 | (4) |
| | | +13 | (1) |
| 0 | (10) | +14 | (2) |
| | | +15 | (3) |
| +1 | (17) | +16 | (4) |
| +2 | (7) | +18 | (1) |
| +3 | (8) | +20 | (1) |
| +4 | (12) | | |

The negative scores indicate that the teachers do not have the sex-role expectations that they were predicted to have. The 28 teachers with negative scores did not give higher ratings to the Rigid, Conforming, Orderly girls or the Active, Independent, Assertive boys, as it was hypothesized that they would do, but rather gave the children's counterparts the higher ratings. Apparently the teachers were not concerned that they were rating an independent girl above an independent boy, and evidently the child's sex was not a factor in their ratings.

The 10 teachers who had a Sex-Role Expectations score of zero did not respond to the depicted children on the basis

of their sex and therefore did not have any sex-role expectations for the children. By not seeing a difference between a dependent girl and a dependent boy the teachers were reacting to the children as children and not as little adults who are to grow up in pre-determined roles in the society.

The clear majority of the teachers, 112, held predicted sex-role expectations. These teachers preferred conforming girls to conforming boys and flexible boys to flexible girls as they stood by their long-held expectations for appropriate behavior for children based on the child's sex. Granted, many of the teachers had low positive scores but even the low scores suggest that there is still a trace of sex-role expectations in the teachers' minds if not also in their actions. The large number of higher positive scores is frightening to anyone who realizes the danger of such stereotyped expectations of how children should behave and perform.

Tests for Significance of Findings: Pearson Correlations

The Sex-Role Expectation Score was used as the dependent variable, to test the correlation of it to several independent variables, in a series of Pearson correlation tests. This was done in order to explain the effect of the community structure and individual attributes on teachers' expectations for children, and in doing so confirm or reject the proposed hypotheses. The zero-order correlation coefficients for the variables appear in Appendix I, Table 24. The variable Sex-Role Expectation Score was correlated with the teachers'

background data variables: Grade Teaching; Years Teaching Experience; Years Lived in County; Years Taught in County; Size of Place Where Childhood was Spent; Amount of Involvement in Community Activities; and Age, and with their county's ratings on the variables: Differentiation; Median Family Income; Economic Inequality; Female Labor Force Participation; Percent Females College Educated; and Percent Working Women with Preschool Children.

There was only one significant Pearson correlation value (the coefficients were not considered to be significant if their level was greater than $p<.05$) for the Sex-Role Expectation Score variable and the above listed independent variables; Years Lived in County had an $r$ value of .25 and a significance level of $p<.002$. This statistical finding suggests that teachers' sex-role expectations for children intensify with the increasing number of years they have lived in the county they reside in. The $r$ value suggests covariance but not necessarily causality so one cannot imply that the amount of time a teacher has lived in a county actually determines their sex-role expectations. However, as the significance value indicates, there is sufficient evidence that the Sex-Role Expectation Score and the Years Lived in County variables are indeed linearly related. This finding is important for the understanding of the significance of the community in the formation of teachers' sex-role expectations. Since there is a relationship between expectations and the number of years a teacher has lived in a certain county,

there is something to be said for the interaction between teacher and community and the effect of the community on the teachers' attitudes. This relationship does not consider what type of county a teacher is from (i.e., whether it has a high or low level of community structure and status of women), so it applies to all types.

Another series of Pearson correlation coefficients was computed with the same individual background, community structure, and status of women variables previously listed, and used as dependent variables the differences in the scores for the boys and girls on the four behavior groupings: Flexible, Nonconforming, Untidy; Rigid, Conforming, Orderly; Active, Independent, Assertive; and Passive, Dependent, Acquiescent (see Appendix I, Table 25, for the zero-order correlation coefficients). There were several significant relationships between the variables.

With the Flexible, Nonconforming, Untidy differences in male and female students there were significant correlations with three variables, Years Taught in County, Years Lived in County, and Age. Years Taught in County had a .21 correlation with the Flexible behavior difference, and was significant at the $p<.008$ level. The strongest correlation was with Years Lived in County ($r = .27$, $p<.001$), and Age had a .20 correlation ($p<.01$) with the difference in behavior ratings for the boys and girls. Even though the correlations are not extremely high the suggested covariance between the variables is important to note. Because the Flexible, Nonconforming,

Untidy difference variable has the highest values when the teachers expect boys to portray the behavior, these findings imply that a teacher is more likely to expect boys to be flexible and nonconforming when he or she has lived and taught in the county for a greater number of years and is somewhat older. These findings apply to teachers from counties with both high and low levels of community structure and status of women. The finding that the teacher's age is related to the expectation for boys to be nonconforming students is in some contradiction with Hypothesis #4 which advanced the theory that younger teachers would have more strict sex-role expectations. The hypothesis cannot be totally rejected, however, since the finding applies only to the children portraying flexible behaviors.

There were no significant relationships for the Rigid, Conforming, Orderly differences and the independent variables. It is interesting that the polar opposite of this behavior grouping which was previously discussed (the Flexible, Nonconforming, Untidy group) had some noteworthy correlations while this grouping did not. The reason for this is most logically explained by the fact that the teachers did not perceive that much difference between the conforming boy and girl.

The Active, Independent, Assertive differences had two significant correlations with the independent variables. The Female Labor Force Participation variable and the Percent Working Women With Preschool Children variable had .19 and .21 $r$ values with significance levels of $p<.02$ and $p<.01$.

respectively. Both the variables are representative of women's status in the community. Apparently there is some relationship between the teachers' expectations for independent children and the status of women in their county. Because the correlations suggest that the expectation scores increase as the values of the other variables increase, this signifies that a teacher is more likely to expect boys to be independent and assertive if the teacher's county has a high status for women. These findings are in contradiction with Hypothesis #2 which proposed that teachers from counties with a high status for women would be less likely to have sex-role expectations for children. However, the correlations suggest only that there is a significant relationship for the Active, Independent, Assertive differences and two of the three Status of Women variables, hardly enough evidence to cause complete rejection of the hypothesis.

Median Family Income, Economic Inequality, and Female Labor Force Participation had significant correlations with the Passive, Dependent, Acquiescent differences. Median Family Income and Female Labor Force Participation correlated negatively with the dependent variable ($r$ = -.30, $p$<.001 and $r$ = -.26, $p$<.001, respectively) while Economic Inequality correlated positively ($r$ = .26, $p$<.002). These correlations imply that teachers who expect dependent behavior from girls rather than boys are likely to be from counties with low levels of community structure and status of women. The findings partially support Hypothesis #3 which advanced the theory that teachers living in counties with a low level of

community structure and a low status for women would likely have sex-role expectations for children, although this can be said to be true only when teachers consider children who portray dependent behavior.

In the third set of Pearson correlation tests, the dependent variables were the teachers' scores for the boys and girls on the four judgment dimensions (i.e., Intelligence, Grades, Typical, and Prefer Child) and the independent variables were the same individual and community background variables used previously (see Appendix I, Table 26 for the zero-order correlations). The scores for the boys and girls on the four judgment dimensions were used separately but the only significant correlations with the independent variables were found in the boy's scores.

For the boys' expected intelligence a -.19 Pearson coefficient was significant at the $p<.02$ level for the variable Economic Inequality. The negative relationship suggests that when inequality in a county is low the teachers are more likely to see a difference in the intelligence of boys and girls and will rate boys higher. For the boys' preference dimension two variables had significant correlations, Amount of Involvement in Community Activities ($r = -.17$, $p<.04$) and Age ($r = .17$, $p<.03$). It would seem that the fewer community activities a teacher is involved in (or the less closely he or she is associated with their community) the more likely he or she is to prefer a boy displaying a certain behavior to a girl with the same behavior. As the teacher

aged the preference for a male student also increases. The teachers' preference for boys is not specifically related to the type of county they live in, that is whether it has high or low levels of community structure and status of women, but rather applies to teachers from all types of counties.

Even though there were only three significant correlations on the male judgment dimensions it is interesting that there were none for the female dimensions. Apparently none of the independent variables are related to the teachers' scores for the girls on their expected intelligence, grades, typicalness, and preference for them in the classroom.

## Tests for Significance of Findings: Multiple Regression Analysis

Multiple regression analysis was conducted in order to determine if there was a relationship between the dependent variables and the combined independent variables. Three sets of regression analysis were computed with the independent variables always being the individual and community background variables. At different times the dependent variables were the Sex-Role Expectations Score, the differences in the scores given the boys and girls for the four behavior groupings, and the teachers' scores for the boys and girls on each of the judgment dimensions (all designed, from the teachers' answers to the four questions asked of each of the 16 depicted children in the questionnaire, to measure sex-role expectations).

The first multiple regression analysis discussed will be for the Sex-Role Expectations Score. None of the community background variables (i.e., Differentiation, Median Family Income, Economic Inequality, Female Labor Force Participation, Percent Females College Educated, and Percent Working Women with Preschool Children) had a linear effect on the dependent variable when the effects of the other independent variables had been adjusted; the effects of two or more independent, community background variables were not additive. However, for the individual background variables some results were significant. In the stepwise regression analysis the first variable to be entered in the equation was Years Lived in County with a multiple regression coefficient of .25 and an $F$ value of 9.64 ($p<.01$). Since the $F$-ratio was significant the conclusion is that the number of years a teacher has lived in a county does account for a portion of the variance in their Sex-Role Expectation Score, even though the variance accounted for is only 6 percent ($r^2 = .06$).

Adding more variables into the multiple regression equation will always account for more variance than in the single-predictor equation but it is important to determine if each added variable significantly increases the amount of variance that is accounted for. In this case the variable Years Teaching Experience was second to be added into the equation, increasing the multiple regression coefficient to .26, the proportion of variance accounted for to .07, and maintaining an $F$-ratio significant at $p<.01$ ($F = 5.25$). The next two variables to be added were Size of Place Where

Childhood was Spent ($F = 3.60$, $p<.05$) and Amount of Involvement in Community Activities ($F = 2.73$, $p<.05$). Beta, the multiple regression coefficient and the coefficient of determination ($r^2$, proportion of variance accounted for) increased slightly but stabilized at .26 and .07, respectively. The remaining individual background variables, Years Taught in County, Age, and Grade Teaching, were not entered into the equation because their effects were not additive in the accountability of variance in the dependent variable, Sex-Role Expectation Score, although Years Taught in County just missed having the required 2.21 $F$ value at $p<.05$ with a value of 2.20.

Therefore, 7 percent of the variance in the Sex-Role Expectations Score was explained by four individual background variables operating jointly: Years Lived in County, Years Teaching Experience, Size of Place Where Childhood was Spent, and Amount of Involvement in Community Activities. The strength of dependence is not great since only a small portion of the variation can be accounted for, however, the significance of the effect of the four variables is noteworthy.

The second multiple regression analysis utilized the differences in the scores for boys and girls for the four behavior groups (Flexible, Nonconforming, Untidy; Rigid, Conforming, Orderly; Active, Independent, Assertive; Passive, Dependent, Acquiescent) as the dependent variables. For the Flexible, Nonconforming, Untidy students' differences in scores none of the community background variables were significant in explaining the variation in the scores but six of the individual background variables were.

Years Lived in County is the best predictor of the dependent variable with a coefficient of .27 and an F-ratio of 11.79 ($p<.01$). The number of years a teacher has lived in a county explains 7 percent of the variance in the difference in scores for boys and girls who display nonconforming behavior. The other independent variables to significantly increase the amount of variance accounted for are Age ($F = 6.38$, $p<.01$), Years Teaching Experience ($F = 4.51$, $p<.01$), Years Taught in County ($F = 3.50$, $p<.01$), Grade Teaching ($F = 2.81$, $p<.05$), and Size of Place Where Childhood was Spent ($F = 2.33$, $p<.05$). The final multiple regression coefficient was .30 and the six independent variables combined to explain 9 percent of the variance in the dependent variable.

For the Rigid, Conforming, Orderly students' differences none of the community variables were significant in the analysis. The Size of Place Where Childhood was Spent and Age variables became significant when they were combined with the effects of the Years Taught in County variable ($F = 3.19$, $p<.05$) and served to explain 6 percent of the variance with a multiple regression coefficient of .25. Years Teaching Experience and Grade Teaching also significantly increased the amount of variance accounted for ($F = 2.68$, $p<.05$ and $F = 2.40$, $p<.05$, respectively) with a final regression coefficient of .28 and a coefficient of determination of .08. These five variables combined to explain 8 percent of the variance in the differences in scores for boys and girls with Rigid, Conforming and Orderly behavior.

For the Active, Independent, Assertive differences

both community and individual background variables were significant in explaining some of the variance in the scores. Considering the individual variables first, Years Teaching Experience and Age combined with Amount of Involvement in Community Activities ($F = 2.61$, $p<.05$) to account for 5 percent of the variance, having a regression coefficient of .23. The community variables which were significant at the $p<.05$ level were Percent Working Women with Preschool Children ($F = 6.61$) and Female Labor Force Participation ($F = 3.68$). The two produced a coefficient of .22 and explained 5 percent of the variance in scores for the Active, Independent, Assertive students' differences.

Years Teaching Experience and Years Taught in County combined with Years Lived in County to produce a significant $F$-ratio ($F = 3.39$, $p<.05$) and a regression coefficient of .25 to explain 6 percent of the variance in the Passive, Dependent, Acquiescent differences in scores for boys and girls. The Age and Grade Teaching variables were significant by themselves in adding to the percent of variance explained by the individual background variables ($F = 2.86$, $p<.05$ and $F = 2.44$, $p<.05$, respectively). The five variables had a .28 multiple regression coefficient to explain approximately 8 percent of the variance in the dependent variable.

All of the community background variables were significant in the multiple regression analysis for the Passive, Dependent, Acquiescent differences variable. Median Family Income was the best predictor of the differences ($F = 14.25$, $p<.01$) having a coefficient of .30 and accounting for almost

9 percent of the variance. The other variables to be added into the equation were Economic Inequality ($F = 8.05$, $p<.01$), Percent Females College Educated ($F = 5.84$, $p<.01$), Differentiation ($F = 4.47$, $p<.01$), Female Labor Force Participation ($F = 3.73$, $p<.01$), and Percent Working Women with Preschool Children ($F = 3.14$, $p<.01$). The six independent, community background variables combined to explain 12 percent of the variance in the scores for the Passive, Dependent, Acquiescent grouping (the regression coefficient was .34).

The third set of multiple regression analysis used the teachers' scores for the boys and girls on the four judgment dimensions (Intelligence, Grades, Typical, Prefer Child) as the dependent variables. There were significant results for only three of the eight groupings, boys' intelligence scores, the preference for boys, and the preference for girls.

For the boys' Intelligence variable both individual and community background variables explained some of the variance in the scores. The effects of the variable Age when added with the Years Taught in County variable significantly explained ($F = 4.62$, $p<.01$) 6 percent of the variance with a regression coefficient of .24. Size of Place Where Childhood was Spent and Amount of Involvement in Community Activities were significant by themselves in accounting for a portion of the variance ($F = 3.32$, $p<.05$ and $F = 2.63$, $p<.05$, respectively). The final coefficient was .26, and 7 percent of the variance was explained by the four individual background variables.

In separate regression equations Economic Inequality combined with Differentiation and Female Labor Force Participation to each time explain 4 percent of the variance in the Intelligence ratings for boys. Economic Inequality and Differentiation had significant F-ratios of 5.47 and 3.34, respectively, at the $p<.05$ level with a regression coefficient of .21. Female Labor Force Participation and Economic Inequality also had F-ratios significant at $p<.05$ ($F = 5.47$ and 3.43, respectively) with the same coefficient of .21.

For the Prefer Child judgment dimension for the boys both individual and community background variables were significant in accounting for variance in the scores. Three individual background variables, Age, Amount of Involvement in Community Activities, and Years Lived in County, combined to explain 6 percent of the variance ($r = .23$). Their F-ratios were 4.37, 3.90, and 2.83, respectively, all being significant at the $p<.05$ level.

The community background variable Economic Inequality combined its effects with Median Family Income to produce an F-ratio of 3.37 ($p<.05$), a regression coefficient of .21 and a coefficient of determination of .04 in the explanation of the preference for boys in the classroom. Percent Females College Educated ($F = 3.25$, $p<.05$), Female Labor Force Participation ($F = 2.76$, $p<.05$), Differentiation ($F = 2.43$, $p<.05$), and Percent Working Women with Preschool Children ($F = 2.11$, $p<.05$) all contributed significantly to the accountance of variance in the dependent variable. With a multiple regression

coefficient of .28 the six variables explained 8 percent of the variation in the teachers' scores for the preference of the male child in their classes.

For the girls' Prefer Child judgment dimension the Female Labor Force Participation variable could not significantly account for variation in the scores by itself, but when its effects were combined with the Economic Inequality variable the F-ratio of 3.37 was significant at the $p<.05$ level, and with a regression coefficient of .21, the portion of variance explained was 4 percent. The addition of four more community background variables into the equation significantly increased the amount of variance accounted for by the independent variables to 9 percent; these variables were: Percent Females College Educated ($F = 4.23$, $p<.01$), Differentiation ($F = 3.47$, $p<.01$), Percent Working Women with Preschool Children ($F = 2.81$, $p<.05$), and Median Family Income ($F = 2.33$, $p<.05$). The final multiple regression coefficient for the variables was .30. None of the individual background variables were significant in explaining the teachers' preferences for female students.

Summary of Data Analysis Results

The data concerning the teachers' basic expectations for student behavior was quite conclusive -- the elementary teachers questioned in this study did have sex-role expectations for children. The tests for the differences in the means for the boys' and girls' scores on each judgment dimension

for all behavior groupings had 13 out of 20 possible significant results. The analysis of variance tests also had several significant findings which further substantiated the proposed hypothesis (#1) which advanced the theory that certain behaviors displayed by children would be considered appropriate or inappropriate because of the sex of the child. The teachers in this sample did express their expectations for children on the basis of the pupil's sex.

In order to determine the sources of the teachers' expectations another series of data analysis was conducted utilizing the teachers' individual attributes and the unique characteristics of the counties in which they lived. Hypotheses were proposed which attempted to specify the importance of the structure of the county and the status of women within it as being sources of expectations on the macro level, and the teachers' individual background characteristics as a source of their expectations on the micro level. It was believed that the conception of expectations for sex-role appropriate behavior took place on both levels, but it was important to determine to what extent that assumption was correct, and if indeed it was.

Through Pearson correlation analysis it was discovered that very few of the community and individual variables had significant relationships with the variables designed to measure the teachers' sex-role expectations. Although the findings were few it was suggested that there was possible evidence to reject the hypothesis that a high status for

women in a county was related to teachers' likeliness not to have strict sex-role expectations (Hypothesis #2) since it was discovered that high rates of female labor force participation and employment of women with preschool children were related to the teachers' high expectations for boys to display independence. Conversely, however, it was discovered that teachers from counties with suggested low levels of community structure and status of women were likely to expect girls to be dependent, a finding in agreement with the theory advanced in Hypothesis #3.

The significance of the teachers' years of teaching experience and age was not found to be extremely important in the explanation of sex-role expectations, although older teachers were discovered to have a slightly higher level of expectations for boys displaying nonconforming behavior. It had been hypothesized (#4) that older teachers would be less likely than younger teachers to have strong sex-role expectations.

The amount of time the teachers had taught and lived in their counties was not as significant in the explanation of their expectations as had been suspected (Hypotheses #2 and #3). Both variables were found to correlate with the teachers' expectations for boys to be nonconforming pupils, and the number of years the teachers had lived in the county was related positively to the general Sex-Role Expectation Score, which means that the longer the amount of time spent in the county the stronger are the teachers' expectations.

The correlation coefficients did not support the theory that teachers who had grown up in certain sized communities would have specific expectations for children (Hypothesis #5).

Neither were the overall results of the multiple regression analysis extremely helpful in the explanation of elementary teachers' sex-role expectations for children. For the Sex-Role Expectation Score four of the individual background variables (Years Lived in County, Years Teaching Experience, Size of Place Where Childhood was Spent, and the Amount of Involvement in Community Activities) could account for only 7 percent of the variance in the scores, and none of the community background variables were significant in the analysis.

In the analysis using the differences in the scores for boys and girls in the four behavior groups, the results were slightly more conclusive. For the Flexible, Nonconforming, Untidy differences there were no community variables that were significant, but six of the individual background variables (Age, Years Lived in County, Years Teaching Experience, Years Taught in County, Grade Teaching, and Size of Place Where Childhood was Spent) combined their effects to explain 9 percent of the variance in scores.

In the analysis of the Rigid, Conforming, Orderly differences five individual background variables (Size of Place Where Childhood was Spent, Age, Years Taught in County, Years Teaching Experience, and Grade Teaching) accounted for

8 percent of the variance, but once again none of the community variables were significant. For the Active, Independent, Assertive differences both community and individual background variables explained some of the variance; three individual background variables (Years Teaching Experience, Age, and Amount of Involvement in Community Activities) accounted for 5 percent, and two community variables, Percent Working Women with Preschool Children and Female Labor Force Participation, also accounted for 5 percent.

The individual and community variables combined to explain a total of 20 percent of the variance in the differences in scores for the Passive, Dependent, Acquiescent boys and girls. Five individual variables (Years Teaching Experience, Years Taught in County, Years Lived in County, Age, and Grade Teaching) accounted for 8 percent of the variance, and all six of the community variables accounted for 12 percent of the variation in scores.

Concerning the scores for the boys and girls on the four judgment dimensions, none of the community or individual background variables could account for the variation in scores for the girls' Intelligence ratings, the boys' and girls' Grades ratings, or the boys' and girls' Typical ratings. For the boys' Intelligence scores four individual background variables (Age, Years Taught in County, Size of Place Where Childhood was Spent, and Amount of Involvement in Community Activities) explained 7 percent of the variance, and three community variables (Economic Inequality, Differentiation, and

Female Labor Force Participation) significantly explained 4 percent of the variance. Both individual and community variables explained variance in the boys' scores on the Prefer Child dimension, with three individual variables (Age, Amount of Involvement in Community Activities, and Years Lived in County) accounting for 6 percent, and all six community variables accounting for 8 percent. For the girls' Prefer Child scores none of the individual background variables were significant in the analysis, but all of the community variables combined to explain 9 percent of the variation in scores.

The behavior differences variables had the most significant results overall, although for two of the groups, Flexible, Nonconforming, Untidy and Rigid, Conforming, Orderly, none of the community variables explained any of the variance in the scores. The variable Age, which is the age of the teachers at the time they were surveyed, was significant more times, a total of six, in the three regression problems than any of the other community or individual background variables. However, Years Teaching Experience, Economic Inequality, and Female Labor Force Participation were significant five times each, and none of the variables were significant less than three times each.

Three unique dependent variables were constructed to measure the teachers' sex-role expectations, the Sex-Role Expectations Score, the differences in the scores for boys and girls in the four behavior groups, and the scores for the children on each judgment dimension. The same independent

variables were analyzed with each of the three dependent variables in order to determine if, and to what extent, the teachers' expectations were associated with their individual and community backgrounds. However, the majority of the variance in the dependent variables, for all cases was not accounted for by the predictor variables. The low regression coefficients and coefficients of determination signify that the community and individual background variables do not contribute very greatly to the explanation of this sample's sex-role expectations for children.

The data analysis for this study confirmed one solid fact -- elementary teachers do have differential and firm sex-role expectations for children. Unfortunately, however, the results could not completely support the advanced theories for the sources and establishment of the teachers' expectations.

# Chapter 10

## CONCLUSIONS AND IMPLICATIONS

> It is difficult to imagine that we can meet the educational needs of all children . . . a goal repeatedly stated . . . if these needs are, in part, determined in advance by the sex of the pupil, and by artifical expectations of his teacher (Zach and Price, 1973:12).

This study attempted to discover to what extent and for what reasons sex-role expectations existed for elementary teachers in non-metropolitan Kansas counties. More specifically, it was hypothesized that certain community structure and individual attributes were the sources of teachers' expectations and that these sources were determining factors for the degree of stereotyped expectations. In order to examine teachers' differential attitudes concerning children's behavior and to test the advanced hypotheses, a questionnaire, constructed by Dr. Norma Feshbach (1971), was utilized to measure preferences for children displaying certain behaviors.

The overall excellent quality of the instrument cannot be denied. The instrument designed to measure expectations had been previously tested and was proven to be both a valid and reliable measure for this study. It was discovered that the 150 elementary teachers in the sample had specific sex-role expectations for children, and the instrument adequately tested and measured those expectations.

The proposed theory of the basic sources of teachers'

expectations cannot be rejected. It is obvious that individual qualities as well as community characteristics have some impact on the formation and intensity of sex-role expectations. Even though the significant findings were not numerous there apparently is something operating within the teachers and within their environments that determines their responses to and reactions toward children. Teachers' individual characteristics do seem to determine the nature and extent of their stereotypical attitudes and behavior. However, it is perhaps true that the real determining characteristics were not examined in this study, and, therefore, the significance of the effect was minimized.

Some of the insignificant findings may be due to the differences between the time periods for which the data was gathered. The information for the community structure and status of women variables was taken from 1970 census material. The variables designed to measure the teachers' sex-role expectations were based on 1977 data (gathered from the survey in that year, of 150 elementary teachers in non-metropolitan Kansas counties). This variation may account for some of the lack of major significant findings since it is possible that a county could have different levels of community structure and status of women after seven years, which would change the impact of that county on its teachers and their expectations for children.

One may also question the importance of the school environment and its effect on the formation of teachers'

sex-role expectations. Schools may be ideologically set apart from communities so that they have a different and unique relationship with the teachers which the communities do not have. The extent of unionization, the "open" dimension of the school, and the in-service experiences of the teachers are all important in determining the impact of the school on its teachers and their allegiance to it. These factors may all serve to determine the teachers' attitudes, and in turn their behaviors, toward their students. Perhaps the school itself is more important than the entire community in shaping a teacher's expectations for students, but this study did not test that hypothesis.

It can be speculated that there are several other reasons why the hypotheses advanced in this study could not be firmly accepted. A large sample size is always desirable and although 150 is not a small number, an even larger sample size would have strengthened the analysis. One cannot be sure of course that a larger sample would have increased the amount of significant findings, but it can be assumed that at least the hypotheses would have had a more conclusive testing.

Another issue concerning the sample could also possibly account for some of the insignificant findings. The original sample design for this study was to determine what counties had scores on the community structure and status of women variables which placed them as either perfectly high or low representatives of the types of counties. This sampling method was considered to be a very desirable one since a county could

have been examined as either a pure "hi" or "lo" without looking at each characteristic individually (as was required for the method which was finally resorted to). The steps were conducted to select the pure-type counties, and the analysis showed 15 counties to be above the average on the community structure and status of women variables and 10 to be below average.

This concept of using only the polar-type counties could not be employed because it was discovered that there were not enough teachers from the selected counties who had completed the questionnaire to provide an adequate sample size. Had the original sampling procedure been utilized the hypotheses could have been tested with less difficulty and perhaps with much more accuracy, which would have undoubtedly benefited the study.

The teachers who responded to the questionnaire had one very unique thing in common -- they were all students enrolled in Continuing Education and on-campus courses at three major Kansas universities. It is likely that this common feature biased the results since obviously a select group of teachers was studied. Teachers who return to school typically are close enough to a university that it is relatively easy for them to attend classes at the university, or it is possible that Continuing Education courses are offered in their community due to the proximity of the university. Therefore, the centrality of the community is important in understanding why the teachers find it possible to take classes.

Because there are numerous Kansas counties which are not highly central it is sometimes difficult for their inhabitants to do everything they would like. It may be nearly impossible for some teachers in remote counties to continue their education, even if they have the strong desire to do so. The method of sampling had a limiting effect on the types of teachers that were accessible for the survey.

Conceivably the best way to avoid the problem of having this special group of teachers would have been to sample directly in every non-metropolitan county so that a true representation of the Kansas elementary teaching population would have been had. This method of data collection would have been very expensive and time-consuming. It would have been necessary to contact principals and perhaps even school boards from every district in the school systems involved, which would have presented many problems for simple data collection. Although this type of direct sampling would have insured that every elementary teacher in a non-metropolitan Kansas county had an equal chance of being included in the study (that is if all the principals and school boards would have agreed to have their teachers respond to the questionnaire, which is unlikely to have happened), it is obvious that the method utilized instead was relatively more simple and straightforward even though it limited the population.

Because of the type of sample that was tested for this study, the data analysis results can actually be generalized to only very similar populations and measurement variables.

In other words, the external validity of the study is restricted by the fact that only elementary teachers who were students in advanced Continuing Education or on-campus courses were surveyed. However, one can say that the study's effects can more appropriately be generalized to other populations than could Feshbach's (1971). Feshbach's sample was comprised entirely of student teachers, whereas this sample included only full time elementary teachers.

Several reasons have been suggested as to why the hypotheses were not conclusively confirmed, but the idea can also be proposed that perhaps the hypotheses themselves were not completely and logically consistent with the background theory. It is believed that some inconsistencies in the hypotheses may have existed which could have caused them to be not fully substantiated by the results of the study.

In Hypothesis #4, which presented the theory that younger teachers would have more strict sex-role expectations, it can now be seen that structural effects were wrongly mixed with the age variable. Presumably younger teachers have just come from college and university communities which likely have high levels of community structure and status of women. The contact with a high level of community structure had been previously theorized to cause teachers to have fewer sex-role expectations, but in Hypothesis #4 younger teachers who had been recently influenced by high community structure were hypothesized to have more expectations, an obvious inconsistency in the theory. The structure of the university environment

and the university community should have been considered as having an impact on the young teachers' formations of expectation patterns.

Hypothesis #4 also did not account for the interaction of community structure with the teachers' perceptions over time. The length of time spent in a community had been hypothesized as having an effect on the teachers' expectations whether they lived in low or high structured communities. But for Hypothesis #4 it was not specified as to what effect the structure of the community would have on teachers who had only a little, or a great deal, of teaching experience.

Another problem that surfaced again pertains to the length of time the teachers had lived in the community. The variable was hypothesized to be important in the backgrounds of teachers in highly structured communities as well as in low structured communities. It was believed that teachers with a longer period of residence would be more likely to have firmly accepted the more equal (in the case of communities with a high level of structure) or more stereotypical (in low structured communities) attitudes of their communities than would teachers who had not been in the communities for as long. This theory did not consider the fact that the teachers who were recent migrants to the communities were just as likely to have come from high as low structured places, and that the length of residence would then not have the importance on the development of their expectations that it was hypothesized to have -- since they might have moved into a community which

was very similar to the one they left.

Despite the suggested reasons for the lack of more significant results and the apparent inherent fallacies in the hypothetical reasoning, the fact remains that the elementary teachers in this sample did have obvious sex-role expectations for children. Although it could not be specifically determined as to what actually fostered the conception of the expectations and caused them to persist throughout years of teaching experience, the evidence that they do exist for the elementary teachers involved in this study is in itself a major finding.

Elementary teachers certainly are not the first to constrain boys and girls with their sexist values by making certain assumptions about children's interests and abilities solely on the basis of their sex. Parents have the early years of a child's development to insure that their ideas concerning appropriate and acceptable behavior for boys and girls are synthesized. When the children enter the school environment they often have a firm understanding of what they should and should not do as a boy or girl. Because of previous reinforcement, habit, and societal expectations it is not hard for teachers, due to their own beliefs and expectations, to continue the pattern of sex-role stereotype reinforcement that the children are so accustomed to.

The effects of sex-role stereotyping are seldom realized by those who have different expectations for boys and girls. Not only can stereotypes reduce available options for children but they can also eventually inhibit intellectual

development.

> By attempting to live up to sex role expectations, boys avoid activities which might be considered "sissy." Girls avoid aggressive, action roles which also do not fit into sex role expectations. The result is that the intellectual and creative talents become restricted to "socially approved" areas. The loss of intellectual and creative talent due to sex role stereotyping is beyond estimating (Sadker, 1975:315).

If sex-role stereotyping stifles children's creativity and limits their learning potential it will also prevent them from developing emotionally (Zach and Price, 1973) and thereby increases hesitancy, stress, and fear of challenges and problems in their growing years.

The relationship of sex-role expectations to learning needs to be systematically investigated. It would seem that teachers' expectations for children affect their treatment of them and the treatment, in turn, affects what the children learn. Children should not be deprived of learning opportunities because of their teachers' biases, but daily, in school systems across the country, children are prevented from developing their maximum potential. Expectations inhibit children, and only when teachers realize that their thoughts and behaviors have educational implications will they understand what they are doing to their students.

There is a congruity between teachers' beliefs and their actions which causes them to believe that they treat boys and girls equally (Chasen, 1974). It is difficult to change people's ideas when they believe they are being fair. Only when teachers become aware of the subtleness and

pervasiveness of their unequal and differential treatment of children will they be able to change their attitudes and then their behaviors. However, it is not easy to isolate an expectation and change it. An inspection of one's thoughts and behaviors and a simple consciousness of equality can often lead to the demise of the self-fulfilling prophecy for children's development and growth in a sexist environment. A school atmosphere that expects and values variety and encourages individual exploration minimizes the probability of a self-fulfilling prophecy and certainly benefits the teachers themselves, almost as much as the students.

Feshbach warned at the conclusion of her study, "If subsequent research indicates that these preferences persist past the teacher-training stage, then modifications in existing training and selection procedures would appear to be necessary," (Feshbach, 1971:83). This study of 150 elementary teachers in non-metropolitan Kansas counties proved that in fact full time elementary teachers do have differential sex-role expectations, which obviously means that teachers' preferences for children do persist far beyond their schooling days when they learn how to teach.

Perhaps the most intense and demanding challenge facing educators and the educational system today is that of exploring and confronting teachers' biases, misconceptions, and stereotypes that perpetuate and intensify sex-role expectations for children. It will do little good to change children's

readers, introduce "non-sexist" toys, and allow children to play as they will during recess if teachers' basic expectations are not closely examined and finally eradicated. Increasing teachers' awareness and causing them to realise the effects and implications of their preferences for certain pupils are mandatory measures. The explorations should be a vital part of teacher training programs as well as in-service training programs. For example, it would be difficult but not impossible to monitor classrooms to determine what teacher-behaviors differentiate students by sex and then give the teachers direct feedback so they can attempt to modify their behavior (Ricks and Pyke, 1973). There are undoubtedly many other steps that could be taken to insure that teachers become conscious of their beliefs and actions so that they might attempt to realistically change them.

None of this will be easy, but then neither is it easy for the children who are daily subject to the supressive expectations of their teachers. Our society attempts to educate every child equally, but until teachers stop basing their treatment of, and interaction with, children solely on the basis of the child's sex then the educational system will continue to injustly serve those it was designed to accomodate. However, without support from the larger society in general, and parents in particular, the teachers will not be successful in their attempt to realize a non-sexist schooling environment, and the children will continue to suffer the damaging and lasting effects of sex-role stereotyping.

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# APPENDICES

# APPENDIX I

## TABLES

Table 1

Rankings of Personality Clusters by Sex in Order of Mean Scores Obtained on Each Judgment Dimension

| Cluster Situation | Independent Active Assertive | | Dependent Passive Submissive | | Flexible Nonconforming Untidy | | Rigid Conforming Orderly | |
|---|---|---|---|---|---|---|---|---|
| | Boy | Girl | Boy | Girl | Boy | Girl | Boy | Girl |
| Total | 6 | 8 | 4 | 3 | 5 | 7 | 2 | 1 |
| Popular | 7 | 8 | 4 | 3 | 5 | 6 | 2 | 1 |
| Generous | 7 | 8 | 4 | 3 | 5 | 6 | 2 | 1 |
| Prefer child in class | 6 | 8 | 4 | 3 | 5 | 7 | 2 | 1 |
| Intelligent | 3 | 5 | 8 | 7 | 2 | 6 | 4 | 1 |
| Grades | 3 | 6 | 5 | 4 | 7 | 8 | 2 | 1 |

(Source: Feshbach, 1971: Table 3, p. 81)

Table 2

Means and Standard Deviations of Independent Variables

| Variable | Mean | Standard Deviation |
|---|---|---|
| Centrality 1970 | 1674.03 | 7610.09 |
| Differentiation 1970 | 24.71 | 28.00 |
| Mean-Median Family Income 1970 | 1164.26 | 468.08 |
| Mean-Median/Mean Family Income 1970 | 13.39 | 4.80 |
| Circulation of K.C. Star 1960 | 774.94 | 1521.36 |
| Circulation of Wichita Eagle 1960 | 247.12 | 678.39 |
| Circulation of Topeka Capital 1960 | 444.53 | 733.47 |
| Total Paper Circulations 1960 | 1466.78 | 1843.38 |
| Papers Per Family 1960 | 31.17 | 26.90 |
| Families with Incomes Below Poverty 1970 | 12.37 | 3.84 |
| Families with Incomes Above $25,000 1970 | 2.58 | 1.65 |
| Median School Years Completed by Persons 25+ 1970 | 12.10 | .31 |
| Median Family Income 1970 | 7440.76 | 895.36 |

Table 3

Zero-Order Correlation Matrix
of Independent Variables

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | .44 | -.03 | -.09 | .59 | -.005 | .22 | .58 | .19 | -.15 | .04 | .21 | .29 |
| 2 | | --- | -.14 | -.22 | .40 | .26 | .05 | .45 | -.02 | -.31 | -.06 | .34 | .40 |
| 3 | | | --- | .94 | -.12 | -.18 | .08 | -.13 | -.04 | .08 | .75 | .09 | -.07 |
| 4 | | | | --- | -.16 | -.20 | .13 | -.15 | .02 | .26 | .59 | -.08 | -.35 |
| 5 | | | | | --- | -.10 | .21 | .87 | .54 | -.01 | -.07 | .04 | .20 |
| 6 | | | | | | --- | -.18 | .21 | .001 | -.18 | -.15 | .10 | .13 |
| 7 | | | | | | | --- | .50 | .70 | .05 | -.04 | .03 | -.10 |
| 8 | | | | | | | | --- | .72 | -.06 | -.13 | .09 | .18 |
| 9 | | | | | | | | | --- | .14 | -.16 | -.19 | -.17 |
| 10 | | | | | | | | | | --- | .01 | -.50 | -.71 |
| 11 | | | | | | | | | | | --- | .22 | .29 |
| 12 | | | | | | | | | | | | --- | .60 |
| 13 | | | | | | | | | | | | | --- |

1 Centrality 1970
2 Differentiation 1970
3 Mean-Median Family Income 1970
4 Mean-Median/Mean Family Income 1970
5 Circulation of The Kansas City Star and Times 1960
6 Circulation of The Wichita Eagle and Beacon 1960
7 Circulation of The Topeka Daily Capital and Journal 1960
8 Total Paper Circulations 1960
9 Papers Per Family 1960
10 Families With Incomes Below Poverty 1970
11 Families With Incomes Above $25,000 1970
12 Median School Years Completed by Persons 25 Years and Older 1970
13 Median Family Income 1970

Table 4

Independent Variables
Correlation Matrix of Items Loading On
Factor One: Differentiation-Centrality

| | (1) | (2) | (5) | (8) |
|---|---|---|---|---|
| (1) Centrality 1970 | --- | .44 | .59 | .58 |
| (2) Differentiation 1970 | | --- | .40 | .44 |
| (5) Circulation of The Kansas City Star and Times 1960 | | | --- | .87 |
| (8) Total Paper Circulations 1960 | | | | --- |

Table 5

Independent Variables
Correlation Matrix of Items Loading On
Factor Two: Level of Living

| | (10) | (12) | (13) |
|---|---|---|---|
| (10) Families Below Poverty 1970 | ---- | -.50 | -.71 |
| (12) Median School Years Completed by Persons 25 Years and Over 1970 | | ---- | .60 |
| (13) Median Family Income 1970 | | | ---- |

Table 6

Independent Variables
Correlation Matrix of Items Loading On
Factor Three: Economic Inequality

| | (3) | (4) | (11) |
|---|---|---|---|
| (3) Mean-Median Family Income 1970 | --- | .94 | .75 |
| (4) Mean-Median/Mean Family Income 1970 | | --- | .59 |
| (11) Families Above $25,000 Income 1970 | | | --- |

Table 7

Correlation Matrix of Independent Variables
For Inclusion in Multiple Regression Analysis

| | (1) | (2) | (8) | (13) | (4) |
|---|---|---|---|---|---|
| (1) Centrality 1970 | --- | .44 | .58 | .29 | -.09 |
| (2) Differentiation 1970 | | --- | .45 | .40 | -.22 |
| (8) Total Paper Circulations 1960 | | | --- | .18 | -.15 |
| (13) Median Family Income 1970 | | | | --- | -.35 |
| (4) Mean-Median/Mean Family Income 1970 | | | | | --- |

Table 8

Means and Standard Deviations
of Dependent Variables

| Variable* | Mean | Standard Deviation |
|---|---|---|
| 1 | 4900.37 | 4759.48 |
| 2 | 786.59 | 829.27 |
| 3 | 234.59 | 257.65 |
| 4 | 918.49 | 862.43 |
| 5 | 452.82 | 431.62 |
| 6 | 3051.63 | 2816.91 |
| 7 | 1633.46 | 5054.28 |
| 8 | 728.50 | 753.11 |
| 9 | 204.02 | 219.62 |
| 10 | 831.64 | 764.23 |
| 11 | 391.37 | 363.96 |
| 12 | 325.05 | 31.45 |
| 13 | 35.34 | 4.62 |
| 14 | 316.34 | 400.23 |
| 15 | 3882.48 | 3481.75 |
| 16 | 44.19 | 17.95 |
| 17 | 42.26 | 21.90 |
| 18 | 43.78 | 15.45 |
| 19 | 39.61 | 8.13 |
| 20 | 47.33 | 6.91 |
| 21 | 44.17 | 5.35 |
| 22 | 11.26 | 5.16 |
| 23 | .28 | .06 |
| 24 | .49 | .06 |
| 25 | .27 | .06 |
| 26 | .47 | .07 |
| 27 | 3.05 | 27.09 |
| 28 | .07 | .03 |

*See Table 9 for corresponding variable names.

Table 9

Dependent Variables*

| | |
|---|---|
| 1 | Number of Women 16 Years and Older |
| 2 | Number of Women 16 Years and Older with own Children Under 6 Years |
| 3 | Number of Women 16 Years and Older with own Children Under 6 Years, and in the Labor Force |
| 4 | Number of Women 16 Years and Older with own Children 6 to 17 Years |
| 5 | Number of Women 16 Years and Older with own Children 6 to 17 Years, and in the Labor Force |
| 6 | Number of Married Women, Husband Present |
| 7 | Number of Married Women, Husband Present, and in the Labor Force |
| 8 | Number of Married Women, Husband Present, with own Children Under 6 Years |
| 9 | Number of Married Women, Husband Present, with own Children Under 6 Years, and in the Labor Force |
| 10 | Number of Married Women, Husband Present, with own Children 6 to 17 Years |
| 11 | Number of Married Women, Husband Present, with own Children 6 to 17 Years, and in the Labor Force |
| 12 | Women 35 to 44 Years -- Cumulative Fertility Rate |
| 13 | Percent of Women in the Labor Force |
| 14 | Number of Women 25 Years and Older Completing 4 or More Years of College |
| 15 | Number of Women 25 Years and Older |
| 16 | Percent of Women 18-19 Years in the Labor Force |
| 17 | Percent of Women 20-21 Years in the Labor Force |
| 18 | Percent of Women 22-24 Years in the Labor Force |

Table 9 (cont.)

| | |
|---|---|
| 19 | Percent of Women 25-34 Years in the Labor Force |
| 20 | Percent of Women 35-44 Years in the Labor Force |
| 21 | Percent of Women 45-64 Years in the Labor Force |
| 22 | Percent of Women 65 Years and Older in the Labor Force |
| 23 | Percent of Women with own Children Under 6 Years, and in the Labor Force |
| 24 | Percent of Women with own Children 6 to 17 Years, and in the Labor Force |
| 25 | Percent of Married Women, Husband Present, with own Children Under 6 Years, and in the Labor Force |
| 26 | Percent of Married Women, Husband Present, with own Children 6 to 17 Years, and in the Labor Force |
| 27 | Percent of Married Women, Husband Present, in the Labor Force |
| 28 | Percent of Women 25 Years and Older Completing 4 or More Years of College |

*All data is for 1970

Table 10

Zero-Order Correlation Matrix of Dependent Variables*

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | .97 | .97 | .97 | .97 | .99 | .17 | .97 | .96 | .97 | .96 | -.39 | .44 | .93 | .98 | .12 | .33 | .24 | .18 | .23 | .38 | .10 | .22 | .12 | .20 | .10 | -.04 | .40 |
| 2 | | --- | .98 | .94 | .95 | .98 | .19 | .99 | .98 | .96 | .94 | -.34 | .46 | .92 | .95 | .10 | .31 | .22 | .17 | .18 | .38 | .11 | .20 | .08 | .19 | .06 | -.02 | .44 |
| 3 | | | --- | .95 | .95 | .96 | .21 | .98 | .99 | .94 | .94 | -.34 | .54 | .93 | .93 | .12 | .34 | .27 | .25 | .23 | .43 | .15 | .32 | .13 | .31 | .10 | -.003 | .47 |
| 4 | | | | --- | .89 | .98 | .17 | .95 | .94 | .99 | .99 | -.36 | .44 | .87 | .98 | .13 | .33 | .23 | .18 | .20 | .36 | .11 | .20 | .10 | .18 | .08 | -.05 | .32 |
| 5 | | | | | --- | .98 | .16 | .95 | .93 | .99 | .99 | -.37 | .48 | .88 | .98 | .16 | .35 | .24 | .22 | .26 | .40 | .11 | .23 | .10 | .21 | .17 | -.06 | .34 |
| 6 | | | | | | --- | .12 | .97 | .95 | .98 | .97 | -.40 | .42 | .91 | .99 | .13 | .33 | .24 | .17 | .23 | .37 | .08 | .20 | .11 | .18 | .09 | -.10 | .35 |
| 7 | | | | | | | --- | .19 | .21 | .17 | .16 | -.03 | .20 | .16 | .16 | .03 | .11 | .02 | .18 | -.07 | .09 | .29 | .19 | -.09 | .19 | -.10 | .98 | .03 |
| 8 | | | | | | | | --- | .98 | .96 | .94 | -.34 | .46 | .93 | .94 | .10 | .31 | .23 | .16 | .18 | .39 | .11 | .20 | .07 | .19 | .05 | -.02 | .45 |
| 9 | | | | | | | | | --- | .93 | .93 | -.33 | .55 | .94 | .92 | .12 | .34 | .27 | .25 | .23 | .44 | .16 | .33 | .13 | .32 | .10 | -.001 | .47 |
| 10 | | | | | | | | | | --- | .99 | -.35 | .44 | .87 | .98 | .16 | .34 | .23 | .18 | .20 | .36 | .10 | .20 | .09 | .18 | .08 | -.05 | .33 |
| 11 | | | | | | | | | | | --- | -.37 | .48 | .88 | .97 | .17 | .35 | .24 | .22 | .27 | .40 | .11 | .23 | .10 | .21 | .18 | -.06 | .34 |
| 12 | | | | | | | | | | | | --- | -.15 | -.34 | -.40 | -.12 | -.17 | -.04 | -.15 | -.32 | -.24 | -.08 | -.16 | -.23 | -.17 | -.23 | .05 | -.05 |
| 13 | | | | | | | | | | | | | --- | .47 | .40 | .31 | .48 | .35 | .58 | .41 | .72 | .56 | .65 | .40 | .61 | .38 | .10 | .49 |
| 14 | | | | | | | | | | | | | | --- | .86 | .07 | .26 | .25 | .19 | .21 | .42 | .12 | .22 | .12 | .21 | .10 | -.05 | .65 |
| 15 | | | | | | | | | | | | | | | --- | .16 | .35 | .23 | .17 | .23 | .35 | .10 | .21 | .12 | .19 | .10 | -.05 | .37 |
| 16 | | | | | | | | | | | | | | | | --- | .38 | .24 | .40 | .16 | .68 | .16 | .31 | .16 | .27 | .21 | -.002 | -.15 |
| 17 | | | | | | | | | | | | | | | | | --- | .28 | .06 | .27 | .40 | .30 | .48 | .21 | .47 | .21 | .04 | .02 |
| 18 | | | | | | | | | | | | | | | | | | --- | .27 | -.04 | .16 | .25 | .33 | -.001 | .32 | -.04 | -.04 | .18 |
| 19 | | | | | | | | | | | | | | | | | | | --- | .24 | .17 | .25 | .70 | .38 | .48 | .35 | .13 | .17 |
| 20 | | | | | | | | | | | | | | | | | | | | --- | .29 | .07 | .41 | .64 | .35 | .66 | -.13 | .08 |
| 21 | | | | | | | | | | | | | | | | | | | | | --- | .37 | .32 | .40 | .32 | .40 | .00009 | .40 |
| 22 | | | | | | | | | | | | | | | | | | | | | | --- | .44 | .09 | .42 | .04 | .27 | .17 |
| 23 | | | | | | | | | | | | | | | | | | | | | | | --- | .33 | .97 | .39 | .14 | .18 |
| 24 | | | | | | | | | | | | | | | | | | | | | | | | --- | .30 | .97 | -.13 | .09 |
| 25 | | | | | | | | | | | | | | | | | | | | | | | | | --- | .27 | .14 | .18 |
| 26 | | | | | | | | | | | | | | | | | | | | | | | | | | --- | -.14 | .05 |
| 27 | | | | | | | | | | | | | | | | | | | | | | | | | | | --- | -.06 |
| 28 | | | | | | | | | | | | | | | | | | | | | | | | | | | | --- |

*See Table 9 for corresponding variable names.

Table 11

Correlation Matrix of Dependent Variables
For Inclusion in Multiple Regression Analysis

| | (12) | (13) | (16) | (23) | (24) | (28) |
|---|---|---|---|---|---|---|
| (12) Women 35-44 Cumulative Fertility Rate | ---- | -.15 | -.12 | -.16 | -.23 | -.05 |
| (13) Percent of Women in the Labor Force | | ---- | .31 | .65 | .40 | .48 |
| (16) Percent of Women 18-19 in the Labor Force | | | ---- | .31 | .16 | -.15 |
| (23) Percent of Women with own Children Under 6, and in the Labor Force | | | | ---- | .33 | .18 |
| (24) Percent of Women with own Children 6 to 17 Years, and in the Labor Force | | | | | ---- | .09 |
| (28) Percent of Women 25 Years and Older Completing 4 or More Years of College | | | | | | ---- |

Table 12

Zero-Order Correlation Matrix of Variable Used in Multiple Regression Analysis

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | .44 | -.20 | .26 | -.04 | .58 | -.09 | .29 | .13 | .07 | .55 |
| 2 | | --- | -.36 | .60 | .16 | .45 | -.22 | .40 | .31 | .18 | .45 |
| 3 | | | --- | -.15 | -.12 | -.24 | .09 | -.03 | -.16 | -.23 | -.05 |
| 4 | | | | --- | .31 | .21 | -.37 | .58 | .65 | .40 | .48 |
| 5 | | | | | --- | .07 | -.27 | .01 | .31 | .16 | -.15 |
| 6 | | | | | | --- | -.15 | .18 | .15 | .05 | .32 |
| 7 | | | | | | | --- | -.35 | -.31 | -.13 | -.06 |
| 8 | | | | | | | | --- | .18 | -.03 | .45 |
| 9 | | | | | | | | | --- | .33 | .18 |
| 10 | | | | | | | | | | --- | .09 |
| 11 | | | | | | | | | | | --- |

1 Centrality 1970

2 Differentiation 1970

3 Cumulative Fertility Rate - Women 35-44 1970

4 Percent of Women in the Labor Force 1970

5 Percent of Women 18-19 in the Labor Force 1970

6 Total Paper Circulations 1960

7 Economic Inequality 1970

8 Median Family Income 1970

9 Percent of Women 16+ with own Children Under 6, and in the Labor Force 1970

10 Percent of Women 16+ with own Children 6-17 Years Only, and in the Labor Force 1970

11 Percent of Women 25+ Completing 4 or More Years of College 1970

Table 13

Zero-Order Correlation Matrix of Variables Selected as Most Important for the Explanation of Community Structure and the Status of Women in Non-Metropolitan Kansas Counties

| Community Structure | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| 1 Differentiation | ---- | -.22 | .40 | .60 | .31 | .45 |
| 2 Economic Inequality | | ---- | -.35 | -.37 | -.31 | -.06 |
| 3 Median Family Income | | | ---- | .58 | .18 | .45 |
| **Status of Women** | | | | | | |
| 4 Percent of Women in Labor Force | | | | ---- | .65 | .48 |
| 5 Percent of Women 16+ with own Children of Preschool Age, and in the Labor Force | | | | | ---- | .18 |
| 6 Percent of Women 25+ Completing 4 or More Years of College | | | | | | ---- |

Table 14

Correlation Sketch of Variables Selected as Most Important for the Explanation of Community Structure and the Status of Women in Non-Metropolitan Kansas Counties

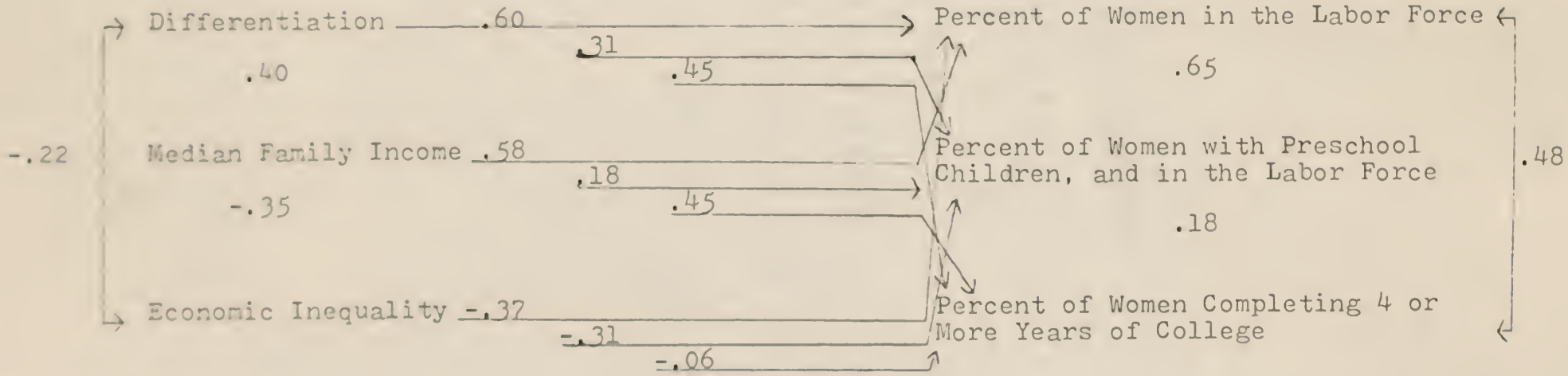


Table 15

Pre-Test Results:
Mean Judgments of Child's Attributes as a Function of
Personality Cluster and Sex of Child

| Cluster Situation | Independent Active Assertive | Dependent Passive Acquiescent | Flexible Nonconforming Untidy | Rigid Conforming Orderly |
|---|---|---|---|---|
| Total Score | | | | |
| Boys | 12.67 | 12.61 | 12.50 | 13.33 |
| Girls | 11.86 | 12.72 | 11.67 | 14.14 |
| Intelligence | | | | |
| Boys | 3.80 | 3.30 | 3.75 | 3.55 |
| Girls | 3.50 | 3.28 | 3.39 | 3.89 |
| Grades | | | | |
| Boys | 3.69 | 3.17 | 3.19 | 3.78 |
| Girls | 3.39 | 3.28 | 3.08 | 4.08 |
| Typical | | | | |
| Boys | 1.86 | 2.55 | 2.36 | 2.11 |
| Girls | 1.92 | 2.44 | 1.92 | 1.89 |
| Prefer Child in Class | | | | |
| Boys | 3.30 | 3.58 | 3.19 | 3.89 |
| Girls | 3.05 | 3.72 | 3.28 | 4.28 |

Table 16

Pre-Test Results:
Rankings of Personality Cluster by Sex in Order of Mean Scores
Obtained on Each Judgment Dimension

| Cluster Situation | Independent Active Assertive | | Dependent Passive Acquiescent | | Flexible Nonconforming Untidy | | Rigid Conforming Orderly | |
|---|---|---|---|---|---|---|---|---|
| | Boy | Girl | Boy | Girl | Boy | Girl | Boy | Girl |
| Total Score | 4 | 7 | 5 | 3 | 6 | 8 | 2 | 1 |
| Intelligence | 2 | 5 | 7 | 8 | 3 | 6 | 4 | 1 |
| Grades | 3 | 4 | 7 | 5 | 6 | 8 | 2 | 1 |
| Typical | 8 | 5* | 1 | 2 | 3 | 5* | 4 | 7 |
| Prefer Child in Class | 5 | 8 | 4 | 3 | 7 | 6 | 2 | 1 |

*Mean scores were identical.

Table 17

Pre-Test Results:
Results of Analyses of Variance of Total Ratings
And of Ratings for Each Judgment Dimension

| Source of Variation | Total | | | Intelligence | | Grades | | Typicalness | | Prefer Child in Class | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | df | Ms | F | Ms | F | Ms | F | Ms | F | Ms | F |
| Behavior Cluster (A) | 3 | 355.21 | 2.99* | 2.57 | 4.51** | 9.31 | 15.02** | 5.09 | 7.83** | 12.71 | 15.5** |
| Sex (B) | 1 | 21.12 | .178 | .59 | 1.035 | 0 | -- | 2.35 | 3.61 | .59 | .72 |
| Interaction (A x B) | 3 | 101.21 | .852 | 1.82 | 3.19* | 1.27 | 2.05 | .78 | 1.20 | 1.24 | 1.51 |

*$p<.05$

**$p<.01$

Table 18

Pre-Test Results:
Results of Small Sample Tests for Differences in Means
By Behavior Groupings for Both Sexes on all Judgment Dimensions

| Cluster Situation | Independent Active Assertive | Dependent Passive Acquiescent | Flexible Nonconforming Untidy | Rigid Conforming Orderly |
|---|---|---|---|---|
| Intelligence | Z = 1.82 | Z = .12 | Z = 1.78 | Z = 2.00 $\alpha$.05 |
| Grades | Z = 1.82 | Z = -.58 | Z = .52 | Z = -1.76 |
| Typical | Z = -.33 | Z = .57 | Z = 2.23 $\alpha$.05 | Z = 1.16 |
| Prefer Child in Class | Z = 1.10 | Z = -.66 | Z = -.39 | Z = -2.17 $\alpha$.05 |

Table 19

Mean Judgments of Child's Attributes as a Function of Personality Cluster and Sex of Child

| Cluster Situation | Independent Active Assertive | Dependent Passive Acquiescent | Flexible Nonconforming Untidy | Rigid Conforming Orderly |
|---|---|---|---|---|
| Total Score | | | | |
| Boys | 12.337 | 12.657 | 12.767 | 13.183 |
| Girls | 11.807 | 12.807 | 11.767 | 13.607 |
| Intelligence | | | | |
| Boys | 3.670 | 3.293 | 3.857 | 3.580 |
| Girls | 3.483 | 3.317 | 3.453 | 3.627 |
| Grades | | | | |
| Boys | 3.447 | 3.233 | 3.153 | 3.717 |
| Girls | 3.247 | 3.343 | 2.917 | 3.880 |
| Typical | | | | |
| Boys | 1.840 | 2.430 | 2.270 | 2.083 |
| Girls | 1.833 | 2.430 | 2.090 | 2.027 |
| Prefer Child in Class | | | | |
| Boys | 3.380 | 3.700 | 3.487 | 3.803 |
| Girls | 3.243 | 3.717 | 3.307 | 4.073 |

Table 20

Rankings of Personality Cluster by Sex
in Order of Mean Scores Obtained on Each Judgment Dimension

| Cluster Situation | Independent Active Assertive | | Dependent Passive Acquiescent | | Flexible Nonconforming Untidy | | Rigid Conforming Orderly | |
|---|---|---|---|---|---|---|---|---|
| | Boy | Girl | Boy | Girl | Boy | Girl | Boy | Girl |
| Total Score | 6 | 7 | 5 | 3 | 4 | 8 | 2 | 1 |
| Intelligence | 2 | 5 | 8 | 7 | 1 | 6 | 4 | 3 |
| Grades | 3 | 5 | 6 | 4 | 7 | 8 | 2 | 1 |
| Typical | 7 | 8 | 1* | 1* | 3 | 4 | 5 | 6 |
| Prefer Child in Class | 6 | 8 | 4 | 3 | 5 | 7 | 2 | 1 |

*Mean scores were identical.

Table 21

Comparison of Rankings of Personality Cluster by Sex in Order of Mean Scores Obtained on Each Judgment Dimension for Feshbach (1971)*, Weber (Pre-test)**, Weber (Final)***

| Cluster Situation | Independent Active Assertive | | Dependent Passive Acquiescent | | Flexible Nonconforming Untidy | | Rigid Conforming Orderly | |
|---|---|---|---|---|---|---|---|---|
| | Boy | Girl | Boy | Girl | Boy | Girl | Boy | Girl |
| Total Score | 6* | 8* | 4* | 3* | 5* | 7* | 2* | 1* |
| | 4** | 7** | 5** | 3** | 6** | 8** | 2** | 1** |
| | 6*** | 7*** | 5*** | 3*** | 4*** | 8*** | 2*** | 1*** |
| Intelligence | 3* | 5* | 8* | 7* | 2* | 6* | 4* | 1* |
| | 2** | 5** | 7** | 8** | 3** | 6** | 4** | 1** |
| | 2*** | 5*** | 8*** | 7*** | 1*** | 6*** | 4*** | 3*** |
| Grades | 3* | 6* | 5* | 4* | 7* | 8* | 2* | 1* |
| | 3** | 4** | 7** | 5** | 6** | 8** | 2** | 1** |
| | 3*** | 5*** | 6*** | 4*** | 7*** | 8*** | 2*** | 1*** |
| Typical | 8** | 5** | 1** | 2** | 3** | 5** | 4** | 7** |
| | 7*** | 8*** | 1*** | 1*** | 3*** | 4*** | 5*** | 6*** |
| Prefer Child in Class | 6* | 8* | 4* | 3* | 5* | 7* | 2* | 1* |
| | 5** | 8** | 4** | 3** | 7** | 6** | 2** | 1** |
| | 6*** | 8*** | 4*** | 3*** | 5*** | 7*** | 2*** | 1*** |

Table 22

Results of Analyses of Variance of Total Ratings
And of Ratings for Each Judgment Dimension

| Source of Variation | Total | | | Intelligence | | Grades | | Typicalness | | Prefer Child in Class | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | df | Ms | F | Ms | F | Ms | F | Ms | F | Ms | F |
| Behavior Cluster (A) | 3 | 15578.282 | 3.12* | 14.74 | 25.86** | 60.57 | 106.26** | 36.82 | 76.71** | 50.04 | 75.82** |
| Sex (B) | 1 | 2574.0225 | .52 | 10.14 | 17.79** | 1.00 | 1.75 | 2.22 | 4.63* | .04 | .06 |
| Interaction (A x B) | 3 | 4701.7843 | .94 | 6.62 | 11.61** | 6.48 | 11.37** | 1.04 | 2.17 | 6.19 | 9.38** |
| Error | 2,392[a] | 4990.972 | | .57 | | .57 | | .48 | | .66 | |

*$p < .05$

**$p < .01$

[a]The separate error estimates of Sex x Cluster, Sex x Sex, Sex x Cluster x Sex and between Sexes may be regarded as homogeneous and are combined to yield a pooled Sex x Cluster--sex mean square with df = 1192 (149 x 8). An additional 1200 degrees of freedom are added by the replication of situations (150 x 8).

Table 23

Results of Tests for Differences in Means for Both Sexes
By Behavior Groupings On All Judgment Dimensions

| Cluster Situation | Independent Active Assertive | Dependent Passive Acquiescent | Flexible Nonconforming Untidy | Rigid Conforming Orderly |
|---|---|---|---|---|
| Total Score | 4.86<br>α.000 | -1.50 | 7.19<br>α.000 | -3.72<br>α.000 |
| Intelligence | 4.57<br>α.000 | -.58 | 6.79<br>α.000 | -.89 |
| Grades | 4.38<br>α.000 | -2.51<br>α.013 | 4.38<br>α.000 | -3.11<br>α.002 |
| Typical | .16 | 0.0 | 3.24<br>α.001 | .96 |
| Prefer Child in Class | 3.00<br>α .003 | -.40 | 3.16<br>α.002 | -5.48<br>α.000 |

Table 24

Zero-Order Correlation Matrix of Sex-Role Expectation Score with Individual and Community Variables

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | .03 | .07 | .15 | .25 | -.08 | -.08 | .09 | .01 | -.01 | .03 | .01 | -.08 | .09 |
| 2 | | --- | -.01 | .02 | .05 | -.05 | -.01 | .03 | .01 | .01 | .03 | .06 | -.08 | .13 |
| 3 | | | --- | .81 | .54 | -.10 | -.10 | .74 | -.02 | -.04 | .14 | -.10 | -.05 | -.12 |
| 4 | | | | --- | .69 | -.23 | -.10 | .62 | -.05 | -.03 | .16 | -.10 | -.11 | -.07 |
| 5 | | | | | --- | -.13 | -.16 | .48 | .03 | .01 | .20 | -.03 | -.10 | -.02 |
| 6 | | | | | | --- | .07 | -.08 | .21 | .07 | .02 | .11 | .25 | -.07 |
| 7 | | | | | | | --- | -.12 | -.01 | -.05 | .06 | .02 | .13 | -.07 |
| 8 | | | | | | | | --- | .03 | .004 | .09 | .002 | .04 | -.05 |
| 9 | | | | | | | | | --- | .43 | -.19 | .74 | .58 | .25 |
| 10 | | | | | | | | | | --- | -.58 | .71 | .01 | .44 |
| 11 | | | | | | | | | | | --- | -.47 | .06 | -.46 |
| 12 | | | | | | | | | | | | --- | .33 | .64 |
| 13 | | | | | | | | | | | | | --- | -.19 |
| 14 | | | | | | | | | | | | | | --- |

1 Sex-Role Expectation Score
2 Grade Teaching
3 Years Teaching Experience
4 Years Taught in County
5 Years Lived in County
6 Size of Place Where Childhood was Spent
7 Amount of Involvement in Community Activities
8 Age
9 Differentiation
10 Median Family Income
11 Economic Inequality
12 Female Labor Force Participation
13 Percent Females College Educated
14 Percent Working Women with Preschool Children

Table 25

Zero-Order Correlation Matrix of Behavior Grouping Differences with Individual and Community Variables

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | .03 | .06 | .10 | -.01 | .14 | .21 | .27 | -.03 | -.06 | .20 | .05 | .09 | -.07 | .04 | -.04 | .06 |
| 2 | | --- | -.02 | -.06 | -.08 | -.03 | .10 | .02 | -.14 | .06 | -.09 | -.02 | .04 | -.01 | .03 | -.01 | .04 |
| 3 | | | --- | -.12 | .09 | -.14 | -.09 | .03 | .02 | -.11 | -.01 | .11 | .10 | -.08 | .19 | -.03 | .21 |
| 4 | | | | --- | .07 | .14 | .04 | .14 | .003 | -.04 | .06 | -.14 | -.30 | .26 | -.26 | -.08 | -.14 |
| 5 | | | | | --- | -.01 | .02 | .05 | -.05 | -.01 | .03 | .01 | .01 | .03 | .06 | -.08 | .13 |
| 6 | | | | | | --- | .81 | .54 | -.10 | -.10 | .74 | -.02 | -.04 | .14 | -.18 | -.05 | -.12 |
| 7 | 1 | Differences in Scores for Flexible | | | | | --- | .69 | -.23 | -.10 | .62 | -.05 | -.03 | .16 | -.19 | -.11 | -.02 |
| 8 | | Nonconforming, Untidy Boys and Girls | | | | | | --- | -.13 | -.16 | .48 | .03 | .01 | .20 | -.03 | -.10 | -.02 |
| 9 | 2 | Differences in Scores for Rigid, Conforming, | | | | | | | --- | .07 | -.08 | .21 | .07 | .02 | .11 | .25 | -.07 |
| 10 | | Orderly Boys and Girls | | | | | | | | --- | -.12 | -.01 | -.05 | .06 | .02 | .11 | -.07 |
| 11 | 3 | Differences in Scores for Active, Independent, Assertive | | | | | | | | | --- | .03 | .004 | .02 | .002 | .08 | -.05 |
| 12 | | Boys and Girls | | | | | | | | | | --- | .41 | -.19 | .74 | .58 | .25 |
| 13 | 4 | Differences in Scores for Passive, Dependent, Acquiescent | | | | | | | | | | | --- | -.58 | .71 | .01 | .44 |
| 14 | | Boys and Girls | | | | | | | | | | | | --- | -.47 | .06 | -.46 |
| 15 | 5 | Grade Teaching | | | | | | | | | | | | | --- | .11 | .64 |
| 16 | 6 | Years Teaching Experience | | | | | | | | | | | | | | --- | -.19 |
| 17 | 7 | Years Taught in County | | | | | | | | | | | | | | | --- |
| | 8 | Years Lived in County | | | | | | | | | | | | | | | |
| | 9 | Size of Place Where Childhood was Spent | | | | | | | | | | | | | | | |
| | 10 | Amount of Involvement in Community Activities | | | | | | | | | | | | | | | |
| | 11 | Age | | | | | | | | | | | | | | | |
| | 12 | Differentiation | | | | | | | | | | | | | | | |
| | 13 | Median Family Income | | | | | | | | | | | | | | | |
| | 14 | Economic Inequality | | | | | | | | | | | | | | | |
| | 15 | Female Labor Force Participation | | | | | | | | | | | | | | | |
| | 16 | Percent Females College Educated | | | | | | | | | | | | | | | |
| | 17 | Percent Working Women with Preschool Children | | | | | | | | | | | | | | | |

Table 26

Zero-Order Correlation Matrix of Ratings for Boys and Girls on Each Judgment Dimension with the Individual and Community Variables

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | .56 | .72 | .49 | -.26 | -.04 | .55 | .37 | -.04 | .01 | -.06 | .01 | -.04 | -.07 | .15 | -.05 | .05 | -.19 | .005 | .02 | .02 |
| 2 | | --- | .43 | .73 | -.10 | -.23 | .46 | .48 | -.08 | .02 | -.06 | -.07 | -.02 | -.06 | .06 | -.02 | -.12 | -.05 | -.03 | .10 | -.04 |
| 3 | | | --- | .59 | -.23 | -.05 | .41 | .28 | .02 | -.07 | -.09 | -.03 | -.06 | -.07 | .02 | -.03 | .02 | -.15 | .02 | -.04 | .06 |
| 4 | | | | --- | -.21 | -.21 | .35 | .44 | -.02 | .01 | -.05 | -.03 | -.01 | -.02 | -.01 | -.04 | -.12 | -.02 | -.05 | .03 | -.001 |
| 5 | | | | | --- | .53 | -.05 | -.07 | .04 | .07 | .10 | .07 | .03 | .06 | .07 | .13 | .07 | .001 | .15 | .03 | .12 |
| 6 | | | | | | --- | -.10 | -.18 | .03 | .05 | -.01 | -.01 | -.03 | .10 | .01 | -.10 | -.004 | .05 | -.04 | -.08 | .01 |
| 7 | 1 | Boys' Intelligence Score | | | | | --- | .78 | .04 | .10 | .08 | .04 | .01 | -.17 | .17 | .06 | -.03 | -.15 | -.02 | .12 | -.02 |
| 8 | 2 | Girls' Intelligence Score | | | | | | --- | .05 | .08 | .11 | -.01 | -.07 | -.12 | .09 | -.01 | -.08 | -.09 | -.12 | .09 | -.11 |
| 9 | 3 | Boys' Grades Score | | | | | | | --- | -.01 | .02 | .05 | -.05 | -.01 | .03 | .01 | .01 | .03 | .06 | -.08 | .13 |
| 10 | 4 | Girls' Grades Score | | | | | | | | --- | .81 | .54 | -.10 | -.10 | .74 | -.02 | -.04 | .14 | -.10 | -.05 | -.12 |
| 11 | 5 | Boys' Typical Score | | | | | | | | | --- | .69 | -.23 | -.10 | .62 | -.05 | -.03 | .16 | -.10 | -.11 | -.07 |
| 12 | 6 | Girls' Typical Score | | | | | | | | | | --- | -.13 | -.16 | .48 | .03 | .01 | .20 | -.03 | -.10 | -.02 |
| 13 | 7 | Boys' Prefer Child Score | | | | | | | | | | | --- | .07 | -.08 | .21 | .07 | .02 | .11 | .25 | -.07 |
| 14 | 8 | Girls' Prefer Child Score | | | | | | | | | | | | --- | -.17 | -.01 | -.05 | .06 | .02 | .13 | -.07 |
| 15 | 9 | Grade Teaching | | | | | | | | | | | | | --- | .03 | .004 | .09 | .002 | .04 | -.05 |
| 16 | 10 | Years Teaching Experience | | | | | | | | | | | | | | --- | .43 | -.19 | .74 | .58 | .25 |
| 17 | 11 | Years Taught in County | | | | | | | | | | | | | | | --- | -.58 | .71 | .01 | .44 |
| 18 | 12 | Years Lived in County | | | | | | | | | | | | | | | | --- | -.47 | .06 | -.46 |
| 19 | 13 | Size of Place Where Childhood was Spent | | | | | | | | | | | | | | | | | --- | .33 | .64 |
| 20 | 14 | Amount of Involvement in Community Activities | | | | | | | | | | | | | | | | | | --- | -.19 |
| 21 | 15 | Age | | | | | | | | | | | | | | | | | | | --- |
| | 16 | Differentiation | | | | | | | | | | | | | | | | | | | |
| | 17 | Median Family Income | | | | | | | | | | | | | | | | | | | |
| | 18 | Economic Inequality | | | | | | | | | | | | | | | | | | | |
| | 19 | Female Labor Force Participation | | | | | | | | | | | | | | | | | | | |
| | 20 | Percent Females College Educated | | | | | | | | | | | | | | | | | | | |
| | 21 | Percent Working Women with Preschool Children | | | | | | | | | | | | | | | | | | | |

# APPENDIX II

# QUESTIONNAIRE

# QUESTIONNAIRE

THIS STUDY IS BEING CONDUCTED AS A RESEARCH PROJECT FOR SUELLEN WEBER'S MASTER'S THESIS IN SOCIOLOGY AT KANSAS STATE UNIVERSITY. WE ARE INTERESTED IN TAPPING TEACHERS' PREFERENCES AND ATTITUDES CONCERNING THE BEHAVIORS OF ELEMENTARY SCHOOL CHILDREN, AND THIS QUESTIONNAIRE IS DESIGNED TO LEARN ABOUT YOUR OPINIONS. IT IS NOT NECESSARY FOR YOU TO SIGN YOUR NAME.

ON THE FOLLOWING PAGES YOU WILL FIND 16 PARAGRAPHS WHICH DESCRIBE CHILDREN OBSERVED IN FIRST- THROUGH FIFTH-GRADE CLASSROOMS. YOU WILL BE ASKED TO GIVE YOUR OPINIONS ABOUT THE CHARACTERISTICS OF THE DEPICTED CHILDREN BY MARKING YOUR RESPONSE TO EACH QUESTION WITH AN "X". EVEN THOUGH IT MAY BE DIFFICULT TO MAKE A DECISION AT TIMES, PLEASE TRY TO ANSWER EACH QUESTION.

IMMEDIATELY FOLLOWING THE PARAGRAPHS CONCERNING THE CHILDREN YOU WILL FIND SOME PERSONAL BACKGROUND INFORMATION QUESTIONS. THESE ARE DESIGNED MERELY TO LEARN MORE ABOUT THE ELEMENTARY TEACHERS IN KANSAS COMMUNITIES. WE WOULD APPRECIATE YOUR ACCURATE RESPONSES TO THESE QUESTIONS.

THANK YOU VERY MUCH FOR YOUR TIME SPENT PARTICIPATING IN THIS STUDY. WE CONSIDER THIS AREA TO BE A VERY IMPORTANT ONE, AND WE APPRECIATE YOUR WILLINGNESS TO SHARE YOUR OPINIONS WITH US.

Situation 1

Steve is working on a model for the space project. He decides to make a space capsule and works out a design for it. While he works he scatters glue, wood, and nails on the floor. When he can't find a piece of wood the right shape, he re-designs part of his model. When he catches his shirt on a nail, he pulls it loose carelessly. Although there is always a 10-minute cleanup period after a work project, Steve continues working on his model until the final bell rings.

1. How intelligent (bright) do you think this child is?

| | | | | |
|---|---|---|---|---|
| considerably below average | below average | average | above average | considerably above average |

2. What grades do you think this child usually gets?

| | | | | |
|---|---|---|---|---|
| considerably below average | below average | average | above average | considerably above average |

3. How typical of elementary children is this child's behavior?

| | | | | |
|---|---|---|---|---|
| almost all children would act this way | many children would act this way | about half of the children would act this way | a few children would act this way | very few children would act this way |

4. In comparison to other children how much would you like to have this child in your class?

| | | | | |
|---|---|---|---|---|
| would very definitely not want | would probably not want | would not matter | would probably want | would very definitely want |

Situation 2

The teacher asks the class how many remembered to bring a bar of soap for carving animals. Ruth is one of the pupils who remembered. Before beginning to carve, Ruth covers her desk with paper and lays out her materials. She spends fifteen minutes cleaning up and putting away the materials. While carving, she carefully follows the teacher's instructions for using the tools. When she has finished her work, she helps the teacher pick up newspapers and soap chips.

1. How intelligent (bright) do you think this child is?

| | | | | |
|---|---|---|---|---|
| considerably below average | below average | average | above average | considerably above average |

2. What grades do you think this child usually gets?

| | | | | |
|---|---|---|---|---|
| considerably below average | below average | average | above average | considerably above average |

3. How typical of elementary children is this child's behavior?

| | | | | |
|---|---|---|---|---|
| almost all children would act this way | many children would act this way | about half of the children would act this way | a few children would act this way | very few children would act this way |

4. In comparison to other children how much would you like to have this child in your class?

| | | | | |
|---|---|---|---|---|
| would very definitely not want | would probably not want | would not matter | would probably want | would very definitely want |

Situation 3

The teacher assigns a set of arithmetic problems which the children are to do at home and turn in the next day. Jim raises his hand, waving a paper, and announces, "I've already finished these problems. I did all of them yesterday. I guess that means that I don't have any homework for tomorrow." When the teacher asks him if he is sure that his work is correct, he insists that it is. Jim hands in his paper and sits back, smiling proudly.

1. How intelligent (bright) do you think this child is?

| | | | | |
|---|---|---|---|---|
| considerably below average | below average | average | above average | considerably above average |

2. What grades do you think this child usually gets?

| | | | | |
|---|---|---|---|---|
| considerably below average | below average | average | above average | considerably above average |

3. How typical of elementary children is this child's behavior?

| | | | | |
|---|---|---|---|---|
| almost all children would act this way | many children would act this way | about half of the children would act this way | a few children would act this way | very few children would act this way |

4. In comparison to other children how much would you like to have this child in your class?

| | | | | |
|---|---|---|---|---|
| would very definitely not want | would probably not want | would not matter | would probably want | would very definitely want |

Situation 4

During a discussion on how the pioneers crossed the country in the winter, the teacher asks in what parts of the country the winters are cold. When she calls on Bill, he says quietly, "I think it is cold in Washington, D.C. where my grandmother lives. Is that right?" The teacher asks where Washington, D.C. is located. "I think it's in the East," he says, looking around to see whether everyone agrees. The teacher tells him to check it on the map. He gets up and points out Washington, D.C.

1. How intelligent (bright) do you think this child is?

| | | | | |
|---|---|---|---|---|
| considerably below average | below average | average | above average | considerably above average |

2. What grades do you think this child usually gets?

| | | | | |
|---|---|---|---|---|
| considerably below average | below average | average | above average | considerably above average |

3. How typical of elementary children is this child's behavior?

| | | | | |
|---|---|---|---|---|
| almost all children would act this way | many children would act this way | about half of the children would act this way | a few children would act this way | very few children would act this way |

4. In comparison to other children how much would you like to have this child in your class?

| | | | | |
|---|---|---|---|---|
| would very definitely not want | would probably not want | would not matter | would probably want | would very definitely want |

Situation 5

While the children are studying their history lesson, the teacher is writing some questions on the blackboard. Betty does not understand a passage in the book she is reading. She quietly goes toward where the teacher is standing and looks at her for a few minutes. When the teacher asks Betty whether she has a question, Betty says she is sorry to disturb her, but she is not sure about something in the book. After the teacher explains the passage to her, Betty completes the reading.

1. How intelligent (bright) do you think this child is?

| | | | | |
|---|---|---|---|---|
| considerably below average | below average | average | above average | considerably above average |

2. What grades do you think this child usually gets?

| | | | | |
|---|---|---|---|---|
| considerably below average | below average | average | above average | considerably above average |

3. How typical of elementary children is this child's behavior?

| | | | | |
|---|---|---|---|---|
| almost all children would act this way | many children would act this way | about half of the children would act this way | a few children would act this way | very few children would act this way |

4. In comparison to other children how much would you like to have this child in your class?

| | | | | |
|---|---|---|---|---|
| would very definitely not want | would probably not want | would not matter | would probably want | would very definitely want |

Situation 6

The class has been assigned a composition to be written at home. Anne runs to the front of the room and states, "Here is my composition; I did it this morning before school. Now I don't have anything to do tonight, right?" When the teacher asks her if she is sure that the spelling and punctuation are correct, Anne says positively that they are. She gives the teacher her paper and goes back to her desk, quite pleased with herself.

1. How intelligent (bright) do you think this child is?

| | | | | |
|---|---|---|---|---|
| considerably below average | below average | average | above average | considerably above average |

2. What grades do you think this child usually gets?

| | | | | |
|---|---|---|---|---|
| considerably below average | below average | average | above average | considerably above average |

3. How typical of elementary children is this child's behavior?

| | | | | |
|---|---|---|---|---|
| almost all children would act this way | many children would act this way | about half of the children would act this way | a few children would act this way | very few children would act this way |

4. In comparison to other children how much would you like to have this child in your class?

| | | | | |
|---|---|---|---|---|
| would very definitely not want | would probably not want | would not matter | would probably want | would very definitely want |

Situation 7

Judy is absorbed in her painting project. Her hair ribbon is untied, and there is paint on her face and hands. Several crumpled pieces of paper are on the floor, and some of the paint has been spilled. Although the teacher admires Judy's painting, she is surprised that it is a landscape rather than the family picture which was assigned. Judy says that she didn't think the subject mattered. When the bell rings, she starts to leave the room, and has to be reminded to come back to clean up.

1. How intelligent (bright) do you think this child is?

| | | | | |
|---|---|---|---|---|
| considerably below average | below average | average | above average | considerably above average |

2. What grades do you think this child usually gets?

| | | | | |
|---|---|---|---|---|
| considerably below average | below average | average | above average | considerably above average |

3. How typical of elementary children is this child's behavior?

| | | | | |
|---|---|---|---|---|
| almost all children would act this way | many children would act this way | about half of the children would act this way | a few children would act this way | very few children would act this way |

4. In comparison to other children how much would you like to have this child in your class?

| | | | | |
|---|---|---|---|---|
| would very definitely not want | would probably not want | would not matter | would probably want | would very definitely want |

Situation 8

The children are learning how to handle and feed hamsters. The teacher asks David to help take them out of the cages for their food. Although David thinks it will be messy, he agrees to help. After putting on a lab coat, he gets some newspapers and covers the floor with them. He lines up the food dishes in front of the cages and carefully pours the food. He closes the food container tightly and returns it to the shelf. David follows the teacher's directions precisely in feeding each hamster.

1. How intelligent (bright) do you think this child is?

| | | | | |
|---|---|---|---|---|
| considerably below average | below average | average | above average | considerably above average |

2. What grades do you think this child usually gets?

| | | | | |
|---|---|---|---|---|
| considerably below average | below average | average | above average | considerably above average |

3. How typical of elementary children in this child's behavior?

| | | | | |
|---|---|---|---|---|
| almost all children would act this way | many children would act this way | about half of the children would act this way | a few children would act this way | very few children would act this way |

4. In comparison to other children how much would you like to have this child in your class?

| | | | | |
|---|---|---|---|---|
| would very definitely not want | would probably not want | would not matter | would probably want | would very definitely want |

Situation 9

The teacher has told the children that crunchy fresh vegetables such as carrots and cucumbers should be washed and peeled before serving. Sue shakes her head, saying no. She raises her hand, but since the teacher does not call on her she says loudly, "That isn't right, my mother gives us carrots and cucumbers with peels and they are good that way. I bet the recipe book tells you that too." She takes the cookbook, turns to the section on fresh vegetables, and shows it to the teacher.

1. How intelligent (bright) do you think this child is?

| | | | | |
|---|---|---|---|---|
| considerably below average | below average | average | above average | considerably above average |

2. What grades do you think this child usually gets?

| | | | | |
|---|---|---|---|---|
| considerably below average | below average | average | above average | considerably above average |

3. How typical of elementary children is this child's behavior?

| | | | | |
|---|---|---|---|---|
| almost all children would act this way | many children would act this way | about half of the children would act this way | a few children would act this way | very few children would act this way |

4. In comparison to other children how much would you like to have this child in your class?

| | | | | |
|---|---|---|---|---|
| would very definitely not want | would probably not want | would not matter | would probably want | would very definitely want |

Situation 10

Joe is assigned to collect Valentine cards. He follows the teacher's instructions carefully and starts looking for a box. He wants to use the red box but is urged to pick a larger one, which he then uses. He puts all of the boys' cards on one side and all of the girls' on the other side. When he has collected all the cards, he calls up the children row by row, seat by seat, one at a time, until all the cards have been distributed.

1. How intelligent (bright) do you think this child is?

| | | | | |
|---|---|---|---|---|
| considerably below average | below average | average | above average | considerably above average |

2. What grades do you think this child usually gets?

| | | | | |
|---|---|---|---|---|
| considerably below average | below average | average | above average | considerably above average |

3. How typical of elementary children is this child's behavior?

| | | | | |
|---|---|---|---|---|
| almost all children would act this way | many children would act this way | about half of the children would act this way | a few children would act this way | very few children would act this way |

4. In comparison to other children how much would you like to have this child in your class?

| | | | | |
|---|---|---|---|---|
| would very definitely not want | would probably not want | would not matter | would probably want | would very definitely want |

Situation 11

After recess Bob dashes into the classroom. He makes a half-hearted attempt to tidy up by brushing his tousled hair out of his eyes and partially tucking in his shirt. The teacher distributes paper and instructs the class to write a composition about a pet. Bob talks to his neighbor until the teacher reminds him to get to work. He looks around for his paper, which has fallen on the floor. Bob brushes it off and uses it. He quickly dashes off a humorous story about a pet otter.

1. How intelligent (bright) do you think this child is?

| | | | | |
|---|---|---|---|---|
| considerably below average | below average | average | above average | considerably above average |

2. What grades do you think this child usually gets?

| | | | | |
|---|---|---|---|---|
| considerably below average | below average | average | above average | considerably above average |

3. How typical of elementary children is this child's behavior?

| | | | | |
|---|---|---|---|---|
| almost all children would act this way | many children would act this way | about half of the children would act this way | a few children would act this way | very few children would act this way |

4. In comparison to other children how much would you like to have this child in your class?

| | | | | |
|---|---|---|---|---|
| would very definitely not want | would probably not want | would not matter | would probably want | would very definitely want |

Situation 12

The children are studying Indians. The teacher asks for the names of some Indian tribes. Nancy is sitting quietly at her desk. The teacher calls on her. Nancy says hesitantly, "Are the Sioux and Mojaves tribes?" The teacher asks her in what section of the country they lived. "I think in the North," she says, checking to see whether the others agree. The teacher tells her to get a book on Indians from the shelf and look it up. Nancy goes to the book shelf and gets the book.

1. How intelligent (bright) do you think this child is?

| | | | | |
|---|---|---|---|---|
| considerably below average | below average | average | above average | considerably above average |

2. What grades do you think this child usually gets?

| | | | | |
|---|---|---|---|---|
| considerably below average | below average | average | above average | considerably above average |

3. How typical of elementary children is this child's behavior?

| | | | | |
|---|---|---|---|---|
| almost all children would act this way | many children would act this way | about half of the children would act this way | a few children would act this way | very few children would act this way |

4. In comparison to other children how much would you like to have this child in your class?

| | | | | |
|---|---|---|---|---|
| would very definitely not want | would probably not want | would not matter | would probably want | would very definitely want |

Situation 13

The class is beginning a project on farming. The teacher has explained that the harvest season is always in the fall. Jack waves his hand wildly. Although the teacher does not call on him, Jack jumps up and says, "That is not true, because in California where I lived fruits and vegetables are ripe many times a year." Jack runs to the side of the room to get a book on California. He gives it to the teacher and goes back to his seat.

1. How intelligent (bright) do you think this child is?

| | | | | |
|---|---|---|---|---|
| considerably below average | below average | average | above average | considerably above average |

2. What grades do you think this child usually gets?

| | | | | |
|---|---|---|---|---|
| considerably below average | below average | average | above average | considerably above average |

3. How typical of elementary children is this child's behavior?

| | | | | |
|---|---|---|---|---|
| almost all children would act this way | many children would act this way | about half of the children would act this way | a few children would act this way | very few children would act this way |

4. In comparison to other children how much would you like to have this child in your class?

| | | | | |
|---|---|---|---|---|
| would very definitely not want | would probably not want | would not matter | would probably want | would very definitely want |

Situation 14

The teacher asks the children to write sentences using the new words which they have been studying. Laura is thinking of ideas for her sentences. She decides that it would be more fun to write a paragraph on one topic than to put each word into a separate sentence. When she can't think of a way to fit in one of the words, she leaves it out. She makes several changes in her paper before turning it in, crossing out words and writing the corrections above them.

1. How intelligent (bright) do you think this child is?

| | | | | |
|---|---|---|---|---|
| considerably below average | below average | average | above average | considerably above average |

2. What grades do you think this child usually gets?

| | | | | |
|---|---|---|---|---|
| considerably below average | below average | average | above average | considerably above average |

3. How typical of elementary children is this child's behavior?

| | | | | |
|---|---|---|---|---|
| almost all children would act this way | many children would act this way | about half of the children would act this way | a few children would act this way | very few children would act this way |

4. In comparison to other children how much would you like to have this child in your class?

| | | | | |
|---|---|---|---|---|
| would very definitely not want | would probably not want | would not matter | would probably want | would very definitely want |

Situation 15

When it is time for the arithmetic test, Jean gets out her scratch paper, two sharpened pencils, and an eraser. When the class is told to begin, she starts to work the problems, taking them in order from the first to the last. Jean then checks the problems carefully. When she finds an answer which she wants to change, she erases it neatly. Although she has not finished checking when the teacher calls "time," she stops at once and hands in her paper.

1. How intelligent (bright) do you think this child is?

| | | | | |
|---|---|---|---|---|
| considerably below average | below average | average | above average | considerably above average |

2. What grades do you think this child usually gets?

| | | | | |
|---|---|---|---|---|
| considerably below average | below average | average | above average | considerably above average |

3. How typical of elementary children is this child's behavior?

| | | | | |
|---|---|---|---|---|
| almost all children would act this way | many children would act this way | about half of the children would act this way | a few children would act this way | very few children would act this way |

4. In comparison to other children how much would you like to have this child in your class?

| | | | | |
|---|---|---|---|---|
| would very definitely not want | would probably not want | would not matter | would probably want | would very definitely want |

Situation 16

While the teacher is working with one group at the front of the room, the other children are doing arithmetic problems at their desks. Paul has a question. He looks around at what the other children are doing. He then goes up to the teacher and stands beside her until she turns to him. He apologizes for interrupting and asks how many problems they are supposed to do. After she tells him what is required he goes back to his seat and finishes his work.

1. How intelligent (bright) do you think this child is?

| | | | | |
|---|---|---|---|---|
| considerably below average | below average | average | above average | considerably above average |

2. What grades do you think this child usually gets?

| | | | | |
|---|---|---|---|---|
| considerably below average | below average | average | above average | considerably above average |

3. How typical of elementary children is this child's behavior?

| | | | | |
|---|---|---|---|---|
| almost all children would act this way | many children would act this way | about half of the children would act this way | a few children would act this way | very few children would act this way |

4. In comparison to other children how much would you like to have this child in your class?

| | | | | |
|---|---|---|---|---|
| would very definitely not want | would probably not want | would not matter | would probably want | would very definitely want |

1. Are you: (1) a full time employee of a public school_____
(2) a full time employee of a private or parochial school_____
(3) not currently teaching_____

2. In what county do you teach?_____

3. What is your current teaching assignment? _____
(Third grade; Reading, etc.)

4. How many years of teaching experience, including this year, have you had?

| | | | |
|---|---|---|---|
| Less than 2 years | _____ | 11 to 15 years | _____ |
| 2 to 5 years | _____ | 16 to 20 years | _____ |
| 6 to 10 years | _____ | Over 20 years | _____ |

5. Is the community in which you live in the county in which you are currently employed?

(1) Yes_____ (2) No_____
If no, in what county do you live? _____

6. How many years, including this year, have you been teaching in the county in which you are presently employed?

| | | | |
|---|---|---|---|
| Less than 2 years | _____ | 11 to 15 years | _____ |
| 2 to 5 years | _____ | 16 to 20 years | _____ |
| 6 to 10 years | _____ | Over 20 years | _____ |

7. How many years, including this year, have you lived in the county in which you are presently living?

| | | | |
|---|---|---|---|
| Less than 2 years | _____ | 11 to 15 years | _____ |
| 2 to 5 years | _____ | 16 to 20 years | _____ |
| 6 to 10 years | _____ | Over 20 years | _____ |

8. How large was the place where you spent most of your childhood?

| | |
|---|---|
| (1) Farm or open country | _____ |
| (2) Town under 2,500 | _____ |
| (3) Town 2,500 to 7,500 | _____ |
| (4) Town 7,500 to 15,000 | _____ |
| (5) City 15,000 to 50,000 | _____ |
| (6) City 50,000 to 100,000 | _____ |
| (7) City over 100,000 | _____ |

9. Are you involved in many community activities and organizations?

(1) Yes, alot_____ (2) Yes, a few_____ (3) No_____

10. What is your sex?

(1) Male _____ (2) Female _____

11. What is your age?

(1) Under 25 _____
(2) 25 - 29 _____
(3) 30 - 39 _____
(4) 40 - 49 _____
(5) 50 - 59 _____
(6) 60+ _____

Thank you for your cooperation.

# APPENDIX III

## LETTER TO TEACHERS

Dear

I am a graduate student in Sociology at Kansas State University and I am currently working on my Master's thesis. I am interested in the examination of elementary teachers' preferences and attitudes concerning behaviors expressed by children.

I am using Continuing Education courses as the source for my sample of teachers. I am contacting instructors of courses at Kansas State University, Emporia State University, and Fort Hays State University to ask permission to have the elementary teachers taking the Continuing Education courses respond to my questionnaire.

My questionnaire has been approved by the members of my thesis committee: Dr. Cornelia Flora, Department of Sociology; Dr. Mary Harris, Department of Curriculum and Instruction; and Dr. Eugene Friedmann, Department of Sociology. The questionnaire has also been approved by the Committee on Research Involving Human Subjects of the College of Arts and Sciences at Kansas State University.

Because I am specifically interested in the responses of elementary teachers I have chosen courses from the listings of the three university's Continuing Education offerings which, according to the titles and course descriptions, appear to be those in which elementary teachers would be enrolled. Your course, _____ which you teach in _____,seems to be such a course. I realize that the short span for teaching the course does not provide much spare class time, but it will only take 15-20 minutes for the teachers to complete the questionnaires.

If there are not any elementary teachers enrolled in your course, or if you simply do not wish to have my questionnaire used in your course, it is not necessary for me to trouble you any further with this, and if you would please indicate so on the enclosed card it will be helpful to me. However, if there are elementary teachers taking your course and you grant your approval so that the people taking your course may respond to my questionnaire, I would appreciate it if I could make arrangements with you to administer my questionnaire in your class. I realize that if you do consent to the use of your course that you may not want to have those who are not elementary teachers leave the room while the elementary teachers are completing the questionnaire, so everyone enrolled in your course may fill out the questionnaire, if you wish, to make things easier for you.

I am enclosing a copy of my questionnaire so that you may read it over before deciding if you want the teachers in your class to respond to it. I think you will find that it is very non-threatening and quite harmless for those responding to it. There is no reason why the teachers need to identify themselves as all results will be confidential.

Unfortunately, it is impossible for me to travel to the counties in which you and other instructors of Continuing Education courses are teaching, so I must ask if you would be willing to pass out the questionnaires in your class and then return them to me when they are completed. I know this is trouble for you but there really is no other way I can administer it without your help.

If you would please indicate on the enclosed card whether or not you will consent to the use of my questionnaire in your course, the number of questionnaires you will need if you do consent, and the date by which you will need them, and return the card to me as quickly as possible I will greatly appreciate it. I will then mail the desired number of questionnaires to you and send the necessary postage for their return to me.

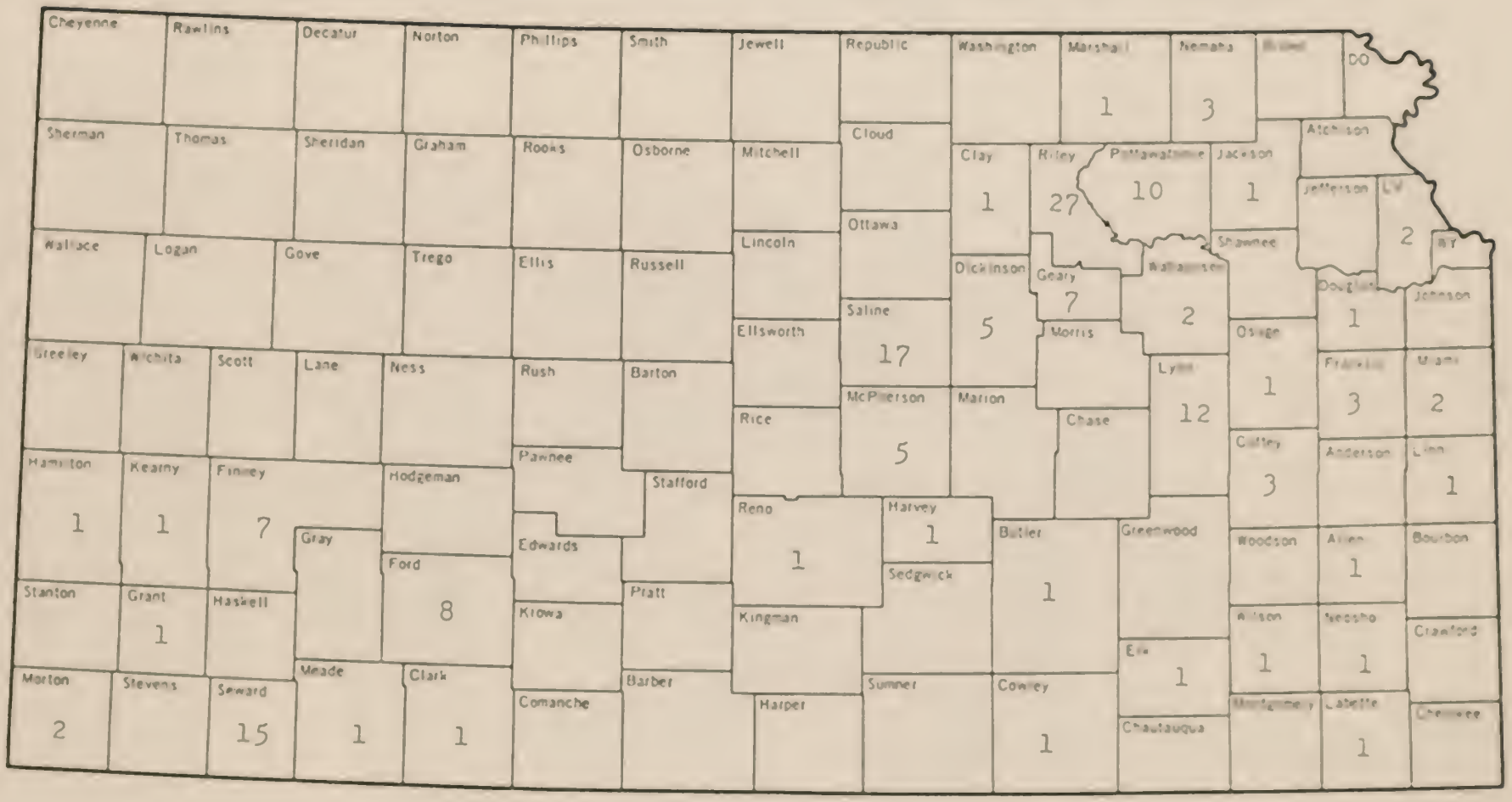
I thank you for your time and consideration. I hope I will have the opportunity to have further contact with you regarding this study.

Sincerely,

Suellen Weber
Sociology Graduate Student
Kansas State University

# APPENDIX IV

## MAP




Map 1

Counties In Which 150 Sample Respondents Live

# AN EXAMINATION AND ANALYSIS OF THE EFFECTS OF INDIVIDUAL BACKGROUND AND COMMUNITY STRUCTURE ON THE DEVELOPMENT OF SEX-ROLE EXPECTATIONS AMONG ELEMENTARY TEACHERS IN NON-METROPOLITAN KANSAS

by

SUELLEN WEBER

B.A., Fort Hays State University, 1975

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AN ABSTRACT OF A MASTER'S THESIS

submitted in partial fulfillment of the

requirements for the degree

MASTER OF ARTS

Department of Sociology, Anthropology, and Social Work

KANSAS STATE UNIVERSITY
Manhattan, Kansas

1978

Teachers' expectations for children are almost exclusively sex-based. Sex-role appropriate behavior is not only considered desirable but deviation from the expected is regarded as abnormal to the point that little girls who express independence or assertiveness may be viewed as troublemakers while boys who are passive and acquiescent are thought to be sissies.

In an attempt to determine what causes teachers to form sex-role expectations for children a study was designed to analyze the importance of both macro- and micro-level factors on the development of expectations. The basic sources of teachers' expectations on which the study focussed were two, community structure and individual background.

It was theorized that the community of which a teacher was a part would have an impact on the formation of his or her sex-role expectations. It was hypothesized that the structural characteristics of a community as well as the status of women in it could conceivably cause people to expect certain behavior because of the type of social structure and its effect on them. More than 40 variables were selected to measure Community Structure and Status of Women. Through a lengthy analysis procedure utilizing factor, correlation, and multiple regression analyses, six variables emerged as the most significant: Differentiation, Median Family Income, Economic Inequality, Percent of Women in the Labor Force, Percent of Women Completing Four or More Years of College, and Percent of Working Women with Preschool Children. The theory was

established that a high degree of community structure would cause teachers to be less likely to have differential expectations, whereas a low level of structure would cause teachers to have strict sex-role expectations.

An individual's unique background characteristics were also hypothesized to be sources of their expectations. Seven individual attributes were considered: Grade Taught, Amount of Teaching Experience, Amount of Time Teaching in Community, Amount of Time Living in Community, Amount of Involvement in Community Activities, Size of Place Where Childhood Was Spent, and Age. The variations in these characteristics were considered to be the cause of more or less strictness in sex-role expectations.

The study was conducted during three consecutive semesters, Spring 1977, Summer 1977, and Fall 1977. The instrument, designed by Dr. Norma Feshbach of the School of Education at the University of California, Los Angeles, consisted of 16 short, projective situations which depicted boys and girls displaying four specific behavior patterns. The questionnaire was completed by 150 elementary teachers enrolled in Continuing Education courses offered by three Kansas universities, Emporia State University, Fort Hays State University, and Kansas State University, at locations in non-metropolitan counties throughout the state.

The results were strikingly conclusive; the elementary teachers did have differential expectations for children based solely on the child's sex. The basic theories of the sources

of teachers' expectations, whether on the macro- or micro-level, could not be either completely accepted or rejected. There were not a large number of significant findings but the community structure and individual background factors were found to have some impact on the formation and intensity of the teachers' sex-role expectations, although the most important factors for the development of sex-role expectations were apparently not accounted for by this study.